



Guangxi LiuGong Machinery Co., Ltd.

2024

ENVIRONMENTAL SOCIAL AND GOVERNANCE (ESG) REPORT

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About This Report

Introduction

This is the second Environmental, Social, and Governance (ESG) Report issued by Guangxi LiuGong Machinery Co., Ltd. (“the Company”), following 16 previous Corporate Social Responsibility Reports. In the principles of objectivity, standardization, transparency, and comprehensiveness, this report provides a detailed disclosure of the Company’s concepts, practices and performance in environmental, social, and governance for the year 2024.

Reporting Scope

Reporting Period: This report covers the period from January 1, 2024 to December 31, 2024. To improve the comparability and completeness of this report, some statements and data are retrospective and extended where appropriate.

Scope of Organization: Unless otherwise specified, this report primarily focuses on Guangxi LiuGong Machinery Co., Ltd., including its headquarters and subsidiaries. The scope of data disclosure aligns with that of the Company’s consolidated financial statements. Any content beyond this scope will be explained within this report.

Release Cycle

This Environmental, Social and Governance (ESG) Report is released on an annual basis.

Preparation Basis

- ▶ Shenzhen Stock Exchange Self-Regulatory Guidelines for Listed Companies No. 1 - Standardized Operation of Main Board Listed Companies
- ▶ Shenzhen Stock Exchange Self-Regulatory Guidelines for Listed Companies No. 17—Sustainability Report (For Trial Implementation)
- ▶ Research on Compilation of ESG Reports by Central SOE-Controlled Listed Companies issued by the State-owned Assets Supervision and Administration Commission of the State Council
- ▶ Sustainability Reporting Standards of the Global Reporting Initiative (“GRI Standards”)
- ▶ Guidelines for Chinese Enterprise Sustainable Development Reporting (CASS-ESG 6.0) of the China Enterprise Reform and Development Research Association
- ▶ Task Force on Climate-related Financial Disclosures (TCFD) Framework
- ▶ Sustainable Development Goals (SDGs) of the United Nations
- ▶ Sustainability Accounting Standards Board (SASB) Standards

Data Sources and Explanations

The financial data in this report are sourced from the 2024 Annual Report of Guangxi LiuGong Machinery Co., Ltd., and other information and data come from statistical summaries of data from relevant departments of the Company. This report doesn’t contain any false records, misleading statements, or material omissions. Unless otherwise specified, all amounts in this report are expressed in RMB.

Term	Interpretation
LiuGong, the Company, or We	Guangxi LiuGong Machinery Co., Ltd.
LiuGong Changzhou Machinery	LiuGong Changzhou Machinery Co., Ltd.
LiuGong Loader Plant	Guangxi LiuGong Machinery Co., Ltd. (Loader Manufacturing Plant)
LiuGong Driveline	LiuGong Liuzhou Driveline Co., Ltd.
OVM	Liuzhou OVM Machinery Co., Ltd.
Zhongyuan Hydraulic	Hydraulic Components Branch of Guangxi Zhongyuan Machinery Co., Ltd
LiuGong Forklift	Liuzhou LiuGong Forklift Co., Ltd.
Joinhand Construction Machinery	Hubei Joinhand Construction Machinery Co., Ltd.
Guangxi Liurui	Guangxi Liurui Asset Management Co., Ltd.
Xinjiang Ruiyuan	Xinjiang Ruiyuan LiuGong Machinery Equipment Co., Ltd.
LiuGong Indonesia	PT. LiuGong Machinery Indonesia
LiuGong Latin America	LiuGong Machinery Latin America Co., Ltd.

Definition

For the ease of expression and readability, the following terms are used in this report:

Access and Feedback

This report is released in both Chinese and English versions. For any discrepancy between the Chinese and English versions, the Chinese version shall prevail. You may access and download the electronic version of this report on the websites of Shenzhen Stock Exchange (<http://www.szse.cn/>), cninfo (<http://www.cninfo.com.cn/>) and the official website of Guangxi LiuGong Machinery Co., Ltd. (<https://www.liugong.com/>), and the Company’s WeChat Official Account.

For any report-related comments or suggestions, please feel free to contact us:

Address: No.1 Liutai Road, Liuzhou, Guangxi | Postal Code: 545007 | Tel.: 0772-3886509 | Email: stock@liugong.com

Message from the Chairman

2024 is a critical year for LiuGong to achieve the goals and tasks of the 14th Five-year Plan. Facing the complex and ever-changing global business environment, LiuGong overcomes challenges and forges forward by actively assuming its role as a “cornerstone of the nation”. This year, we firmly focused on achieving the strategic goals of the “14th Five-year Plan” to realize “Total Solution, Total Intelligence, and Total Internationalization”. Keeping integrating ESG concepts with our business development, we will write a new chapter of high-quality development for LiuGong in corporate governance, domestic marketing transformation, overseas market expansion, new product and technology innovation, smart manufacturing enhancement, financial management, and organizational and human resource reforms.

Zeng Guang'an,
Party Secretary, Chairman and CEO of
Guangxi LiuGong Machinery Co., Ltd.



Upholding Integrity and Innovation, and Striving for Excellence to Build a Lasting Foundation for Growth.

Aiming to establish a world-leading corporate governance system, LiuGong continuously strengthens the leadership of the Party, thoroughly learns and implements the Party’s innovative theories, and enhances the “Five Major Party Building” system. With “Six Actions” as the key approach, we drive the deep integration of party building and high-quality development. We keep deepening capital operations, strengthen market value management, and actively maintain investor relations. Through strategic innovation and systematic thinking, we continuously improve our corporate governance. Through the implementation of the integrity system construction project, we carry out disciplinary education and other activities to cultivate a culture of integrity, cultivate a clean and upright atmosphere, and ensure the sound operation of the Company.

Respecting Nature, Embracing Low-carbon Development, and Highlighting Green Commitment.

Facing the heavy carbon reduction tasks in the industry under the “Carbon Peaking and Carbon Neutrality” policy, LiuGong is firmly committed to its mission of “Empowering People with Intelligent Green Machinery”. We focus on environmental protection, economy, and intelligence, continuously advance the research and development of key core technologies for electric equipment and the electrification of our products, and upgrade and create a full set of intelligent and green electric products. In 2024, LiuGong launched 29 electric products, 21 of which were put on the market, covering 11 product lines. The entire series of new energy-based products has basically taken into shape. LiuGong integrates environmental protection concepts into production management, product development, and other processes. To ensure “stable energy supply, reasonable energy use, and energy-saving consumption reduction”, we have formulated energy development plans and built a full-value chain energy management system covering the entire product lifecycle from design, procurement, conversion, delivery, and storage, to usage management. We continuously reduce energy consumption and improve energy efficiency, and have earned honors such as 2024 Guangxi Green Factory, Guangxi Green Supply Chain Management Enterprise, and 2023 Clean Production Demonstration Unit in Guangxi Zhuang Autonomous Region.

Driving Innovation, Enhancing Quality, and Forging Brand Excellence.

LiuGong adheres to driving the global competitiveness of our products with technological innovation. We have initially built a world-leading intelligent manufacturing plant, and vigorously promoted four major R&D strategies: technology leadership, quality leadership, TCO leadership and application leadership. We are focusing on the development of internationalized, large-scale, electric, and intelligent products. In 2024, we launched more than 130 new product development projects. LiuGong adheres to customer orientation, and empowers brand development with high standard of quality and service. We host global customer festivals, such as LiuGong “5.28” and “11.26” Global Customer Festivals, and work with our customers to build a win-win ecosystem. Since 2024, LiuGong has made remarkable achievements in emerging markets. LiuGong’s total solutions have performed excellently in all working conditions such as earthmoving, mining and agriculture, and have gained favorable comments from customers around the world.

Putting People First, Fostering Collaboration, and Creating a Harmonious Society.

LiuGong continues to promote the philosophy of strengthening the enterprise development through talents, and fully leverage our advantages in human resource management. Through protecting the legitimate rights and interests of our employees and improve our salary and welfare system, we increase the employees’ sense of honor and belonging to LiuGong. The Company attaches great importance to the integration of industry and education, and provides employees with a broader platform for value enhancement through the construction of “LiuGong University”. Moreover, LiuGong takes the initiative to devote itself to social welfare undertakings, and actively responds to the call for rural revitalization. Through industrial assistance, educational revitalization, and other efforts, we fulfill our responsibilities as a state-owned enterprise and further consolidate the achievements of poverty alleviation. The times shape the enterprise, and the enterprise lives up to the times. LiuGong delivers positive energy through its actions and gives back to society with heartfelt dedication.

With determined action, success will be achieved; and with strong resolve, goals will be reached. In 2025, standing at a new starting point and embarking on a new journey, LiuGong will adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era. We will anchor the vision of “to be the world leading equipment and technology solutions provider”, and always put customers first. We will work hard to explore the path of green development together with global customers and partners, promote the mutual progress of economic value, environmental value, and social value, and create a better future with stakeholders!

About LiuGong

Company Profile

Guangxi LiuGong Machinery Co., Ltd. was established in 1958 and is headquartered in Liuzhou, Guangxi. Listed on the Shenzhen Stock Exchange in 1993, LiuGong is the first listed company (Stock Code: 000528) in China's construction machinery industry and in Guangxi Zhuang Autonomous Region, with significant influence in the construction machinery sector.

LiuGong mainly focuses on the research and development, manufacturing, sales, and service of construction machinery, building machinery, agricultural machinery, engineering vehicles, and related components. The Company is the industry leader in product diversification, categories and total solutions. After 66 years of development, the Company has built globally advanced product lines, with over 30 complete-machine product lines covering earthmoving machinery, mining machinery, lifting machinery, construction prestress equipment, agricultural machinery, and industrial vehicles, as well as product lines for key components, engineering machinery attachments, industrial robots, and new-energy-based products. LiuGong is one of the few global equipment suppliers that can offer a full range of products and total solutions. The Company ranks¹19th among global construction machinery manufacturers, and leads similar providers in China for the sales and market share of its earthmoving machinery.

¹ Yellow Table 2024, *International Construction Magazine* of KHL Group



As of 2024

LiuGong has more than **500** dealers in over **130** countries and regions,

and its products are sold to over **180** countries.

With more than **20** manufacturing facilities,

12 R&D bases,

17 regional parts centers,

over **30** overseas subsidiaries,

and more than **17,000** employees,

the global network of LiuGong enables timely responses to customer needs and ensures localized service and support.

Development Planning

In addition to challenges and opportunities in global politics, economics, society, and technology, customer demands are increasingly diverse and differentiated, and market competition is more intense. LiuGong is firmly committed to implementing the strategy of “Total Solution, Total Intelligence, and Total Internationalization”. Guided by a strategic vision for the next decade, and driven by new brands and cultures, we are dedicated to creating greater value for our customers, and working together with our partners to empower people with intelligent green machinery.

We will always prioritize customers as the primary driving force for development, and continuously create customer value through total solutions.

We will understand customer needs, identify their pain points, and provide customers with a full range of products, services, and solutions across the entire lifecycle and value chain. We will offer total solutions to accelerate the transformation from a single product to complete equipment sets, from whole-machine marketing to a full-value-chain service portfolio, and from traditional services to digital and intelligent services. We also will provide high-quality services and customization solutions to enhance customer satisfaction and empower clients to create greater value, thus achieving long-term cooperative development.

We will always strive forward and dedicate ourselves to building LiuGong into a world-leading enterprise that achieves total internationalization.

With a spirit of perseverance and long-term effort, we steadfastly implement the strategy of “Total Internationalization”. We will continue to strengthen efforts in developing emerging markets, deeply penetrate key core markets, establish a strong marketing service network, and build brand advantages. We will accelerate the expansion of mature markets in Europe and the United States, enhance product technology and operational capabilities, and continuously raise the recognition and reputation of the “LiuGong” brand in developed countries. Gathering the advantages of global resources, we aim to build an open and internationalized LiuGong, and strive to become a world-leading enterprise.

We will always insist on innovation to drive the future and promote the high-quality development of LiuGong with total intelligence.

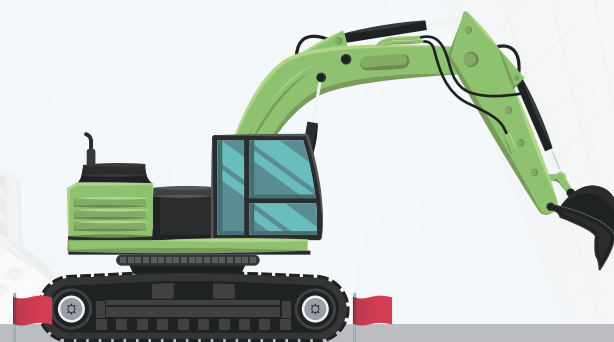
We will actively respond to the new wave of technological revolution and industrial transformation, deeply implement the “Total Intelligence” strategy, and strategically plan for technology innovation and product R&D. We will be fully committed to advancing the rapid application of technologies for electrification, digitalization, interconnection, automation, and sharing, to achieve digitalization and intelligence in product design, manufacturing, services, operations, and customer maintenance, thereby transforming from a traditional equipment manufacturer into a provider of smart green equipment and solutions.

We will always insist that cooperation creates value and work with stakeholders to create a better future together.

We will embrace social and technological changes with a broader perspective of the market and the world, foster a positive competitive environment, and focus on value enhancement for customers, agents, suppliers and other stakeholders, with more rational thinking and a stronger sense of responsibility. We will pool resources, build ecosystems, create value, and share development outcomes, through cooperation with stakeholders on a win-win basis.



Milestones



1958

Factory Construction: Em-barking on a Journey of Glory and Dreams

527 workers from Shanghai and other regions came to Liuzhou to build the factory from scratch. They established Liuzhou Construction Machinery Manufacturing Plant, the predecessor of LiuGong, which marked the official founding of LiuGong.

1966

Industry Pioneer: Launching China' s First Wheeled Loader

LiuGong successfully developed China' s first wheel loader "Z435" under the "Dongfeng" brand (East Wind), which marked the beginning of China's independent research and development of wheel loaders.

1987

Improvement and Innova-tions: Starting a Wave of Technological Innovation

LiuGong introduced Cater-pillar technology and carried out large-scale technological transformations, laying the foundation for the explora-tion of new technologies and products.

1993

Listing on the Shenzhen Stock Exchange: Becom-ing the "First Stock" of Guangxi and China' s Construction Machinery Industry

LiuGong was listed on the Shenzhen Stock Exchange, becoming the first listed company in Guangxi and in China' s construction machinery industry.

1995

Win-Win Cooperation: Starting the Layout of Independent and Control-able Systems of Core Components

LiuGong, in cooperation with ZF Friedrichshafen AG, jointly invested in establish-ing Liuzhou ZF Machinery Co., Ltd., marking the begin-ning of LiuGong' s develop-ment of controllable systems for core components.

2000

Marching Eastward: Pio-neering Mergers and Acquisitions in China' s Construction Machinery Industry

LiuGong acquired the Jiang-yin Road Machinery Plant and successively set up plants in Shanghai, Anhui, Jiangsu, and Shandong, becoming a pioneer in exploring diversified devel-opment within China' s con-struction machinery industry.

2002

Entry into the Global Market: Starting LiuGong' s Journey to Global Expansion

The strategic goal of "building an open and internationalized LiuGong" was put forward, which opened the prelude to LiuGong' s exploration of international businesses.

2007

Overseas Layout: Estab-lishing LiuGong' s First Overseas Factory

LiuGong invested in building a factory and a subsidiary in India, taking the first step in building overseas manufact-uring facilities.

2024

Leadership in new quality productivity: Facing Chal-lenges and Striving for Victory!

Due to the global leap driven by the strategy of "Total Solu-tion, Total Intelligence, Total Internationalization" , the main product sales growth leads the industry and the Company' s total revenue and net profit both hit historic highs!

2023

Leap cross 10 Billion: Em-barking on Robust Interna-tional Expansion

LiuGong' s overseas busi-ness revenue reached a new high, over 10 billion RMB, further enhancing the inter-national influence of LiuGong.

2022

Intelligent Manufacturing: Accelerating the Pace of High-Quality Development

The completion of Phase 1 of LiuGong Loader Intelligent Factory and the ground-breaking of LiuGong Intelli-gent International Industrial Park represented an important step for LiuGong in improving intelligent manufacturing levels.

2021

Ongoing Efforts: Striving for Self-improvement and Excellence:

On April 26, 2021, General Secretary Xi Jinping visited LiuGong and delivered an important speech, highly praising the innovative devel-opment achievements of LiuGong.

2020

Breakthrough Reform: Revitalizing Corporate Development

LiuGong' s mixed-ownership reform project focusing on promoting "reform through mixed ownership" successfully attracted investment, injecting new momentum into the Com-pany' s high-quality develop-ment.

2019

AI Leadership: Leading the New Era of 5G Remote Control and Electrification

LiuGong launched the world' s first commercial 5G remote control loader and three purely electric loaders, marking a solid step forward in the industry' s digital and intelligent transformation.

2015

Scientific Research: Promot-ing the Settlement of "Na-tional Earthwork Machinery Engineering Technology Research Center" at LiuGong

LiuGong Global R&D Center, also the National Earthwork Machinery Engineering Tech-nology Research Center, has been completed, laying a solid foundation for LiuGong to accelerate the achieve-ment of its goals for electrifi-cation, digitalization, inter-connection, automation, and sharing.

2011

Cooperation Alliance: Pro-viding Driving Engines for Equipment Products

LiuGong and Cummins established the world' s first joint venture specified in con-struction machinery, providing exclusive power for the global construction machinery market.

Honors





ESG Management

Goal and Vision

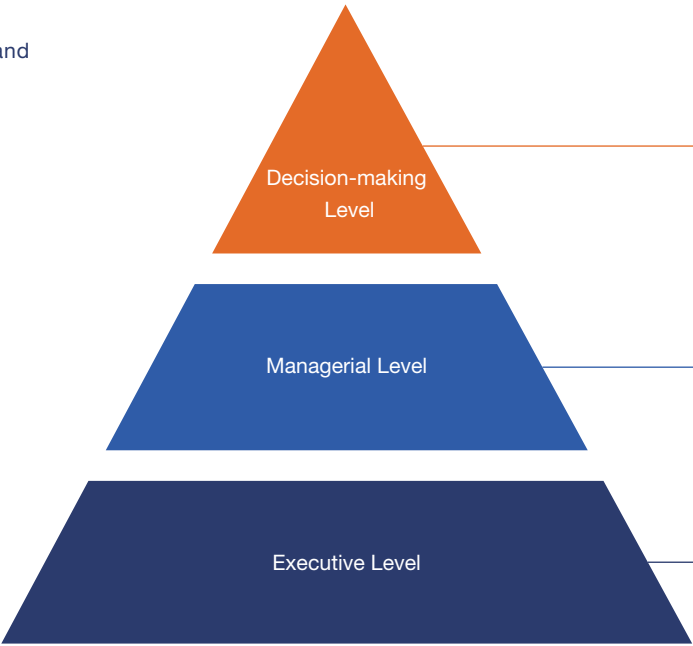
Adhering to its mission of “empowering people with intelligent green machinery” and its vision “to be the world leading equipment and technology solutions provider”, LiuGong actively implements the new development concepts of innovation, coordination, green, openness, and shared growth, and integrate such concepts into every operation field and process. Through efforts and practices in corporate governance, safety production, green manufacturing, electric product development, human rights protection, domestic and international talent development, and response to national strategies, LiuGong continues to promote the high-quality development of the global equipment manufacturing industry. While contributing to society, LiuGong also realizes environmentally friendly construction, and help achieve the Sustainable Development Goals (SDGs) of the United Nations.

ESG Governance

Governance Framework

In today’s global business environment, ESG governance is becoming more and more critical as governments, shareholders, and investors, customers, and others are increasingly concerned about environmental protection, social responsibility, and corporate ethics, and sustainability has become an important part of corporate strategic planning. LiuGong attaches great importance to ESG management, coordinates and plans from a strategic height, comprehensively builds the ESG governance system, and continuously improves its ESG quality and efficiency. In 2024, the Company made new breakthroughs in ESG management, renamed the “Strategic Committee” under the Board of Directors to the “Strategy and ESG Committee”, and established a top-down ESG management structure with clear responsibilities, seamless synergy and high efficiency. The Company formulated the *ESG Management System*, and took it as the overall framework for ESG management.

ESG Governance Structure and Responsibilities of LiuGong



Professional Capacity Building

To improve ESG management and strengthen professional capacity building, the Company offered ESG-specific training for management and department employees in both onsite and online during the reporting period. A total of 9 special training sessions were held, with 180 participants, covering 18 functional departments. Through this training, ESG concepts were internalized and externalized, effectively enhancing performance capabilities and integrating ESG practices with the business development of the Company.



Structure	Responsibilities
Board of Directors	The Board of Directors determines the Company's ESG development direction, strategy, and objectives; reviews and approves the Company's ESG management system and ESG Reports, and handles material ESG matters, etc.
Strategy and ESG Committee	The Strategy and ESG Committee under the Board of Director reviewed ESG-related matters of the Company and provided suggestions, reviewed and submitted the ESG Report to the Board, and guided the daily implementation of ESG work.
ESG Leadership Team	Led by the Company's Chairman and CEO, the ESG Leadership Team is responsible for providing assurance and professional support for the Strategy and ESG Committee in fulfilling its ESG-related duties.
ESG Execution Team	Led by the Board Secretary, this ESG Execution Team serves as the main execution and coordination body for the communication related to ESG work.
Functional Departments and Subsidiaries	The functional departments and subsidiaries of the Company are the executing units of ESG work, and are responsible for putting the ESG tasks into practice.

Communication with Stakeholders

LiuGong attaches importance to communication with internal and external stakeholders such as the government, shareholders and investors, employees, customers and partners, establish online and offline multifaceted communication channels, extensively collects the expectations and suggestions of various stakeholders, and responds to them in the corresponding chapters, so as to realize the win-win result between the Company and the stakeholders.

Stakeholders	Demands and Expectations	Communication Channels and Methods	LiuGong's Responses
 Governments	<ul style="list-style-type: none">Legal Compliance ManagementProactive Tax PaymentSupport for Local Development	<ul style="list-style-type: none">Daily Work Reporting and CommunicationMeetings and Exchange ActivitiesSpecial Summary Reports	<ul style="list-style-type: none">Adhere to the leadership of party building workServe major national strategiesContribute to rural revitalization
 Shareholders and Investors	<ul style="list-style-type: none">Information DisclosureReduction in Operational RisksEconomic Value Creation	<ul style="list-style-type: none">Investor HotlinePerformance BriefingsProduct ExhibitionsRoadshows and Counter RoadshowsInvestor Research ReceptionNetwork and Communication such as irm.cninfo.com.cn	<ul style="list-style-type: none">Ensure corporate governance complianceStrengthen information disclosureConduct investor relations managementMaintain profitability growth
 Employees	<ul style="list-style-type: none">Protection of Basic Rights and Interests of EmployeesEmployees' Occupational HealthBroad Career Development OpportunitiesBalance between Work and Life	<ul style="list-style-type: none">Regular Employee Representative AssembliesEstablishment of Diverse Communication ChannelsRegular TrainingEmployee Activities	<ul style="list-style-type: none">Provide a healthy and safe working environmentSafeguard the legitimate rights and interests of employeesEstablish a comprehensive compensation and benefit systemConduct diversified trainingSmooth career advancement pathsConduct employee care activities

Stakeholders	Demands and Expectations	Communication Channels and Methods	LiuGong's Responses
 Customers	<ul style="list-style-type: none">Cost-effective ProductsHigh-quality ServiceProtection of Customers' Privacy	<ul style="list-style-type: none">Client Visits and CommunicationsWeChat InteractionHotline ServiceOrganizational ActivitiesInformation Disclosure	<ul style="list-style-type: none">Control product quality and safetyProtect the rights and interests of customersLaunch global customer festivalsProtect customers' privacy
 Partners	<ul style="list-style-type: none">Transparent and Honest CooperationMutual SupportWin-win Development	<ul style="list-style-type: none">Enhanced Project CooperationAdvancement of Daily Communication	<ul style="list-style-type: none">Build responsible supply chainsSupport the development of small and medium-sized enterprises up and down the supply chainConduct dealer trainingConvene an annual meeting of distributorsStrengthen industry exchanges and cooperation
 Environmental	<ul style="list-style-type: none">Reduction in Environmental Impact of OperationsEnhancement of Green Development Capacity	<ul style="list-style-type: none">Adherence to Environmental Information DisclosureParticipation in Environmental Protection Forums and ExchangesEnvironmental Advocacy	<ul style="list-style-type: none">Help to save energy and reduce emissionsConduct environmental compliance managementImprove resource utilization efficiencyDevelop green industriesImplement green office practices
 Communities	<ul style="list-style-type: none">Community SupportSupport for Community Development	<ul style="list-style-type: none">Public Welfare ActivitiesCommunity ParticipationInformation Disclosure	<ul style="list-style-type: none">Participate in public welfare and charitable activitiesOrganize volunteer activities

Management of Material Topics

Assessment Process and Methods

With reference to the *Shenzhen Stock Exchange Self-Regulatory Guidelines for Listed Companies No. 17 - Sustainable Development Reports (For Trial Implementation)* (hereinafter referred to as the “the Guidelines”), and based on the characteristics of the industry and the business realities of the Company, we conducted a comprehensive assessment of the Company’s performance on various relevant topics to see whether they will have a material impact (i.e., impact materiality) on the economic, social, and environmental aspects. We also evaluated whether each topic will have a material effect (i.e., financial materiality) on the business model, operations, development strategy, financial situation, cash flow, financing methods and costs, value chain of the Company. Through such materiality assessment, and with reference to the relevant requirements of the international mainstream sustainability reporting standards, the Company conducted the materiality assessment of the topics in the topic pool, The specific implementation steps are as follows:

Step 1: Learn about company background

Analyze the background of the Company based on global macro trends, China’s industry development trends, the industry in which the Company operates, and the Company’s business model, and identify the Company’s stakeholders and the impacts, risks, and opportunities the Company faces.

Step 2: Conduct preliminary topic screening

Use the 21 topics outlined in the Guidelines as the foundation for the topic list, refer to international mainstream sustainability reporting standards such as GRI, and consider related topics from domestic and international peers, align with the Sustainable Development Goals (SDGs) of the United Nations, establish 2024 ESG topic pool consisting of a total of 28 topics.

Step 3: Assess the materiality of topics

① Impact Materiality Assessment

Efforts were made to identify the potential or actual positive or negative impacts of each topic on the external environment, society, and economy. A survey was conducted among stakeholders in the form of questionnaires, with 529 responses collected. Expert judgment was combined to assess topics with impact materiality.

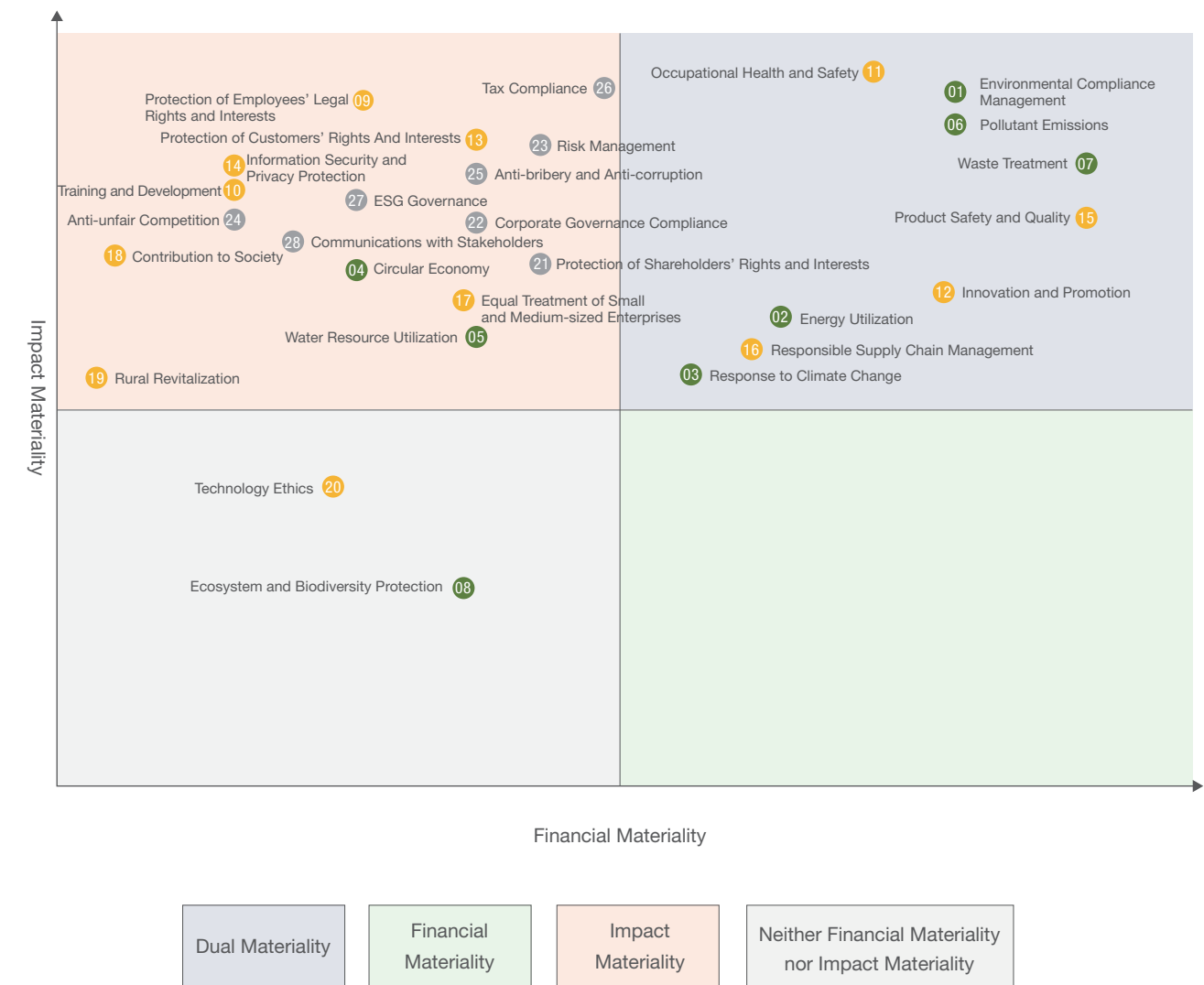
② Financial Materiality Assessment

Through the analysis of impacts, dependencies, and other factors, in combination with expert judgment and risk identification and evaluation lists from departments, risks and opportunities under each relevant topic were identified and assessed, and topics with financial materiality were identified.

Step 4: Identify and approve material topics

An topic list was formed based on impact materiality and financial materiality, and efforts were made to ensure that the relevant topics are transparently, fairly, and comprehensively disclosed in the report.

Identification Results of Material Topics



Strategic Planning: Solidifying Foundation for Steady Development

Our Philosophy

We strictly adhere to the laws and regulations of the jurisdictions where we operate and the requirements of regulatory agencies. While deeply implementing ESG principles, we persist in Party building, continuously improving our governance framework, and strengthening the compliance system. We also strive to enrich investor communication channels, and rigorously implement measures to improve the Party' s work style and promote clean governance, thus providing a solid guarantee for the Company' s sustainable development and long-term value creation.

Our Actions

- ▶ We enhance our governance framework,
- ▶ ensure compliance in operations,
- ▶ strengthen investor relations management,
- ▶ and carry out clean business practices.

SDGs Responeded



03



Responsibility Focus: Transforming from “Compliant Disclosure” to “Value Delivery” to Ensure the Long-term Protection of Investors’ Rights and Interests

In accordance with the revised *14th Five-year Strategic Plan* and with a focus on key content such as sustainable development goals, investment value enhancement, and shareholder returns, the Company has formulated the *2023-2027 Market Value Management Plan*, which includes specific planning arrangements for future corporate governance, operational management, capital operations, and 4R management. In addition, we have released the Market Value Management System, which clearly specifies the regulatory requirements for market value management-related tasks, laying an institutional foundation for achieving market value planning goals.

Standardized Information Disclosure

Strictly adhering to the *Company Law of the People’s Republic of China*, the *Securities Law of the People’s Republic of China*, the *Measures for the Administration of Information Disclosure by Listed Companies* and other applicable laws and regulations, the Company has formulated the *Information Disclosure System and the Voluntary Information Disclosure System* stating that the Secretary of the Board of Directors is responsible for organizing and coordinating the information disclosure affairs of the Company. We also have established a regular communication mechanism to ensure the timely and accurate disclosure of information.

The Company has won honors such as the 2024 Excellent Practice Case Award for Board of Directors of Listed Companies, and the 2024 Best ESG Practice Award for Listed Companies.

Investor Relations Management

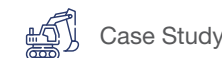
To strengthen communication between the Company and investors or potential investors, and to respect and protect the legitimate rights and interests of investors, the Company has formulated the *Investor Relations Management System* stating that the Chairman is the primary responsible person for investor relations and that the Secretariat of the Board of Directors serves as the functional department for investor relations management and takes charge of investor relations management affairs.

The Company actively strengthens interaction and communication with investors through various channels. This includes: holding regular performance briefings and promptly disclosing the communication results in public media; organizing on-site visits for investors to understand the current development of the Company; proactively conducting reverse roadshows in cities like Beijing, Shanghai, Guangzhou, Shenzhen, and Hong Kong to maintain investor relations; making timely response to investor inquiries on irm.cninfo.com.cn; setting up an investor hotline and patiently answering questions based on actual situations, etc. The management of the Company attaches great importance to investor relations management. In particular, all senior executives including the Chairman, the President in charge of business, and the head of finance actively participate in the aforementioned investor communication activities to achieve unimpeded two-way communication, allowing investors to better understand the Company and enabling the management of the Company to hear the voice of the shareholders.

Key Performance

During the reporting period, the Company held over **340** investor communication meetings, with more than **2,700** person-times of participants. The Company held **4** performance briefing meetings and **5** special investor communication meetings, and effectively answered **111** investor questions on irm.cninfo.com.cn, with a reply rate of **100**%.

LiuGong’s Global Customer Festival Grandly Held



1. In May and November 2024, the Global Customer Festival of LiuGong themed “Green, Intelligent, Extending Human Power” was held in Liuzhou. The Company invited various stakeholders to join LiuGong in the machinery feast shining with green, low-carbon, and technological sparks, and to experience up close the Company’s new brand identity: embracing innovation, striving for growth, seizing the high ground of intelligence, and advancing through digitalization.



4.17 Shareholders’ Day Event
(Organized by the Shenzhen Stock Exchange)



Investor Symposium on 5.28
Global Customer Festival

2. In April and June 2024, the Company, in active response to investors’ demands, organized two large-scale investor visits, through cooperation with the Shenzhen Stock Exchange and the Shanghai Securities Journal. In the form of intelligent factory tours and seminars, the Company engaged in in-depth communication with investors, allowing them to experience firsthand the powerful development momentum brought about by the “mixed-ownership reform” of the Company.



6.27 Investors’ Day (Organized by the Shanghai Securities Journal)



Investor Symposium on 11.26
Global Customer Festival

Protection of Shareholders’ Rights and Interests

The Company always adheres to its mission of creating value for shareholders, and has formulated the *Plan on Return to Shareholder for the Next Three Years (2024–2026)*. Through stable performance and high dividend payouts, the Company effectively protects shareholders’ interests, allowing shareholders to better share in the Company’s intrinsic value growth and achieve mutual success with the Company. Since 2001, the Company has distributed cash dividends for 24 consecutive years, practicing the commitment of long-term return to shareholders.

Cash Dividend Distributed by the Company in the Past Three Years

Indicator	Unit	2022	2023	2024
Cash Dividend per Share	RMB	0.10	0.20	0.27 ↑
Total Cash Dividend	RMB 10,000	19,512	39,024	53,617 ↑
Proportion to Net Profit Attributable to Shareholders of the Listed Company in Consolidated Financial Statements	%	32.56	44.97	40.40 ↓

In 2024, the Board of Directors reviewed and approved two share repurchase proposals respectively, whereby the Company agreed to repurchase a portion of its publicly held shares at a consideration of RMB100-200 million (own funds for Phase I repurchase) and RMB 300-600 million (own funds and special loans for Phase II repurchase). The repurchased shares will be used for the upcoming equity incentive or employee stock ownership plans. The implementation of the share repurchase reflects the Company’s strong confidence in its high-quality sustainable development and the steady growth of its long-term intrinsic value, effectively safeguards the interests of all shareholders, enhances investor confidence, and promotes the reasonable reflection of the quality of the Company in its investment value.

Corporate Governance Compliance

As the first listed company in their China' s construction machinery industry and in Guangxi Zhuang Autonomous Region, LiuGong has a standardized corporate governance framework. As early as 2000, the Company took the lead in formulating and implementing the independent director system. Aiming to building a world-class corporate governance system, LiuGong establishes and improves internal management systems, and continuously promotes the standardized operation of the General Meeting of Shareholders, the Board of Directors, and the Board of Supervisors, to ensure transparent and efficient decision-making. We optimize our shareholding structure to protect shareholders' rights, and emphasize communication with stakeholders. We also establish and improve internal control mechanisms to enhance our risk management capabilities, drive sustainable development, and set an example of corporate governance for listed companies.

Governance Framework

In accordance with applicable laws and regulations such as the *Company Law of the People's Republic of China*, and the *Securities Law of the People's Republic of China*, LiuGong has formulated the *Articles of Association of Guangxi LiuGong Machinery Co., Ltd. (the "Articles of Association")* and other internal management systems, and established and improved the corporate governance mechanism consisting of the General Meeting of Shareholders, the Board of Directors, the Board of Supervisors and the senior management, which features clear authority and responsibility, transparent operations and coordinated functions.



Governance through the General Meeting of Shareholders, Board of Directors, and Board of Supervisors

General Meeting of Shareholders ▶

The General Meeting of Shareholders is the highest authority of the Company. LiuGong strictly follows the requirements of the *Articles of Association*, the *Rules of Procedure for General Meetings of Shareholders* and other rules and regulations to standardize the summoning, convening and voting procedures of the General Meeting of Shareholders. A combination of on-site and online voting is adopted at the , and the General Meeting of Shareholders to facilitate shareholders to exercise their rights. The resolutions of the General Meeting of Shareholders are based on the principles of openness and fairness, and all shareholders, especially minority shareholders, have the legal rights to know, participate, and vote. During the Reporting Period, the Company held 2 meetings of the General Meetings of Shareholders, including 1 Annual General Meeting of Shareholders and 1 Extraordinary General Meeting of Shareholders, at which 15 proposals were reviewed and approved.

Board of Directors ▶

The Board of Directors is accountable to the General Meeting of Shareholders and consists of five specialized committees, namely the Strategy and ESG Committee, the Nomination Committee, the Audit Committee, the Remuneration and Assessment Committee and the Compliance and Management Committee. Each committee performs its functions and powers in accordance with the *Articles of Association* and the working rules of its respective committees, providing strong support for the professionalism and efficiency of the decision-making by the Board of Directors. In 2024, the Company won the Excellent Practice Case Award for Board of Directors of Listed Companies from the China Association of Public Companies. During the Reporting Period, the Board of Directors consisted of 11 members, held 10 board meetings, including 5 extraordinary meetings, and passed a total of 78 resolutions, with a resolution supervision rate of 98%.

Diversity

The Company elects members of the Board of Directors by comprehensively considering their industry experience, educational background, professional skills, internationalization experience, gender, etc. There are 2 female directors in the Company, accounting for 18.18% of the total directors. Each member of the Board of Directors has a diverse professional background and work experience in fields such as legal compliance, investment, finance, auditing, and risk management, to ensure scientific decision-making of the Board of Directors.

Independence

The independent directors of the Company actively participate in the decision-making of the Board of Directors and express their independent opinions on relevant proposals, helping to enhance the decision-making level of the Board of Directors. During the Reporting Period, a total of 4 independent directors visited and researched 11 subsidiaries/business lines, provided feedback on 23 issues, and promoted the decision-making on 4 subsidiary-related proposals of the Board of Directors.

Board of Supervisors ▶

The Board of Supervisors of the Company, in accordance with applicable laws and regulations as well as the *Articles of Association*, has diligently performed its duties, actively carried out related work, attended the meetings of the Board of Directors and the General Meeting of Shareholders, and carefully supervised the Company' s compliance with operational norms and the performance of duties by directors and senior management, thus effectively safeguarding the interests of the Company and all shareholders and promoting the standardized operation of the Company. In 2024, the Board of Supervisors of LiuGong consisted of 3 supervisors, including 1 employees' representative supervisor and 1 external supervisor. During the reporting period, the Company convened a total of 7 meetings of the Board of Supervisors to deliberate on 30 proposals.

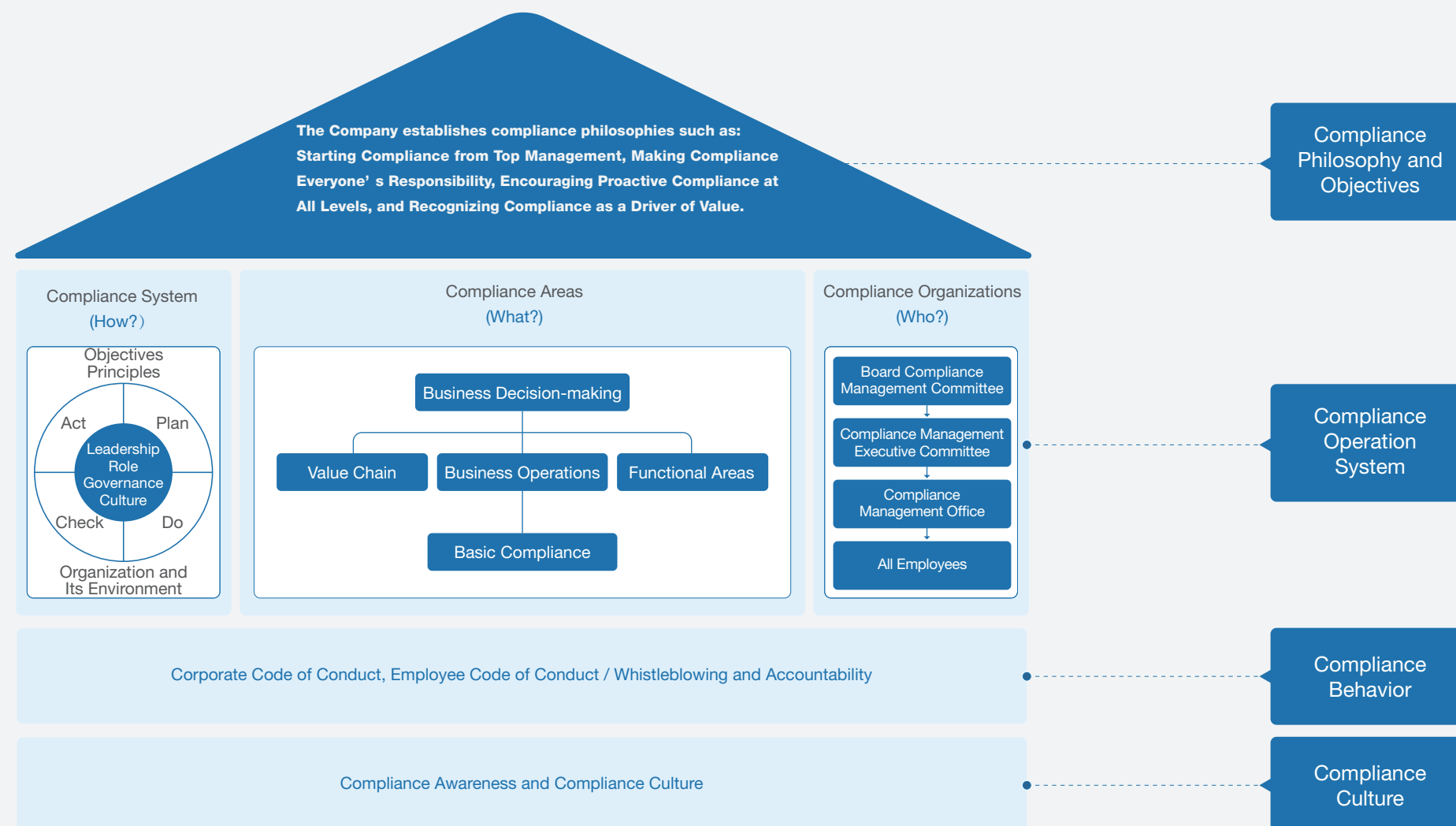
Adherence to Compliance with Laws and Regulations

Compliance Construction ▶

Focusing on “emphasizing compliance, building systems, and strengthening supervision”, LiuGong continuously improves its compliance system, clarifies the responsibility of compliance risk management, promotes the construction of compliance culture, and effectively identifies, manages, prevents and disposes of compliance risks, to ensure lawful and compliant operations and promote the sustainable development of the Company.

Compliance Governance System

Through three years of strategic layout and innovative practice, LiuGong has initially established a modernized and internationalized global compliance governance system that is of industry benchmark significance. During the Reporting Period, the compliance management system of LiuGong realized a comprehensive coverage of the Company and its second-tier holding subsidiaries, and formed a compliance risk management pattern featuring full participation, all-round management and multi-disciplinary monitoring.



The Company has set up the Compliance Management Committee under the Board of Directors, and formulated a series of documents such as the *Standardized Management Manual of Compliance System*, the *Compliance Manual*, and the *Compliance Management System*, to systematically identify and comprehensively analyze the risks related to the operation activities and internal control objectives in terms of the identification, early warning and countermeasures of compliance risks, the development of compliance information technology, and the reporting of violations, thus promoting the construction of the compliance operation system.

LiuGong's Three Lines of Defense for Compliance Management

First Line of Defense

The business units and functional departments of the Company assume the primary responsibility for compliance management work, such as constructing and improving the relevant compliance management systems and operating procedures in their business areas, identifying and assessing compliance risks, regularly conducting compliance training, and reporting their annual compliance management plans and work summaries to the compliance management department.

Second Line of Defense

The Legal and Compliance Department of the Company, as the compliance management department, studies and drafts the annual compliance management work plan, special work plans, compliance reports, basic systems, and specific system regulations, and organizes and carries out compliance risk assessments, compliance inspections, major compliance reviews, and other compliance risk management tasks.

Third Line of Defense

The Audit Department and the Discipline Inspection and Supervision Department of the Company, as the compliance supervision department, conduct compliance supervision within their respective duties, promptly report the compliance supervision results to the Compliance Office, and carry out work based on the recommendations of the Compliance Office.

Compliance Risk Management

LiuGong adheres to a forward-looking risk management philosophy and continuously improves its risk management system. In accordance with the *Guidelines for Compliance Management of Central Enterprises (for Trial Implementation)*, and the *Compliance Management Systems - Requirements with Guidance for Use* (GB/T 35770-2022), the Company has formulated and implemented risk management systems such as the *Risk Identification and Control Procedure*, and the *Risk Evaluation and Grading Control Procedure*. A legal compliance organization has been set up to implement vertical management and unified leadership and achieve effective control of legal compliance risks. In 2024, the Compliance Management Office organized the business divisions and functional units of the headquarters to carry out annual risk assessments. We identified and assessed compliance risks in 13 key fields including corporate governance, bidding management, contract management, labor and personnel, business partners, finance and assets, accounts receivable, intellectual property, etc. We prepared the *2024 Compliance Risk Assessment Results and Rectification Plan* and outlined risk response plans and measures, to provide a basis for the annual risk prevention of the Company.

Compliance Supervision Procedure

The Company has established a whistleblowing mechanism to ensure that employees and external customers can properly exercise their rights to report and complain about violations. The Company encourages real-name whistleblowing but does not exclude anonymous whistleblowing, and protects and strictly prohibits retaliation against complainants and whistleblowers. For complaints and reports, the Compliance Office may organize investigations or refer the matter to relevant departments for investigation, and record and archive the investigation results. During the Reporting Period, no negative compliance events occurred in the Company.



Reporting Channels:

Whistleblowing and Complaint
Hotline of the Compliance Office:
0772-3887690

Compliance Culture Construction

The Company has incorporated compliance culture construction, training, and education into the *Compliance System Standardization Management Manual*, organized employees to sign the *Commitment to Compliance*, and promoted compliance knowledge through various means, publicized and advocated the concept of compliance, and assisted in the cultivation of a compliance culture.

LiuGong Offered Training on the Interpretation of the Revision of the New Company Law and the Analysis of Common Compliance Risks as well Relevant Suggestions



Case Study

LiuGong offered the training on the Interpretation of the Revision of the New Company Law and the Analysis of Common Compliance Risks for 13 subsidiaries, providing an in-depth interpretation of the impact of the new Company Law on business operations, shareholders' rights and interests, governance framework, and other aspects. This helps each business unit adapt to changes in the legal environment and ensures operational compliance. We conducted a comprehensive analysis of common compliance risks and put forward practical compliance recommendations to help the Company and its subsidiaries under the jurisdiction of each division to establish a sound corporate governance system and enhance the level of corporate governance.



Interpretation of the Revision of the New Company Law and the Analysis of Common Compliance Risks as well Relevant Suggestions

Internal Control

The Company regularly conducts internal audits to ensure operational compliance and effective internal controls. The audit team, in line with professional standards, objectively assesses the Company's operations, identifies potential risks, and provides targeted recommendations for improvement. In 2024, the Company carried out 25 audit projects, with the audit scope covering loaders, excavators, functional lines (financial management, human resources, supply chain center, domestic marketing center, international business division, after-sales support and customer solutions, headquarters processes and IT center), and overseas subsidiaries. The audits were conducted through collaborative auditing, cross-department cooperation, and comprehensive supervision efforts. A mature internal control and business framework was employed to comprehensively reveal issues and risks from multiple dimensions, urging relevant units to develop corrective action plans and implement them item by item.

Tax Management

The Company has developed the *Tax Management System* and specific tax business guidelines, which are regularly updated based on the latest tax laws and regulations, business substance, and business processes, to ensure the Company pays taxes on time and in full and reduces the risks related to tax payment. The Company regularly conducts tax health checks, with multiple companies performing comprehensive checks and risk assessments across business operations or all types of taxes, to ensure that problems are identified and corrected promptly to minimize tax risks.

Additionally, we continue to strengthen the tax team building, conduct regular internal tax-themed learning sessions and participate in external tax training organized by third-party institutions. We also hire professional agencies to carry out tax management-related work to enhance our tax compliance capabilities.

Fair Competition

LiuGong, in the principle of fair competition, is committed to creating a healthy and transparent market environment, and has established the *Guidelines for Anti-Monopoly Compliance Management* to raise awareness of compliance management for monopolistic behaviors and to prevent antitrust compliance risks. The Company continuously strengthens the identification of monopoly-related risks and standardizes pre-management processes. We also enhance contract review and approval, focus on drafting the terms of operator concentration transaction contracts, and strengthen anti-monopoly compliance training and assessments to build a compliance culture. In addition, the Company strictly abides by the applicable laws and regulations and industry norms in the locations where it operates, adheres to responsible marketing, comprehensively supervises the compliance of its marketing work, and jointly maintains the market order. During the Reporting Period, neither lawsuits or significant administrative penalties due to unfair competition, nor significant marketing-related violations, occurred in the Company.

Implementation of Integrity Practices

As a large state-owned enterprise in the equipment manufacturing industry, LiuGong has always regarded integrity as the lifeline of enterprise development, which is carried out in every aspect of production and operation. The Company thoroughly implements measures to improve the Party's work style and promote clean governance, establishes and improves the integrity system, and creates a clean and upright business environment. The Company adheres to both educational guidance and institutional constraints, and through regular integrity education as well as strict supervision and discipline enforcement, ensures that every employee respects rules, stays vigilant, and upholds ethical standards, making integrity a defining characteristic of LiuGong.

Integrity Practices Management

LiuGong earnestly implements the strategic deployment of the CPC Central Committee for strict enforcement of Party disciplines, and continuously improves the system for all-out effort to enforce strict Party discipline. The Party Committee of the company is primarily responsible for improving the Party's work style and promoting clean governance, with the Secretary of the Party Committee fulfilling the duties as the "first responsible person". The Company's Commission for Discipline Inspection assumes supervisory responsibility and actively assists the Party Committee in improving the Party's work style and coordinating anti-corruption work.

The Company, in strict compliance with the relevant anti-bribery and anti-corruption laws, regulations, and normative documents of the countries and regions in which it operates, has developed the *Guidelines for Anti-Corruption and Compliance Management* which clearly sets out its commitment to prohibit all forms of corruption and bribery and requires all employees to comply with the anti-bribery and anti-corruption laws of the countries where it operates. This safeguards a healthy and clean business environment.

Prevention and Control of Integrity Risks

LiuGong continuously strengthens the identification and prevention of integrity risks, and revises the *Integrity Risk Point Prevention and Control Manual* of the Company. The Company conducts integrity risk prevention and control in the principles of being "operational, controllable, effective, concise, precise, and focused". Based on integrity risk factors, we adopt comprehensive measures, such as optimizing the power structure, standardizing the operation of power, promoting democracy and transparency, and implementing information management, to strengthen the prevention of integrity risks at the source.

The Company makes full use of the big data business platform system, plugs the loopholes in business process management, encourages all employees to participate in supervision, strengthens the employees' awareness of integrity and conscious acceptance of supervision, and ensures that power operates "in the sunshine". The Company has established the negative performance indicators for integrity evaluation standards for 2024, and conducted integrity investigation and risk prevention assessment for the top management, leaders and directors of the Company, and incorporated integrity into the scope of performance assessment of the top management.

Construction of a Culture of Integrity

The Company has formulated the *Integrity and Responsibility: A Series of Clean Governance Education Activities*. To promote integrity with education, enhance integrity with culture, and cultivate integrity with family values, 14 "integrity" series activities have been organized to form a "five-dimension" integrity culture brand. We organize primary-level Party organizations and commissions for discipline inspection to create an integrity culture brand with own our characteristics, and gradually form an integrity culture brand matrix to create a clean and upright atmosphere for the high-quality reform and development of the Company.



Collective Interview on Actions to Improve the Party's Work Style, Promote Clean Governance and Implement Integrity Practices



Training on Integrity of the International Business Division of LiuGong

Green Transformation: Co-drawing a Blueprint for Low-carbon Development

Our Philosophy

LiuGong implements the primary responsibility for ecological environmental protection, and integrates ecological and environmental protection requirements into the Company's development strategy and corporate governance process. Focusing on green environmental protection, economy, and intelligence, we continuously promote the industry's low-carbon transformation, and actively participate in ecological civilization construction, pollution control, resource conservation, and other related work.

Our Actions

- We response to climate change,
- improvement of environmental management systems,
- management of pollutants and wastes,
- increase of resource efficiency,
- practice of the concept of circular economy.

SDGs Responded



Responsibility Focus: Leading Intelligent and Green Manufacturing to Forge a New Future for Sustainable Development

Upholding the vision of “building excellent manufacturing capability” and the manufacturing strategic objectives of “safety, quality, efficiency, low-consumption, and human development”, LiuGong is committed to building a world-leading green and intelligent manufacturing system. Through the optimization and innovation of LiuGong Intelligent Production System (LiPS), the Company integrates HSE (Health, Safety, and Environment) and quality systems, and promotes a comprehensive upgrade of manufacturing capabilities towards “automation, intelligence, and greenness”, helping to achieve the “carbon peaking and carbon neutrality” goals and the high-quality development strategy of China.

Construction of Smart Green Factories

As a leader in the construction machinery industry and a pioneer in the reform and innovation of local state-owned enterprises, LiuGong aims to “provide safe, stable, reliable, low-carbon, and efficient energy” for the construction of a green energy system. We continuously optimize production processes, vigorously promote the technological advancement and equipment renewal of manufacturing processes, and build smart green factories. The gas used in the welding section of the Company’s manufacturing process contains carbon dioxide, and after process improvement, mixed gas welding is used to reduce the use of carbon dioxide. During the Reporting Period, the Company’s Loader Smart Factory was awarded the title of “Green Factory” in Guangxi, which strongly demonstrated the Company’s excellent capability in the field of green manufacturing.

At a time when intelligent manufacturing and green development have become the main theme of the industry’s development, the Company actively promotes the intelligent transformation, reduce costs, and enhance product quality. In this process, the Loader Smart Factory applied 39 new process technologies, and increased the number of robots from 27 to 102, and the number of AGVs from 8 to 82. After intelligent transformation, the comparable cost of the whole machine is reduced by 0.37%, the automation rate of components and logistics reaches 52.2%, the factory capacity is increased by 15%, the per capita efficiency is increased by 27%, the manufacturing cycle is shortened by 50%, and the rate of external feedback of quality is reduced by 50%, which greatly improves the efficiency of resource utilization.



Research and Application of Green Processes

LiuGong’s 14th Five-year Manufacturing Plan aligns with the national and regional industrial “high-quality development” strategic direction of Guangxi and China, vigorously promotes the technological advancement and equipment renewal of manufacturing processes, and continues to strengthen the application and promotion of common technologies, basic technologies, four new technology research results. The Company focuses on supporting the investment and optimization of intelligent equipment in each product line, the promotion and implementation of typical intelligent demonstration projects, the application of key common process technologies, improving product quality, and enhancing the working environment for employees.

The Company continues to implement green manufacturing, follows applicable laws and regulations on health, safety and environmental protection, and ensures noise, “three wastes” (wastewater, waste gases and solid wastes) and other emissions comply with the required standards. We aim to build an industrial structure and production mode with high technological content, low resource consumption, and minimal environmental pollution, realize the “greening” of our production modes, and quickly establish and improve green and intelligent factories.

Applications of New Equipment

In our Excavator Smart Factory, flame-cutting machines have been eliminated, automatic sanding machines are used to reduce dust and noise, and high-power laser-cutting machines are being promoted.



Innovations of New Technologies

Dry cutting is tried out for the processing of structural components; a centralized paint supply is employed; electric tightening machines and torque tools are used during assembly to reduce noise; continuous promotion of high-efficiency tools, tool regrinding and replacement of grinding with machining is being adopted, and efforts are made to promote the development of micro-lubrication technology and cutting fluid regeneration technology.



Energy Conservation and Emission Reduction

AGVs/RGVs and electric forklifts are used for material delivery, to reduce the use of fuel forklifts. Low-temperature putties are applied to reduce drying temperatures and decrease natural gas consumption, contributing to energy savings.



Reduction of Pollution

For dust and waste gas treatment, dust removal devices are installed in welding and cutting areas, and environmental protection equipment such as wastewater treatment for electroplating lines is designed and manufactured. Powder and electrostatic spraying technologies are promoted, and waste gas from VOCs is properly treated.



LiuGong's Excavator Smart Factory Leading Green
Manufacturing with Intelligent Transformation



Case Study

LiuGong Excavator Smart Factory, committed to building a "green, lean, intelligent, flexible" industry benchmark factory, has 10 automated production lines, with an automation rate of more than 70% and an annual output of 20,000 units. In the industry's first unmanned assembly workstation, the automatic assembly robots have improved the assembly efficiency by about 50%. In addition, the LiuGong Excavator Smart Factory integrates various systems such as APS (Advanced Planning and Scheduling System), MES (Manufacturing Execution System), and WMS (Warehouse Management System), which not only enhances production efficiency but also ensures the creation of an efficient, precise, and macro-coordinated logistics system. In 2024, the "Integrated and Application of Intelligent Logistics System in LiuGong's Excavator Smart Factory" project won the "New Generation Cases to Find Intelligent Technology Innovation Application" award at the 2024 World Intelligence Expo.



Production Workshop of LiuGong Excavator Smart Factory

LiuGong's Loader 5G Smart Factory Included in the 2024 5G Factory
Directory by the Ministry of Industry and Information Technology



Case Study

Relying on the innovative practice of "5G+Industrial Internet", LiuGong's Loader 5G Intelligent Factory deploys the "5G+WIFI6" network to realize the network coverage and connection of the whole factory scene. Through the 5G technology, LiuGong's Loader 5G Smart Factory connects "people, machines, materials, methods, and environment" to build an intelligent manufacturing and service system for the entire product process, helping the Company achieve cost reduction, quality improvement, efficiency enhancement, green and safe development, as well as "end-to-end digital excellence manufacturing along the entire value chain". In November 2024, LiuGong's Loader 5G Smart Factory was included in the 2024 5G Factory Directory by the Ministry of Industry and Information Technology, which is a high recognition for the high-quality "networked" amplification of the "intelligent transformation and digital transformation" effect by LiuGong's Loader 5G Smart Factory.



LiuGong's Loader 5G Smart Factory

Implementation of Energy-saving Renovation

Focusing on the two major themes of "guaranteeing energy supply and reasonable energy use", LiuGong has actively implemented energy-saving renovation projects, continuously optimized the process and accelerated the promotion of relevant technologies. During the Reporting Period, the Company made energy-saving improvements in projects such as the intelligent transformation projects of LiuGong Changzhou Machinery and LiuGong Loader Plant, the renovation project of LiuGong Driveline, and the projects of LiuGong's Excavator Smart Factory and Zhongyuan Hydraulic. Specifically, the coating line was changed from using electric heating to using efficient and clean natural gas heating, to improve thermal efficiency.

LiuGong's Key Energy-saving Projects in the Last Three Years

Project Name	Implementation Highlights	Energy-saving Results
Energy-saving Compressed Air System	<ul style="list-style-type: none">The operation combination of air compressors was optimized to prioritize the use of variable-frequency air compressors.Multiple air compressor stations operated in a network, providing a centralized air supply.The output pressure of air compressors and their endpoints were optimized.Efforts were made to address system leaks, clarify management responsibilities, and reduce gas wastage.	LiuGong's electricity consumption per unit of compressed air in 2024 was 8% lower than the previous year, saving 1.1 million kWh of electricity
Energy-saving Coating Line	<ul style="list-style-type: none">Variable frequency transformation was made to coating line fans.A transmission system was established for fan control and signal collection.Reasonable scheduling was made to reduce sporadic production energy consumption and eliminate idle periods to improve the coating line's operational efficiency.	In 2024, LiuGong's energy cost per unit of painted area decreased by 16% year-on-year, saving 4.37 million yuan in energy costs, equivalent to 5.65 million kWh of electricity.
Linked Transformation Project of Welding and Dust Removal System	<p>Carry out linkage transformation on the welding robot and its dust removal system to reduce the energy consumption during the long-term operation of the dust removal system.</p>	It can save more than 180,000 kilowatt-hours of electricity per year.

Response to Climate Change

As global warming intensifies, extreme weather events due to climate change are occurring more frequently with increasingly severe impacts. In response to the risks brought about by climate change, LiuGong is actively taking action to reduce dependence on fossil fuels and contribute to the realization of the national "carbon peaking and carbon neutrality" goals.

Governance

The Health, Safety, and Environmental (HSE) Department of the Company is responsible for the overall management of climate change-related tasks. This includes setting greenhouse gas reduction targets, developing reduction plans, organizing climate change response training, and supervising and inspecting the implementation of climate change actions. All relevant functional departments and subsidiaries take effective measures to implement the Company's carbon reduction efforts.

Strategy

In accordance with the recommendations of the Task Force on Climate Related Financial Disclosure (TCFD), LiuGong evaluates the risks and opportunities related to climate change and takes effective measures to address the impacts of climate change on the Company's business operations and sustainable development.

Type of Risk/Opportunity	Description of Risk/Opportunity	Likelihood of Occurrence ³	Impact Duration ⁴	Expected Financial Impact	Countermeasures
Physical Risks	Acute Risk Extreme weather events such as low temperatures, snow, heavy rain, and typhoons may cause damage to infrastructure such as factories, warehouses, and transportation systems.	Medium	Short and Medium Term	Facility repairs and transportation disruptions can affect the supply of raw materials, leading to production or service interruptions, cost increases and revenue reduction.	1.Establish a sound emergency management mechanism and develop emergency plans; 2.Implement reinforcement and protection measures for important equipment and buildings; 3. Stay informed about the supply of raw materials and establish a supply chain risk management mechanism.
	Chronic Risk Global warming caused by climate change leads to rising sea levels, triggering natural disasters such as high temperatures and droughts, which affect the Company's production and operations.	Low	Medium and Long Term	This impacts factory production efficiency, resulting in a decrease in revenue.	1. Develop emergency response plans for high temperatures, and monitor temperature and humidity in real time; 2. Implement water-saving measures to reduce water consumption.

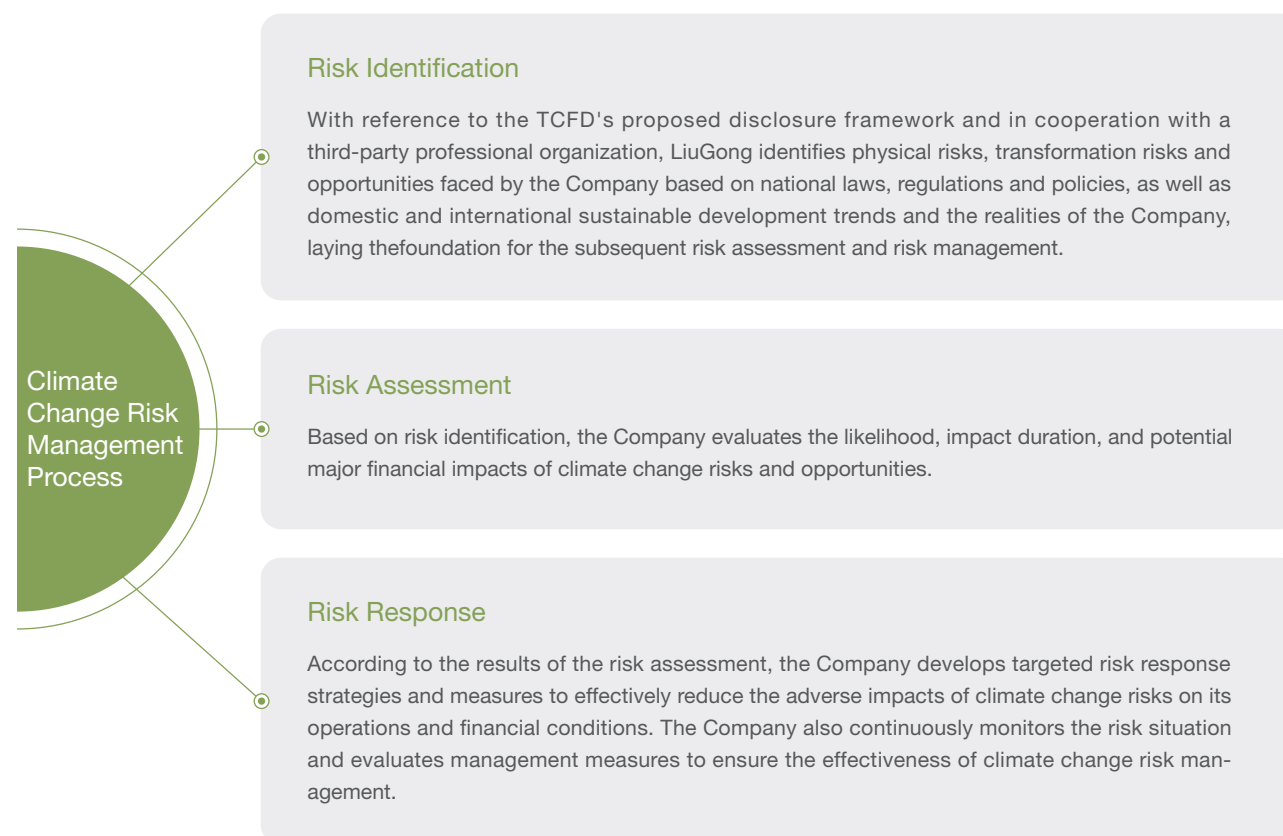
Type of Risk/Opportunity	Description of Risk/Opportunity	Likelihood of Occurrence ⁴	Impact Duration ⁶	Expected Financial Impact	Countermeasures
Transformation Risks	Policy Risk Governments domestically and internationally are imposing increasingly strict requirements for greenhouse gas accounting and inspections.	High	Short, Medium and Long Term	Failure to disclose relevant environmental information in a timely manner according to relevant laws, regulations, and policies may lead to increased fines or impact export business.	1. Stay updated and strictly comply with relevant laws and regulations; 2. Continuously monitor disclosure requirements for greenhouse gas emissions from regulatory bodies, investment institutions and other organizations, and strengthen climate change-related information disclosure.
	Technology Risks As the competition in the electrification of construction machinery intensifies, the demand for new energy construction machinery products is steadily increasing.	High	Short, Medium and Long Term	Green technology research and development leads to higher operating costs for the Company.	Continuously promote technological innovation and optimize industrial layout.
	Market Risks Customer demand is changing to green and low-carbon, and competition in the market is intensifying	High	Short, Medium and Long Term	This impacts traditional machinery sales, leading to a decline in revenue.	1. Communicate in a timely manner and understand customer needs; 2. Launch electrified products.
Opportunities	Technological Opportunities Green production and energy-saving carbon reduction in production have become trends.	High	Short, Medium and Long Term	Reduce operating costs.	Energy-saving and carbon-reducing technologies are used in the production process to reduce greenhouse gas emissions.
	Products and Services The demand for new energy construction machinery products is growing.	High	Short, Medium and Long Term	Market share is expanding, and revenue is increasing.	Increase R&D on electrified products and launch new green products.

³Likelihood of occurrence refers to the frequency or probability of a risk/opportunity occurring, primarily based on historical occurrence probability, external scenarios, progress in policy implementation, and expert predictions. The likelihood of occurrence ranges from "low" to "high".

⁴The Impact Duration refers to the different periods when different climate-related risks and opportunities will affect the Company. The Company categorizes the impact duration into short-term (0-1 year), medium-term (1-5 years), and long-term (over 5 years).

Impact, Risk, and Opportunity Management

LiuGong continuously improves the climate risk management process, and identifies and evaluates risks and opportunities arising from climate change with reference to domestic and international climate policies and standards. On this basis, the Company, in alignment with business planning, develops reasonable risk management strategies and adjusts and updates them in a timely manner in response to changes in the external environment, to enhance resilience in addressing climate risks.



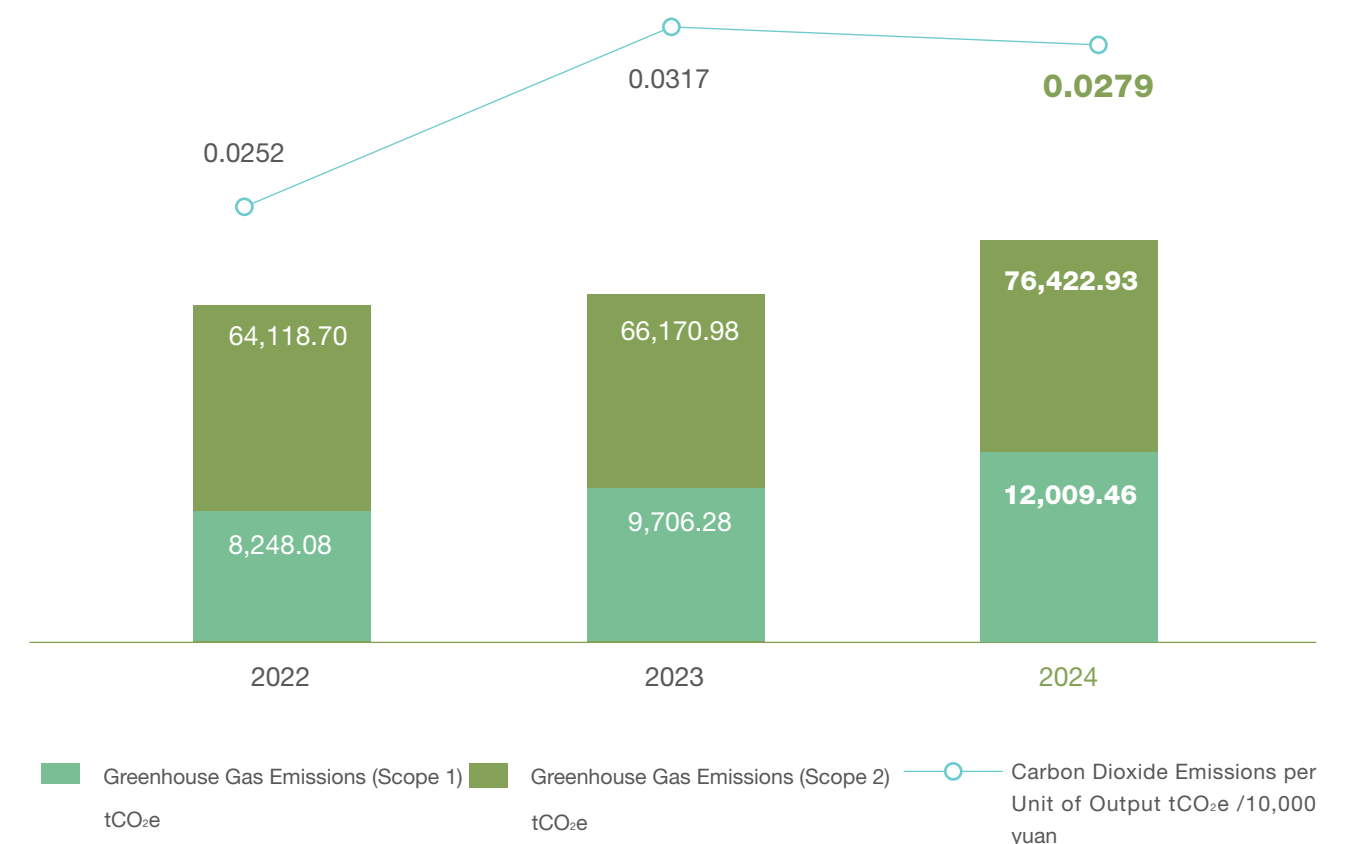
Indicators and Goals

The Company continuously improves its climate change management system, sets annual targets for increasing the percentage of renewable energy in total energy consumption and the percentage of green electricity in total energy consumption, formulates a series of energy-saving and consumption-reduction measures, and implements them in production and operation processes.

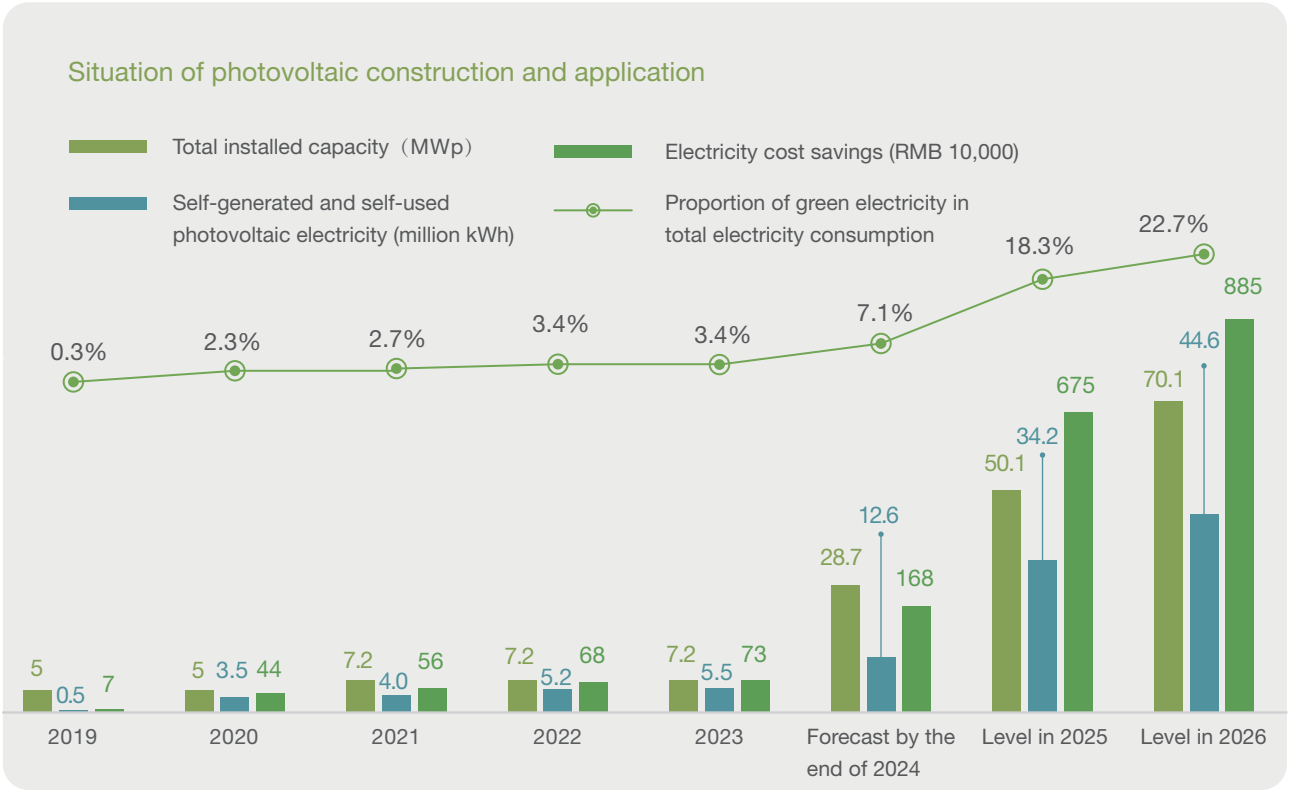
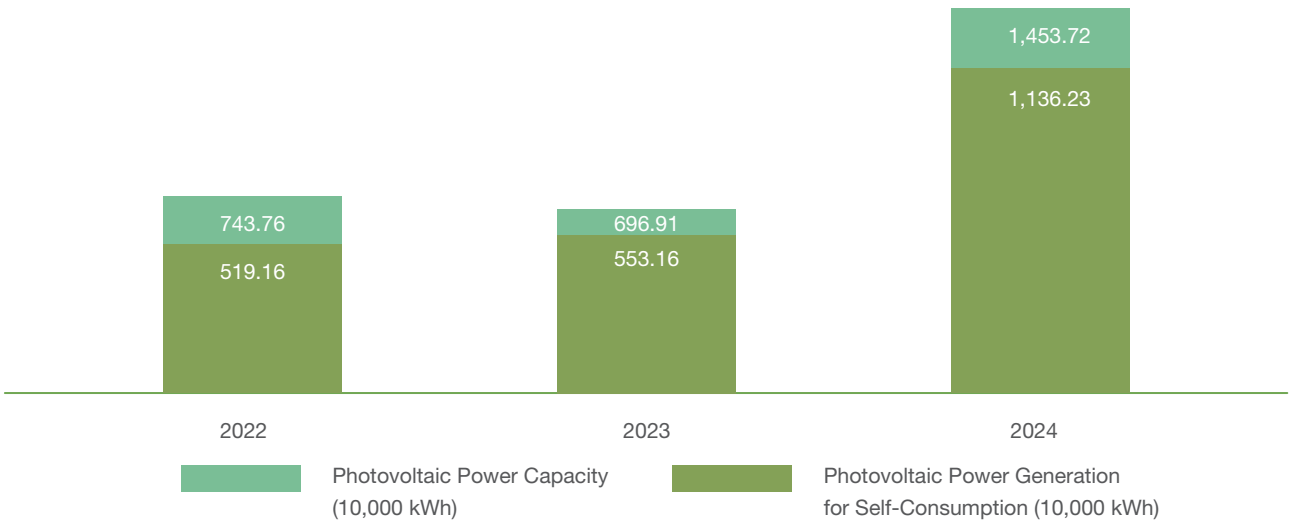
Indicator	Objectives	Achievement
Percentage of Renewable Energy Consumption in Total Energy Consumption	Increase year by year ↗	In progress >>>
Percentage of Green Electricity Consumption in Total Organizational Energy Consumption	Increase year by year ↗	In progress >>>

Greenhouse Gas Emission Management

LiuGong actively builds a green, win-win and sustainable “zero-carbon” future, and integrates the low-carbon concept into the entire process of business operations. The CO₂ emissions from the Company's units mainly arise from production processes such as component cutting, welding, polishing, cleaning, machining, assembly, and vehicle transportation.



LiuGong is moving forward on the road of promoting green development, continuously expanding the proportion of clean energy use and committing itself to reducing CO2 emissions. Since June 2022, LiuGong has actively participated in green electricity trading, and by the end of 2024, the cumulative green electricity traded had reached 28.73 million kWh. In terms of the construction of photovoltaic power generation systems, as early as 2019 and 2021, LiuGong had already built and put into operation distributed photovoltaics at its manufacturing base in East China. The total installed capacity reached 7.2MW, and the annual power generation could reach 7 million kWh. In 2024, LiuGong made great efforts in photovoltaic construction, adding photovoltaics to 4 local factories in Liuzhou and 1 factory at the manufacturing base in East China. The installed capacity reached 21.53MW, and the annual power generation reached 20.77 million kWh. In 2024, LiuGong's photovoltaic power generation amounted to 14.5372 million kWh, with 11.3623 million kWh of photovoltaic for self-consumption, and its purchased green electricity was 7.7328 million kWh. Through these initiatives, CO2 emissions of LiuGong were reduced by 15,677 tons, making a significant contribution to sustainable development.



Conveyance of Low-carbon Concepts

During the Reporting Period, the Company was invited to attend the 2024 China-ASEAN Environmental Cooperation Forum, where it shared LiuGong's energy-saving and emission-reduction practice cases, contributing to the low-carbon transformation of society. The Company also actively held climate change-related training to cultivate internal employees' awareness of climate change and their professional skills.

LiuGong Participates in the 2024 China-ASEAN Environmental Cooperation Forum



Case Study

On October 29-30, 2024, the 2024 China-ASEAN Environmental Cooperation Forum was held in Liuzhou. LiuGong actively participated and shared insights on the construction of LiuGong's low-carbon environmental protection system, electric drive product R&D and manufacturing, creation of a green and efficient supply chain, energy system construction, and resource recycling. At the forum, LiuGong demonstrated the achievements of its low-carbon, energy-saving, and environmental protection efforts, conveying its mission of "empowering people with intelligent green machinery". LiuGong also played a positive role in promoting the implementation of the "China-ASEAN Green Value Chain Partnership" flagship project, advancing green and low-carbon development between China and ASEAN.



2024 China-ASEAN Environmental Cooperation Forum



Letter of Appreciation from the Foreign Economic Cooperation Office of the Ministry of Ecology and Environment

Deepening of Environmental Management

LiuGong, in the principle of "people orientation, full participation, green development, and continuous improvement", formulates and strictly implements environmental management systems, and continuously improves its environmental management level to promote the realization of the Company's goal of "becoming an intrinsically safe and ecologically civilized international enterprise".

Environmental Management System

In strict compliance with laws and regulations such as the *Environmental Protection Law of the People's Republic of China*, the *Water Law of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Wastes*, the *Law of the People's Republic of China on the Prevention and Control of Water Pollution*, and the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution*, as well as local operational requirements, the Company develop an environmental management system and ensure its effective operation. By the end of the Reporting Period, LiuGong and its 12 subsidiaries had all passed the ISO14001 Environmental Management System certification. During the Reporting Period, no major environmental accidents or environmental violations occurred in the Company.



Environmental Management System Certification Certificate (Partial)

LiuGong actively carries out clean production audits. Through the implementation of clean production plans, we have achieved significant economic and environmental benefits in the fields of pollutant reduction and energy saving, reaching the level of advanced clean production enterprises in China. Additionally, LiuGong has actively applied for clean production enterprise status. We were awarded the title of Clean Production Enterprise of Guangxi in 2014, and successfully passed re-examinations in 2018 and 2023.

Governance

LiuGong has formulated environmental management systems such as the *Air Pollution Management System*, the *Water Pollution Management System*, and the *Solid Waste Management System*, to clearly define the responsibilities of each department and related personnel in pollutant emissions and the management of corresponding environmental protection equipment and facilities, ensuring the normal operation of environmental protection equipment and the compliance of pollutant emissions or standardized disposal. The management of pollutants such as waste gas, wastewater and waste materials is handled by the HSE Department, which is mainly responsible for supervising the prevention and control of pollution caused by waste gas, wastewater and solid waste at all levels of the organization.

Indicator	Unit	2022	2023	2024
Environmental Investment	RMB 10,000	2,860	4,146	4,486 ↑
Environmental Protection Taxes Paid	RMB 10,000	21.07	19.87	20.84 ↑

Strategy

LiuGong systematically identifies and analyzes all kinds of environmental factors in production and operation, as well as the risks and opportunities arising from these factors, and formulates corresponding measures to continuously improve the Company's environmental risk management capability.

Type of Risk/Opportunity		Description of Risk/Opportunity	Likelihood of Occurrence	Impact Duration	Expected Financial Impact	Countermeasures
Risk	Policy Risk	The government strengthens the prevention and control of pollutants and waste, requiring the Company to invest more funds in technological upgrades and treatment to reduce the leakage of pollutants and waste caused by unexpected environmental incidents.	High	Short-term	Possible substantial fines and litigation compensation	1. Stay updated and strictly comply with laws and regulations related to pollutants and waste; 2. Strengthen the maintenance and management of environmental protection equipment and standardize measures for the disposal of emissions; 3. Regularly carry out investigations of environmental hazards.
Opportunities	Technological Opportunities	Pollutant and waste emissions are reduced through equipment optimization, technological transformation, and other methods.	High	Medium and Long Term	Reduce operating costs	1. Continuously develop the remanufacturing business and strengthen the recycling of used parts; 2. Vigorously promote the construction of green manufacturing systems, adopt green technology and reduce environmental pollution from the source; 3. Make Continuous optimization of pollutant treatment technologies.

Impact, Risk, and Opportunity Management

Assessment of Environmental Factors



In accordance with the requirements of the environmental management system, LiuGong has formulated the *Environmental Factor Assessment and Control Procedure*, which clarifies the methods and management requirements for the identification, evaluation, updating, and control of environmental factors. The Company regularly organizes environmental factor identification and assessment, establishes an environmental factor list, and classifies and manages these factors. Additionally, corresponding risk prevention and control measures are developed to achieve effective environmental risk management.

Identification of Hidden Hazards



LiuGong conducts on-site inspections every quarter of the environmental protection equipment and facilities, oil pollution treatment, hazardous waste control, and other links, and carries out spot checks and verification of the special inspections and rectification status of each unit. In 2024, a total of 249 environmental issues were identified in the special environmental inspections of the Company, and all have been rectified. Each subsidiary conducts environmental hazard inspections monthly, with 124 environmental hazard inspections conducted during the Reporting Period, identifying 805 environmental hazards, all of which have been rectified, with a rectification rate of 100%.



Indicator	Unit	2022	2023	2024
Special Environmental Inspections	Times	5	6	5 ↓
Hidden Hazard Inspections	Times	108	115	124 ↑
Hidden-hazard Rectification Rate	%	100	100	100

Emergency Response Drills

LiuGong has formulated the *Emergency Response Plan for Environmental Emergencies* to ensure that after an environmental emergency occurs, the Company can organize emergency rescue work in a timely, orderly and efficient manner, and minimize the losses and social hazards caused by the emergency. Each of LiuGong's subsidiaries organizes environmental emergency training and emergency drills for sudden environmental incidents based on their environmental risks. The drills include hazardous waste leakage, hazardous waste fires, and wastewater discharge exceeding standards. In 2024, LiuGong's subsidiaries organized a total of 41 environmental emergency drills.

Indicators and Goals ▶

LiuGong strictly monitors the emission indicators for various pollutants and waste, setting annual goals to ensure that all emission indicators are controlled within permitted limits, steadily promoting ecological environmental protection and green sustainable development.

Indicator	Goals	Achievement
Environmental Pollution Incidents	Number of environmental pollution incidents = 0	Achieved 
Three Wastes and Noise at Boundary	100% compliance with discharge standards	Achieved 

Promotion of Environmental Awareness ▶

LiuGong regularly conducts environmental protection training, advocating for employees to start with themselves and work together to build a low-carbon new life. The content of the training includes environmental protection laws and regulations, the Company's environmental protection management system, equipment and facilities maintenance and management requirements. Additionally, the Company actively carries out environmental protection publicity and education activities. During World Environment Day on June 5, the Company carried out environmental protection publicity through company screens, banners, and other means, continuously enhancing employees' environmental awareness and promoting the orderly development of the Company's environmental protection work.

Indicator	Unit	2022	2023	2024
Number of Environmental Training Sessions	Times	101	114	129 ↑
Number of Participants in Environmental Training	Person-times	7,025	7,128	8,594 ↑
Total Hours of Environmental Training	Hour	223.53	206.5	213 ↑

Stable Compliance with Pollutant Standards

To verify whether environmental pollution factors such as waste gases, wastewater, and noise at boundary comply with discharge standards, the Company has developed an environmental monitoring plan based on pollution discharge permit management requirements. Each unit of LiuGong discharges wastewater, waste gases, and other pollutants after being treated by treatment facilities and meeting relevant standards. Every year, a third-party monitoring unit is entrusted to monitor wastewater, waste gases, and noise at boundary. There are no exceedance cases, and no impact on employees or surrounding residents. In 2024, the units have completed monitoring at 1,878 sites, including 1,040 for exhaust gas, 454 for wastewater, 156 for noise, 3 for soil, 2 for groundwater, and 223 for stormwater, with all monitoring indicators meeting the requirements of the national and local pollutant discharge standards.

LiuGong strictly implements the "Environmental Impact Assessment System" and the "Three Simultaneities" system. All new, modified, and expanded projects undergo environmental impact assessments as required, and the "Three Simultaneities" construction is carried out as required to ensure that all stages of the project, from planning to implementation, comply with environmental protection requirements and reduce the impact of pollutants on the ecological environment.

Indicator	Unit	2022	2023	2024
Pollutant Emission Compliance Rate	%	100	100	100
Synchronized Operation Rate of Environmental Facilities	%	100	100	100
Compliance Rate of “Three Simultaneities” in Environmental Protection for Construction Projects	%	100	100	100

In 2024, the Company actively carried out process and technology improvements, especially in the coating process, by researching the applicability of powder coating and water-based paints for LiuGong products, and introducing new technologies. Over the year, the Company invested more than RMB 8.6 million to establish the powder coating line of the Excavator Smart Factory and the water-based paint coating line of Joinhand Construction Machinery. After being put into operation, these lines significantly reduced the generation and emission of pollutants, with an expected annual reduction of approximately 14 tons of non-methane total hydrocarbons emissions. Currently, 5 coating lines have been converted to powder coating, and 2 coating lines have been converted to water-based paint, effectively reducing pollutant emissions.

Management of Wastewater ▶

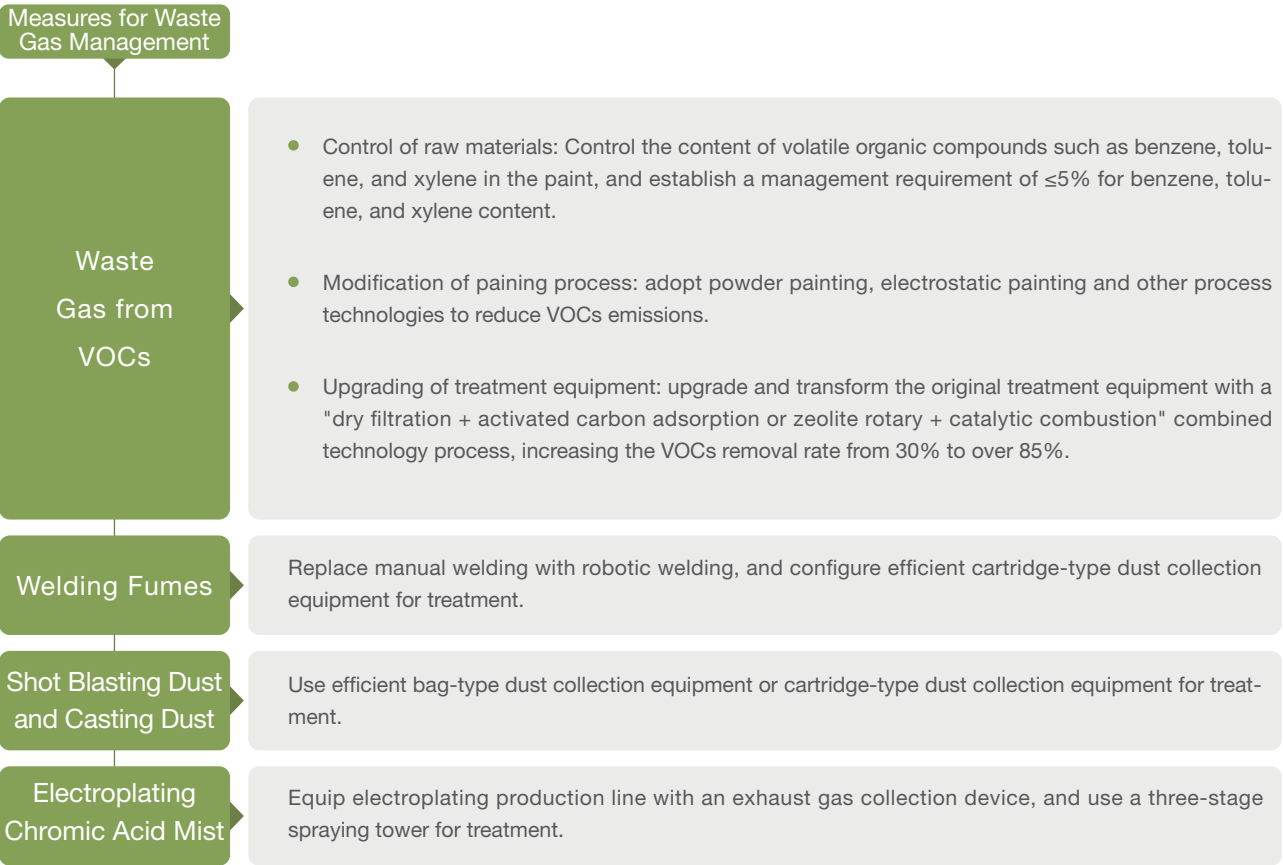
Subsidiaries of LiuGong built 15 wastewater treatment stations, configured wastewater treatment equipment and facilities to maintain normal and effective operation, treated wastewater to maintain long-term stability and meet the standards of discharge, and all electroplating wastewater is reused in production, rather than discharged to the environment. While reducing wastewater discharge, the Company strengthens the recycling of wastewater to turn "wastewater" into "golden water", realizing a win-win outcome for both economic and ecological benefits. During the Reporting Period, the Company's wastewater discharge decreased year by year, dropping to 481,983 tons in 2024, a 5.65% decrease compared to 2023. The amount of wastewater recycled and reused has steadily increased, reaching 2,102 tons in 2024, a 38.56% increase compared to 2023. Moreover, the Company has installed online wastewater monitoring equipment to continuously monitor wastewater quality and ensure efficient wastewater management.

Indicator ⁵	Unit	2022	2023	2024
Wastewater Discharges	ton	553,908	510,833	481,983 ↓
Wastewater Recycling Volume	ton	1,940	1,517	2,102 ↑
Chemical Oxygen Demand (CODcr)	ton	20.45	20.01	19.73 ↓
Five-day Biochemical Oxygen Demand (BOD5)	ton	4.64	4.34	2.82 ↓
Suspended Solids	ton	14.54	17.17	15.13 ↓
Ammonia nitrogen (NH3-N)	ton	5.21	4.18	3.88 ↓
Total phosphorus (P)	ton	1.02	0.56	0.28 ↓

⁵Wastewater-related data statistics scope covers the Company's headquarters and subsidiaries, and the following data for waste gases and waste solids is similarly applicable.

Management of Waste Gases ▶

The waste gases produced by LiuGong's subsidiaries mainly include VOCs from painting, welding fumes, shot blasting dust, casting dust, and electroplating chromic acid mist. The Company has equipped corresponding treatment facilities for different pollutants, and the treated pollutants all comply with the emission standards set by national and local environmental protection regulations. In particular, the waste gas from coating VOCs, the Company has effectively ensured stable compliance with the VOCs emission standards by upgrading and transformation existing treatment facilities. The average concentration of non-methane hydrocarbon generated is less than 30mg/m3, with the annual reduction of non-methane hydrocarbon emissions up to approximately 24%, resulting in significant environmental benefits.



Indicator	Unit	2022	2023	2024
Waste Gas Emissions	10,000 m³	913,854	1,062,664	1,103,023 ↑
Nitrogen Oxide (NOX)	ton	5.9	3.6	4.76 ↑
Sulfur Dioxide	ton	2.3	4.2	3.17 ↓
Volatile Organic Compounds (VOC)	ton	35.88	32.66	34.68 ↑
Particulate Matter (PM)	ton	44.84	50.72	56.54 ↑

Noise Management ▶

LiuGong conducts noise management in accordance with the Emission Standard for Industrial Enterprises Noise at Boundary (GB12348-2008). Firstly, noise generation is reduced through process equipment improvements at the source. Secondly, low-noise equipment is selected. Thirdly, engineering measures such as vibration isolation, silencing, and sound insulation are implemented. From 2022 to 2024, the Company invested over RMB 12 million in a comprehensive renovation of the assembly line at the loader assembly factory. After the transformation, the assembly tools use electric and hydraulic torque wrenches and screwdrivers, and the overhead cranes are equipped with low-noise KBK equipment, significantly reducing the regional noise.

Enhancement of Waste Management

LiuGong adheres to the solid waste management principle of “source control for classified collection, full recycling and utilization, and proper disposal of general solid waste and hazardous waste” and has formulated systems such as the *Solid Waste Management System* and the *Standard for pollution Control on Hazardous Waste Storage* to regulate the collection, storage, and disposal of solid waste in the Company, and each of its subsidiaries implements these systems accordingly. The general solid waste generated during LiuGong’s production and operations mainly includes scrap steel, non-ferrous metals, plastics, waste paper, household garbage, and construction waste, while the hazardous waste mainly includes waste oil, waste chemical packaging barrels, batteries, production waste, and general waste electrical and electronic products.

The Company has established solid waste storage areas that meet the "three-prevention" requirements. Corresponding collection tools are set up in the workshops, and industrial solid waste is classified into Categories A, B, C, and D for collection and storage, and ultimately disposed of accordingly. In hazardous waste storage areas, the Company pastes zoning signs and warning signs, establishes hazardous waste ledgers and standardizes the filling-out procedures, and attaches small labels to packaging bags of hazardous waste. The Company collects, stores, and disposes of all solid waste in accordance with legal and regulatory requirements, and all hazardous waste is disposed of by qualified units. Additionally, LiuGong regularly offers training on standardized management of solid waste to further regulate the environmental protection management, continuously improve employees' environmental protection capabilities, effectively control environmental risks, and ensure that environmental protection work is legal and compliant.

During the Reporting Period, through continuous optimization of the waste management process, the Company achieved an excellent record of 100% compliance in waste disposal year after year. Among them, the disposal volume of general industrial solid waste amounted to 34,364 tons, including 4,001.36 tons of domestic wastes, a year-on-year decrease of 13.06% and 40.12%, respectively.

Indicator	Unit	2022	2023	2024
Disposal Volume of General Industrial Solid Waste	ton	31,963	39,526	34,364 ↓
Disposal Volume of Domestic Waste	ton	5,774	6,682	4,001 ↓
Quantity of Hazardous Waste Disposed of	ton	1,312	1,505	1,621 ↑
Compliant Disposal Rate of Solid Waste	%	100	100	100

Realization of Efficient Resource Utilization

LiuGong deeply practices the concept of circular economy, focusing on the efficient use of resources, implementing energy-saving renovations, strengthening water resource management, promoting renewable energy to replace fossil fuels, and carrying out green and low-carbon office practices to contribute to the building of a resource-saving and environmentally friendly society.

Resource Management System

LiuGong strictly adheres to national and local laws and regulations such as the *Energy Conservation Law of the People's Republic of China* and the *Water Law of the People's Republic of China*, to ensure smooth production operations. The main types of energy used by the Company include natural gas, diesel, gasoline, liquefied petroleum gas, electricity, and heat. From 2022 to February 2024, the production water used in the Company's southern production area was mainly groundwater, while tap water was mainly used for office drinking water and a small portion for special equipment production water. Starting from March 2024, the Company stopped using groundwater and switched entirely to tap water.

Governance ▶ LiuGong manages energy in accordance with the Energy Management System - Requirements with Guidance for Use (GB/T 23331-2020), and plans a total of 42 documents including energy management systems, processes, and standards. LiuGong's headquarters has set up a full-time energy management function, which takes the lead in managing energy-related business. LiuGong's water resource management related work is carried out in accordance with the Company's Energy Management System.

Strategy ▶ LiuGong analyzes the structure of energy consumption in the production process, and through the identification and assessment of risks and opportunities, further defines the direction of energy management improvement, so as to promote technological innovation and green transformation.

Type of Risk/Opportunity		Description of Risk/Opportunity	Likelihood of Occurrence	Impact Duration	Expected Financial Impact	Countermeasures
Risk	Market Risks	Dramatic fluctuations in energy prices may affect the production costs and profits of enterprises	Medium	Short and Medium Term	Increase in energy costs and decline in profits	1. Develop the LiuGong Energy Business Plan during 14th Five-Year Plan Period, strengthen energy management, and set energy consumption management goals; 2. Optimize the energy usage structure and continue to promote photovoltaic power generation and green electricity trading.
	Opportunities	Technological Opportunities	Conduct research on emerging energy technologies, implement energy-saving transformations, thereby improving energy efficiency.	High	Short, Medium and Long Term	Increase production efficiency, reduce production costs.
		Policy Opportunities	Subsidies, incentive measures, and preferential loans introduced by the government encourage companies to adopt clean energy or improve energy efficiency.	High	Medium and Long Term	Reduction in investment costs and increase in income sources

Impact, Risk, and Opportunity Management ▶

The Company establishes an energy usage ledger to record and analyze energy consumption, comprehensively identify and assess the risks and opportunities that may arise in the process of energy utilization. Additionally, the Company has set up a monitoring and protection system to conduct online real-time monitoring of the operating status of electrical equipment, ensuring the long-term stable operation of the electrical equipment.

Indicators and Goals ▶

Based on the Company's development strategy needs, LiuGong has developed the *LiuGong Energy Business Plan during 14th Five-year Plan Period*. With reasonable energy consumption targets, the Company continues to build a standardized and systematic energy management platform to achieve digital, informational, and intelligent control and management of energy.

Indicator	Goals	Achievement
Decrease Rate of Energy Cost per Unit of Working Hour	18% decline by 2025	In progress, and a >>> reduction of 17% in 2024

Promotion of Energy Conservation

The Company improves energy utilization efficiency by eliminating outdated technologies and high energy-consuming equipment and promoting new energy technologies. In the production of components, the Company uses laser cutting machines, dry cutting technology, robot powder spraying, robot welding and other advanced green process technologies. In the production operation, the Company effectively monitors the utilization rate of plates, the amount of paint per unit area, the amount of welding gas used for a single kilogram of welding wire and other green process indicators to achieve low-consumption and energy-saving production.

Energy Consumption of LiuGong



Category	Unit	2022	2023	2024
Natural Gas	10,000 m³	126.36	203.70	311.94 ↑
Diesel	ton	1,166.69	1,230.80	1,175.35 ↓
Gasoline	ton	5.02	7.93	5.90 ↓
Liquefied Petroleum Gas	ton	0.14	0.00	0.00
Electric Power	kWh	151,207,389	157,928,323	182,558,915 ↑
Heat	GJ	8,244	10,450	8,954 ↓
Total Clean Energy Usage	kWh	26,191,585	5,531,599	19,608,978 ↑
Total Energy Consumption	tce	22,414.84	24,24.98	28,612.52 ↑
Comprehensive Energy Consumption per 10,000 Yuan of Output Value	tce/10,000 yuan	0.0111	0.0108	0.0111 ↑

Implementation of Energy-efficient Transportation ▸

LiuGong adopts a low-carbon transportation solution, changing the mode of automobile transportation to a combination of land and water transportation, which significantly reduces logistics and transportation costs while reducing carbon emissions. The Company applies AGV/RGV and electric fork to distribute materials, reduce the use of fuel fork, and effectively reduce carbon emission in the logistics transportation process.

Education on Energy Conservation ▸

LiuGong focuses on improving the energy-saving awareness of its employees, and regularly carries out energy-saving training and publicity activities to convey the concept of energy-saving with practical actions. During the Reporting Period, the Company offered training activities such as the National Energy-Saving Publicity Week and the promotion of energy systems, to create a strong energy-saving and low-carbon atmosphere to contribute to the building of a beautiful China.

LiuGong Organizes Energy Conservation Publicity and Training



Case Study

LiuGong organizes energy conservation training every year to publicize and promote the Company's internal energy management system, energy conservation measures and requirements, etc., and to advance the implementation of the Company's energy conservation work.



Training on the Energy System

LiuGong Energy-saving Publicity Week

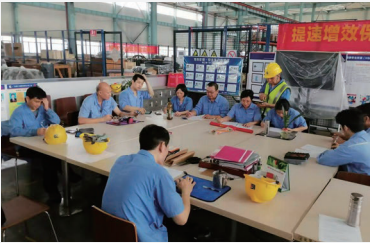


Case Study

Every year during the "National Energy Conservation Publicity Week" event, LiuGong organizes internal energy conservation publicity activities. It uses LED screens to promote the event theme and energy conservation awareness. Its subsidiary companies use electronic screens, publicity banners, emails, WeChat work groups, etc. to publicize and implement energy conservation knowledge, and also organize energy conservation training to enhance employees' awareness of energy conservation.



Themed Promotions



Training and Promotion for Energy Efficiency

Rational Utilization of Water Resource

LiuGong implements various water-saving measures based on its production characteristics, continuously improving the water resource reuse rate. Subsidiaries manage water use through methods such as water balance testing, water supply network inspection, trouble-shooting, and leak sealing. In addition, the casting and heat treatment processes in the production process of subsidiaries use cooling water towers and pools to recycle water resources.

Water Resource Utilization of LiuGong



Category	Unit	2022	2023	2024
Total Freshwater Consumption	ton	1,554,663	1,681,284	1,400,371 ↓
Total Water Consumption	ton	1,395,642	1,534,946	1,294,362 ↓
Comprehensive Water Consumption per 10,000 yuan of Output Value	m³/10,000 Yuan	0.66	0.68	0.50 ↓

Creation of a Circular Economy

LiuGong actively responds to the national call for the development of a green circular economy, fully utilizing waste parts and other materials to develop the remanufacturing industry, while also strengthening the recycling management of packaging materials and waste to achieve efficient resource utilization. In 2024, the Company utilized a total of 439 tons of old parts for production, reducing carbon emissions by 264 tce.

Deepening of the Remanufacturing Field ▸

LiuGong's remanufacturing factory covers an area of 6,300 m² and has a series of advanced remanufacturing specialized equipment such as: ultrasonic testing instruments and high-temperature pyrolysis furnaces. It was one of the first 35 remanufacturing pilot units approved by the Ministry of Industry and Information Technology in 2009. In July 2011, 129 remanufactured products of 5 categories from LiuGong were listed in the first national remanufacturing catalog, which is the first enterprise of construction machinery to be approved.



LiuGong Remanufacturing Plant

LiuGong continues to increase its investment in remanufacturing business, conducting research on green cleaning, non-destructive disassembly, and other technologies, and has successfully applied several new technologies, including high-temperature thermal pyrolysis, ultrasonic cleaning, and cold welding. LiuGong has the capability for the entire remanufacturing process from old part recovery, disassembly, and cleaning, as well as for remanufacturing of whole machines and components such as loaders and excavators, promoting technological progress and sustainable development in the remanufacturing industry. LiuGong Remanufacturing Company has undertaken research projects for national science and technology support, including the Key Technologies and Equipment for Remanufacturing of Construction Machinery Parts and the Application Development and Integrated Demonstration of Remanufacturing for Loaders and Excavators. During the Reporting Period, LiuGong assisted in holding the Construction Machinery Remanufacturing Committee Summit (Liuzhou), a council unit of the China Construction Machinery Industry Association, and was also included in the list of enterprises meeting the "Industry Standards for Remanufactured Electromechanical Products and is the only remanufacturing company in Guangxi to be included.

LiuGong Hosts the Construction Machinery Remanufacturing and Green Development Summit Forum



Case Study

In June 2024, the Construction Machinery Remanufacturing and Green Development Summit Forum, hosted by the China Equipment Management Association and organized by LiuGong and other units, was held in Liuzhou. The forum, themed "Building a New Pattern for the Development of Construction Machinery and Creating New Advantages for a Circular and Sustainable Economy" focuses on addressing the key challenges faced by remanufacturing enterprises in their transformation and upgrading. It discusses the advancement of the construction machinery remanufacturing industry towards high-end, intelligent, and green directions, promoting the vibrant development of the construction machinery remanufacturing industry.



Construction Machinery Remanufacturing and Green Development Summit Forum

Resource Recycling and Reuse

LiuGong implements specific measures in production manufacturing, packaging usage, and waste recycling to improve the utilization of renewable resources during operations, reduce waste and pollution, and provide resource security for sustainable economic and social development.



Production and Manufacturing

In the process of cutting raw materials like steel plates, LiuGong uses the cut-off scraps to make small components, improving resource utilization and reducing scrap steel generation. LiuGong Forklift, Joinhand Construction Machinery, and other units all use powder coating on their production lines, which is recyclable and reusable, with no hazardous waste like paint slag generated, effectively reducing waste generation and disposal.



Packaging Usage

LiuGong has formulated systems such as the *Parts and Components Recycling Packaging Management Process*, and when selecting and purchasing raw and auxiliary materials and equipment, priority is given to materials, products and services with minimal environmental impact, high resource utilization, and high recyclability and degradability. For packaging, recyclable workstation apparatus are used to replace wooden boxes and cartons, and suppliers' cartons are replaced with fixtures for packaging, thereby reducing packaging waste generation and reducing environmental pollution.

Active Promotion of Fuel-to-electricity Conversion

LiuGong has innovatively converted old mining trucks to electric ones, thus achieving full electric control and greatly improving equipment performance and control experience. The energy conversion efficiency of electric mining trucks is higher than that of fuel-powered mining trucks, reducing energy waste and lower operating costs from 0.98 yuan/ton to 0.23 yuan/ton. Electric mine trucks can reduce maintenance costs and eliminate refueling time required for fuel-powered mine trucks, thus increasing the actual operating hours of mine trucks. Calculated on the basis of 3,000 operation hours per year per mine truck, each mine truck reduces carbon dioxide emissions by 121 tons/year, delivering significant environmental benefits.



Fuel-to-electricity Conversion

Practice of Green Office

The Company strengthens the promotion of green and low-carbon development concepts and policies, encourages employees to raise their awareness of energy conservation from their daily work and life, and creates a good green office atmosphere.

Water Saving

- Use foot-operated water valves, sensor faucets, and other water-saving devices;
- Regularly conduct training on water-saving.

Electricity Saving

- Strictly control the temperature of air conditioning in summer and winter;
- Ensure that lights are turned off when leaving offices and firmly prevent lights from being "always-on".

Paper Saving

- Promote paperless office practices and continue to drive the construction of information systems;
- Advocate double-sided printing to reduce paper waste.

Waste Sorting and Recycling

Strictly follow relevant regulations to carry out waste sorting, and collect and treat wastes such as used batteries and pen refills in a centralized manner.

Intelligent Integration: Leading the Path of Striving Forward

Our Philosophy

LiuGong insists on innovation-driven development, strengthens R&D capabilities, optimizes supply chain management, and ensures efficient collaboration. We strive to balance products and services to comply with safety and quality standards and create trusted choices; improve the customer service management mechanism to actively respond to and solve customer needs; and protect data security and privacy, to empower safety with technology and promote the sustainable, high-quality development of the Company.

Our Actions

- ▶ We insist on R&D and innovation,
- ▶ protect intellectual property rights,
- ▶ strengthen supply chain management,
- ▶ conduct responsible purchasing,
- ▶ treat SMEs equally,
- ▶ guarantee quality assurance,
- ▶ optimize customer service,
- ▶ and protect information security and privacy.

SDGs Responeded



Responsibility Focus: Setting a Benchmark for Intelligent and Green Practices to Unswervingly Take the Road of High-quality Development

LiuGong remains steadfast in fulfilling the expectations set by President Xi Jinping during his visit to the Company, leads the high-quality development to new heights with innovation, and strives to be a pioneer and leader of innovation and change in the industry. In recent years, under the guidance of the Company's strategy of "Total Solution, Total Intelligence and Total Internationalization", LiuGong has actively supported the transformation and upgrading of traditional production models, with a focus on high-end, intelligent, and green development. Adapting to local conditions, the Company fosters new quality productivity, advancing high-quality manufacturing and achieving continuous progress and success.

Empowering Through Digital-intelligent Integration

In 2024, LiuGong achieved a commercial breakthrough in autonomous electric wheel loaders. These loaders are now capable of fully autonomous operations, including automatic batching, automatic material loading, and automated scheduling. Through an intelligent dispatch system, autonomous loaders can precisely execute digging and loading tasks, enabling refined management of construction operations. Autonomous road rollers, in addition to performing unmanned fleet operations on highways and railways, have for the first time been deployed for unmanned fleet operations on asphalt surfaces. They have successfully undergone product trials and deliveries for clients such as Anneng, China Railway 25th Bureau, and Jiangxi CCCC. With remote monitoring and automated scheduling, these autonomous rollers can operate continuously around the clock, significantly reducing construction time and costs. During the Reporting Period, the Company obtained approval for 4 digital patents, secured 4 government-approved projects, and won 2 awards.



Tianji Equipment Management



Unmanned Cloud Control



856HE Unmanned Loader



DW105A-E Unmanned Mining Vehicle

Comprehensive Solutions serve as a Core Part of the "Total Solution, Total Intelligence and Total Internationalization" strategy of LiuGong. The Company deeply understands customer needs and offers a full range of products, services, and solutions across the entire lifecycle and value chain, helping customers create greater value. In 2024, the Company released LiuGong Mining Comprehensive Solutions 2.0, evolving from "customized products + combined solutions" to "combined solutions + smart solutions". This upgrade expands the range of applicable construction scenarios and broadens market coverage, achieving a win-win outcome for both customer value and LiuGong's value. The Smart Mine Management System Version 3.0 has been released, which expands and enhances features such as production scheduling, safety supervision, data mining, and lean analysis, enriches the system's product lineup, and further enhances value creation and service capabilities for key customers. These comprehensive solutions are being promoted and applied in overseas markets such as South Africa, continuously improving comprehensive solution capabilities and value connotation.



Home Screen of Smart Mine 3.0

Setting Models for Green Practices

LiuGong firmly adheres to its mission of "Empower People with Intelligent Green Machinery" focusing on environmental protection, economics, and intelligence. It has taken the lead in the electrification R&D of construction machinery. 2024 marks the tenth anniversary of LiuGong's electrification, having formed the most comprehensive electric product lineup in the construction machinery industry, with products covering pure electric, hybrid, drag-line, battery swapping, and power supply technologies. Over the past decade, LiuGong has actively seized clean technology opportunities, investing significant resources in the electric field, setting a new benchmark for the industry's green development.

The Company's electric excavators offer powerful operational performance, integrating advanced energy-saving and emission-reduction technologies. These reduce dependence on fossil fuels while ensuring production efficiency and lowering fuel costs, all while maximizing environmental protection. Thanks to excellent product quality and advanced technology, LiuGong has reduced the operating costs of its electrified products by 60-70%, improved operational efficiency by 20%, reduced power system failure rates by 50%, and significantly lowered carbon emissions. During the Reporting Period, the LiuGong 862HE electric loader won the 2024 China Construction Machinery Annual Product TOP50 New Energy Market Contribution Gold Award, helping industries such as coal, ports, logistics, and construction achieve green transformation and upgrading.

The Company takes "dedicated to promoting the development of new energy technologies for global construction machinery" and "providing global construction machinery customers with new energy products that are technologically advanced and most competitive" as its electric business strategy. On the one hand, it focuses on breakthroughs in core new energy technologies to build an industry leading electrification technology platform. On the other hand, it endeavors to create a new energy product matrix that combines technological leadership, market competitiveness, and environmental benefits, providing customers with full life cycle value solutions. From 2022 to 2024, the Company has achieved remarkable results in its electrification transformation: the product penetration rate has experienced rapid growth, and the market share has continuously led the industry. Based on the standard working conditions of 2,500 hours per unit per year, the electrified equipment put on the market in the past three years has cumulatively achieved a carbon emission reduction of 790,071.6 tons, demonstrating outstanding carbon reduction efficiency.

Promotion of Innovation-driven Development

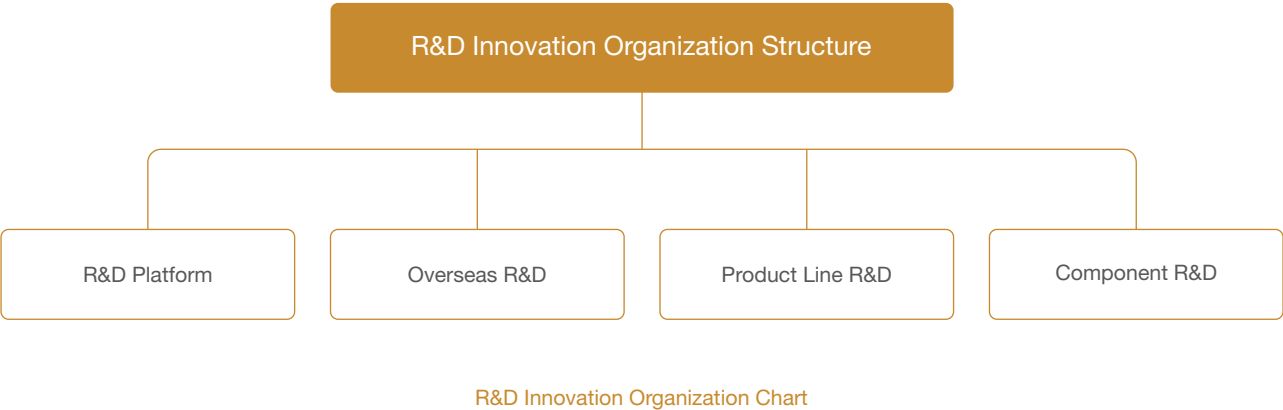
After 65 years of development and accumulation, LiuGong has grown into an international enterprise with nearly 30 product lines, covering the most important application fields. This is inseparable from LiuGong's persistent pursuit of technological innovation and its dedication to product quality. Every technological breakthrough and every round of industrial upgrading is a vivid portrayal of LiuGong's innovation-driven efforts to constantly scale new heights and demonstrates its strong strength and outstanding contributions in the field of construction machinery.

R&D Innovation Management

Governance

R&D System

LiuGong guides the product and technology development process with the innovative spirit of “scaling heights, inspiring success, and embracing failure” and has established research and development management systems such as the *R&D Innovation Management Manual*, the *Annual R&D Project Plan Management Process*, the *Measures for the Administration of Patents*, the *Project Management Standard* and the *Measures for the Administration of Innovation Incentives*. The Company's R&D innovation organization includes four major R&D centers: R&D platform, overseas R&D, product line R&D, and component R&D. Each line has clear responsibilities, and works together to promote the Company's technological innovation and product upgrades.



We have established an efficient and collaborative LiuGong New Product Development Process (LDP), covering six sub-processes including machine development, component development, and technology development. This strengthens the product collaborative development concept, connects customer needs to customer-satisfied products, and solve business collaboration problems in marketing, R&D, procurement, manufacturing, service, and spare parts, effectively improving R&D quality and efficiency. The Company's technological innovation system realizes closed-loop management of the Company's strategy, product strategy, product development, and product decommissioning. It enables collaboration in technological development, component development, and machine development, thereby increasing the success rate of the development of upgraded products.

Investment in R&D

LiuGong's R&D Investment in the Last Three Years

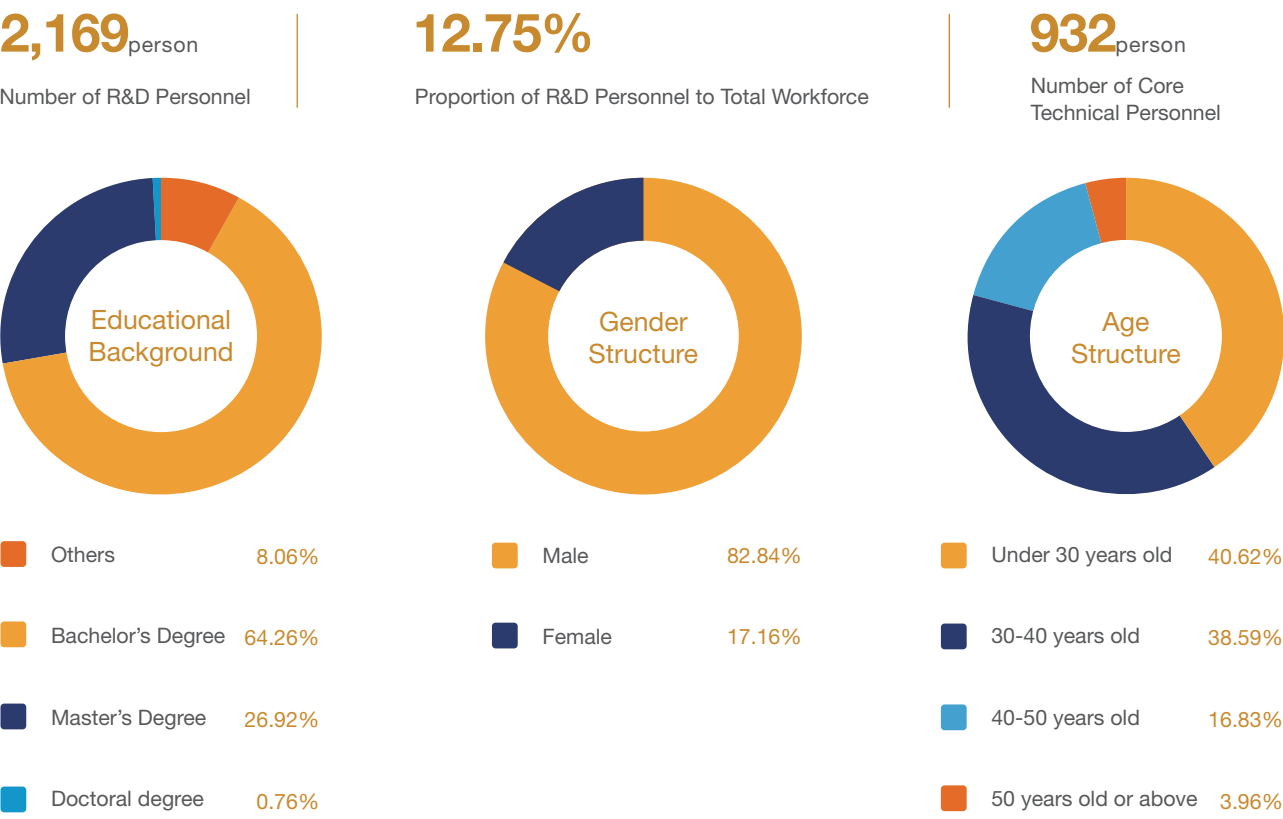


Performance Indicators	Unit	2022	2023	2024
Investment in R&D	RMB 10,000	93,745.96	104,703.59	123,797.89 ↑
Proportion of Total R&D Investment to Operating Revenue	%	3.54	3.80	4.12 ↑

R&D Team

LiuGong actively cultivates leading talents, identifies key personnel, and assigns them to undertake (or participate in) major R&D projects, providing a talent pool for the leadership team of the technology platform. The Company establishes an academy for R&D technical personnel, strengthening the foundational professional capabilities of the R&D team through layered and categorized training. During the Reporting Period, the Company had 2,169 R&D personnel, including top R&D experts having senior overseas R&D backgrounds and work experience with world-leading construction machinery manufacturers.

R&D Personnel Structure



Strategy ▶

In the process of seeking innovation and development, LiuGong faces potential risks and threats. By identifying these risks, the Company is able to take proactive measures to reduce the probability and impact of these risks. Additionally, through the identification and assessment of innovation opportunities, LiuGong can quickly seize market opportunities, develop competitive new products, and capture market share.

Type of Risk/Opportunity		Description of Risk/Opportunity	Likelihood of Occurrence	Impact Duration	Expected Financial Impact	Countermeasures
Risk	Market Risks	Changes in the competitive landscape could cause competitors in the market to quickly launch products similar to LiuGong's, eroding market share.	High	Medium and Long Term	Decrease in revenue	Promptly adjust product pricing, marketing strategies and other policies according to market changes, and improve market response speed and flexibility.
	Technological Leadership	Through technological innovation, LiuGong can develop core technologies with independent intellectual property rights, thereby gaining a leading position in the market.	High	Medium and Long Term	Increase in revenue	Enhance LiuGong's technological R&D strength to ensure that it maintains a leading position in the field of new technologies; increase R&D investment, introduce and cultivate high-quality R&D talents, and establish an efficient R&D system.
Opportunities		Industrial Upgrading	High	Medium and Long Term	Increase in revenue	Strengthen technological innovation and investment in research and development, and actively seek cross-border cooperation with other industries, enterprises and research institutions.

Impact, Risk, and Opportunity Management ▶

LiuGong actively responds to industry changes by developing new technologies and products to enhance competitiveness, with a far-reaching impact that drives industrial upgrading. Additionally, LiuGong faces risks such as rapid technological iteration. The Company leverages strategic planning and risk management to seize opportunities and achieve sustainable development.

Risk Identification

The main risks faced by LiuGong include technological risks, market risks, policy and legal risks, and reputation risks. The Company defines project goals and scope, determines key areas for risk identification, and collects and analyzes customer needs, industry markets, competitors, and information on new products and technologies, to improve the accuracy and comprehensiveness of risk identification.

Risk Assessment

The Company conducts quantitative risk assessments, determines specific values and ranges for risks, such as the probability of occurrence and impact degree, generates a risk matrix and ranks risks by impact and likelihood.

Risk Monitoring

The Company establishes a standardized and sound R&D project initiation and tracking mechanism, improves execution capabilities and closely monitors project development progress.

Risk Management

The Company strengthens full-process R&D management, effectively controls the risks related to new product development, regulates R&D activities, and continuously improves the Company's independent innovation capabilities.

Indicators and Goals ▶

LiuGong focuses on breakthroughs in core technologies. During the Reporting Period, clear technological innovation indicators and goals were set to support the Company's sustainable development through continuous technological leadership.

Indicator	Goals	Achievement
Launch of New Complete Machine Products	800 New Products Launched in 2027	In progress >>>
R&D of Core Components	600 Core Components Developed in 2027	In progress >>>
New Technologies Put into Use	300 New Technologies Put into Use in 2027	In progress >>>

R&D Innovation and Achievements Transformation

Encouragement of R&D and Innovation ▶

The Company has developed the *Strategic New Product R&D Expense Support Management System*, flexibly carrying out short-, medium- and long-term incentives. It adopts a model of "base salary + performance salary + R&D project award + term incentive + equity incentive," with the core focus on achieving strategic goals, linking performance to salary, and motivating employees' independent innovation. Additionally, the Company has established a technology innovation award for teams with outstanding contributions to R&D and significant breakthroughs in technological innovation. The Company has hosted the annual technical innovation conference for 24 consecutive years, honoring and rewarding outstanding teams and individuals. During the Reporting Period, the Company issued R&D innovation incentive bonuses amounting to 47 million yuan.

Construction of R&D Platform ▶

LiuGong, supported by a globally advanced R&D system, has established a three-in-one R&D institution consisting of global R&D centers, product/component research institutes, and overseas R&D centers. The Company has created a global collaborative innovation platform with Liuzhou as the headquarters, covering countries such as China, India, the UK, Poland and the USA. As a national high-tech enterprise, the Company owns 13 national science and technology innovation platforms, such as the National Earthwork Machinery Engineering Technology Research Center and the National CNAS-accredited Laboratory. During the Reporting Period, the Company was recognized as the “Guangxi New Energy Engineering Machinery Technology Achievements Transformation Pilot Research Base” by Department of Science and Technology of Guangxi Zhuang Autonomous Region, and was approved to build the “Guangxi High-end Engineering Equipment Laboratory” which is the highest-level and highest-standard science and technology R&D platform in Guangxi. OVM possesses the industry's first “National Recognized Enterprise Technology Center” that serves as a technical innovation platform with the industry's highest standards.



High-tech Enterprise Certificate

Leveraging technical innovation platforms and government resources such as the "Double Hundred Project," the Company has carried out industry-university-research cooperation on key projects and critical technologies, strengthening technical discussions and exchanges, and sharing expert wisdom. During the Reporting Period, LiuGong signed a strategic cooperation agreement with the National Engineering Research Center for Electric Vehicles at Beijing Institute of Technology to jointly develop new energy technologies and continue advancing in-depth industry-university-research cooperation. The Company, in collaboration with Zhejiang University's High-end Equipment Research Institute, the National Engineering Research Center for Electric Vehicles at Beijing Institute of Technology, and Guangxi University, co-established the Guangxi High-end Engineering Equipment Laboratory. The laboratory is being developed into an innovation platform for core technological breakthroughs, achievement transformation, industrial upgrading, and talent gathering in the high-end engineering equipment manufacturing industry in Guangxi and even globally.

R&D Achievements and Progress ▶

LiuGong leverages product and technological innovation to support the implementation of the “Total Solution, Total Intelligence and Total Internationalization” strategy, insisting on using technological innovation to drive LiuGong products' global competitiveness. The Company vigorously promotes four major R&D strategies: technology leadership, quality leadership, TCO leadership, and application leadership. We focus on the development of international, large-scale, electric, and intelligent products, closely aligning product innovation with the development of key components, aiming to achieve a high level of technological independence and self-reliance. In 2024, the Company launched more than 130 new product development projects, and launched 29 new electric products (including 21 for sales on the market), covering 11 product lines.

Innovative Products in 2024

820TE Electric Wheel Loader	
	Innovation Points
	Lithium iron phosphate batteries are used, achieving zero emissions, no pollution, and low noise;
	Leakage protection and fully hydraulic braking system delivers increased safety;
	MTB battery designed for engineering use has high shock resistance and better adaptability to working conditions;
	Reasonable power distribution between the hydraulic and travel motors make it more efficient and energy-saving;
Articulated swing joint design provides strong adaptability, high reliability, and stability.	
Innovation Points	
A new generation cab is adopted to provide 12-meter rearview;	
The higher-positioned bucket pivot offers stronger breakout force, and parallel lift functions demanded by customers in Europe and America;	
A fully variable hydraulic system is adopted to offer fully hydraulic braking and high safety;	
The automatic transmission gearbox makes operation more convenient, efficient, and energy-saving;	
7-ton wet brake axle features strong bearing capacity, higher reliability, and longer service life.	
856HE Electric Wheel Loader for Europe and America	
	
972F Crawler Excavator	
	Innovation Points
	Powered by a QSM15 engine, which does not consume urea, and a fully electric-controlled hydraulic system, together with a 300cc large displacement main pump, this product offers high efficiency and low fuel consumption;
	Heavy-duty components with a 20,000-hour ultra-long lifespan and large cross-section working devices improve machine reliability. Dual hydraulic variable speed fans, with an 85cc large displacement fan pump, feature high cooling performance, and maintain a cool temperature during hammering operations;
	Breaker switching valve: enables P1/P2 pump switching for breaking, and doubles the service life of the main pump under breaking conditions.
Innovation Points	
Electric proportional travel control technology: achieve smooth and steady starting of travel, through electric proportional pilot control of the main valve opening, with linear incremental speed control;	
Hydraulic-driven travel chassis transmission technology: use a high-efficiency piston motor with automatic variable displacement to adapt speed to load;	
Load-sensitive hydraulic control technology: use load-sensitive pumps and valves to match pressure and flow, achieve energy savings and improve maneuverability;	
Start-up mode customization technology: adapts to different users' needs for travel response speed, mimics car start-up modes, with the industry's first multi-mode setting, greatly satisfies the varying needs of different customers and working conditions for this performance;	
Standard rearview camera: the first industry-standard rearview camera for 6-ton class machines, meets the safety requirements for wheeled excavators when rotating in complex environments.	
906FWG4 Wheeled Excavator	
	

Science and Technology Awards Obtained by LiuGong in 2024

Project Name	Award Name	Award Level
Innovation and Engineering Application of Modern Steel Pipe Concrete Arch Bridge Construction Technology	2023 China Highway Society Science and Technology Award	Special Prize
Green Intelligent Core Transmission Components and Industrialization of Large Power Wheel Loaders	2023 Guangxi Science and Technology Award	First Prize
Introduction and Industrial Application of Off-road Engine Complete Technology	2023 Guangxi Science and Technology Award	Scientific and Technological Cooperation Award (equivalent to first prize)
Research on Key Technologies for Fire and Explosion Safety Protection of Bridge Stay Cables	1st Safety Technology Progress Award	First Prize
Intelligent Mining Safety Operation Management Platform for Open-pit Mines	1st Safety Technology Progress Award	First Prize
Solutions and Applications of Efficient and Stable All-Wheel Drive System for Graders	2024 Mechanical Industry Science and Technology Award	Second Prize
Long-life Intelligent Suspension Technology R&D and Application	2023 Science and Technology Award from China Highway & Transportation Society	Second Prize
Key Technologies and Applications for Structural Performance Improvement and Retrofitting of In-service Bridges	Science and Technology Award from China Highway & Transportation Society	Second Prize
Construction and Electrification Application of Excavator Series Gearbox Forward Development Platform	2023 Guangxi Science and Technology Award	Third Prize
Research and Application of Key Technologies for High-pressure Pure Electric Hydraulic Excavators	2024 Mechanical Industry Science and Technology Award	Third Prize
Research and Application of Bridge Safety Monitoring, Adjustment, and Seismic Isolation Steel Bearing Technology	1st Safety Technology Progress Award	Third Prize
Key Technology Research and Application of Circumferential Prestressed Anchorage System for Water Resources	Technology Innovation Award from China Steel Construction Society	Fourth Prize



Promotion of Industry Development ▶

LiuGong continues to drive technological innovation and green development, leading the trend of product intelligence and efficiency upgrades, effectively promoting the transformation, upgrading, and healthy development of the entire construction machinery industry.



As a leader in the industry, the Company actively participates in the formulation of international and domestic technical standards and is an important member of multiple industry and technical associations, advancing industry technology progress through its actions. During the Reporting Period, LiuGong participated in 32 standard projects, of which 16 are national standards (7 of which were led by LiuGong), 7 are industry standards (4 of which were led by LiuGong), and 9 are group standards (2 of which were led by LiuGong).



Since 2008, LiuGong partnered with the Polar Research Institute of China, has provided customers with loaders, excavators, cranes, and other equipment, becoming the most frequently showcased brand in China’s construction machinery Industry, and is also the only construction machinery manufacturer in China that has a Construction Machinery Laboratory for Polar Scientific Research. In September 2024, the Antarctic research team sets off again, with LiuGong providing support for 16 consecutive years. During the Reporting Period, the Company also hosted events such as the Technology Innovation Conference, Global Dealer Conference, Customer Festival, Academician Symposium, and Technology Salon.

Deepening the “Green Alliance” Program, Empowering Sustainable Development

 Case Study

Since launching the “Green Alliance” initiative at the Global Dealer Conference in 2023, LiuGong has demonstrated a strong commitment to green development by supporting public welfare projects in Africa. At the 2024 Global Dealer Conference, LiuGong further deepened the “Green Alliance” program by signing the Green Alliance Deepening Cooperation Agreement with Universitas Gadjah Mada in Indonesia, Beijing Institute of Technology, and 5 dealers and customers, promoting the sustainable development of the industry’s ecological system.



LiuGong Green Alliance Deepening Cooperation Signing Ceremony

Protection of Intellectual Property Rights

Intellectual Property Management ▶

LiuGong strictly complies with relevant laws and regulations such as the *Patent Law of the People's Republic of China* and the *Trademark Law of the People's Republic of China*, and has formulated systems such as the *Intellectual Property Legal Risk Management Measures*, *Patent Management Measures*, *Trademark Legal Affairs Management Measures*, and *Intellectual Property Compliance Management Guidelines*. To further improve the Company's patent management mechanism, LiuGong has established a Patent Management Committee to promote the Company's patent management and protection work.

Protection of Intellectual Property Rights ▶

During the development process of R&D projects, the Company timely handles the registration, filing, application and other work related to intellectual property to ensure that the Company’s innovative achievements are legally protected and effectively safeguard its intellectual property. The Company identifies risky patents through patent search and analysis, formulates a patent layout plan, and carries out design avoidance to prevent infringing on others’ intellectual property.

Intellectual Property Training ▶

To further strengthen employees' awareness of intellectual property protection and management, the Company has launched specialized intellectual property courses and actively organizes training activities covering the entire process of intellectual property management.

Indicator	Unit	2022	2023	2024
Total Number of Granted Valid Patents	Item	2,659	2,882	3,235 ↑
Total Number of Granted Valid Invention Patents	Item	776	882	1,020 ↑
Total Number of Granted Valid Utility Model Patents	Item	1,718	1,819	1,977 ↑
Total Number of Granted Valid Design Patents	Item	165	181	238 ↑
Total Number of Software Copyrights	Item	174	227	285 ↑
Total Number of Published Papers	Item	1,906	2,032	2,159 ↑

Building Responsible Supply Chains

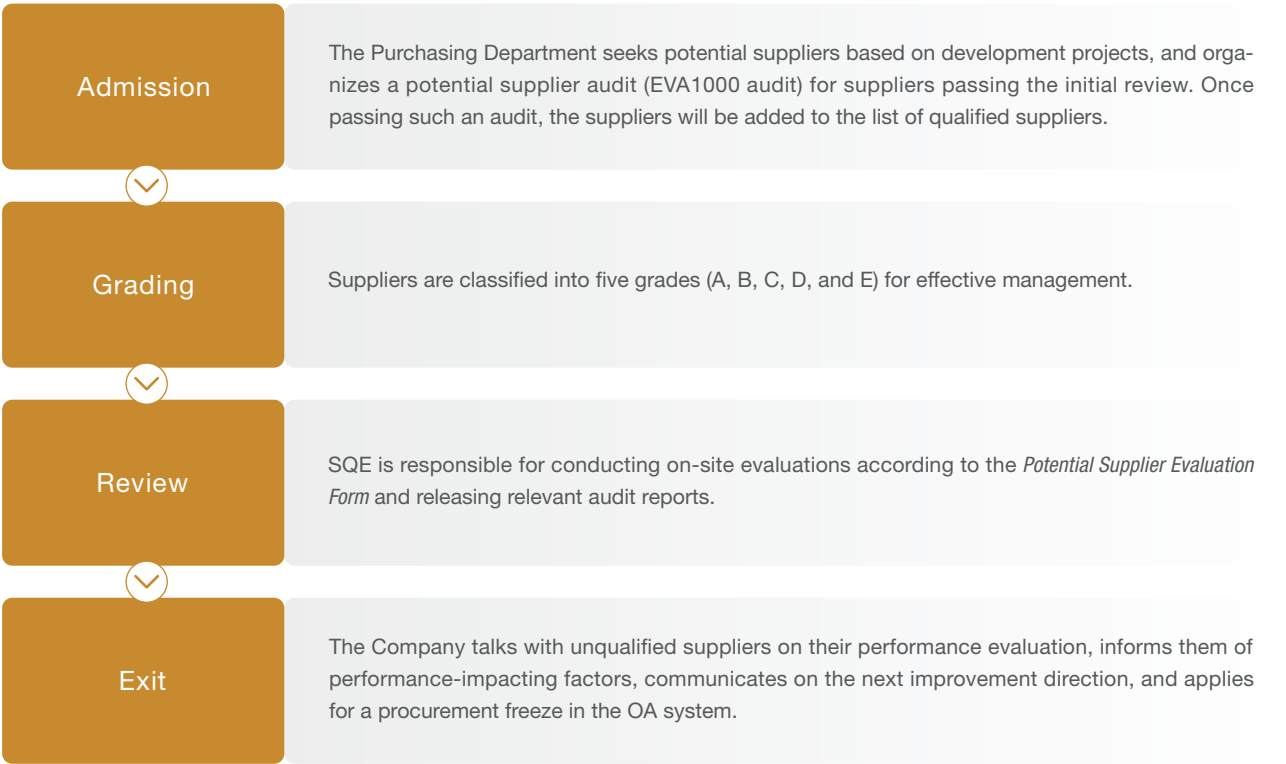
LiuGong is committed to building a green, efficient, and collaborative supply chain system. Through responsible procurement and intelligent management, the Company continuously improves the sustainability of the supply chain to ensure that every link from raw materials to finished products is deeply integrated into the requirements of sustainable development, and works with global suppliers, dealers, and other partners to share responsibilities and seek common development.

Supply Chain Management

Governance

LiuGong has formulated the *Supplier Management Procedure*, the *Supplier Development Procedure* and other systems, which stipulate that the Purchasing Department is responsible for product procurement, supplier management, and related evaluations and assessments, and organizing quality, sales, production, safety, and environmental protection departments to conduct supplier evaluations and assessments. The SQE is responsible for process-specific audits and is accountable for the continuous improvement of suppliers. The Company carries out quality assessment and assurance actions through LiuGong's EVA1000-4000 four-dimension supplier evaluation system, and provides comprehensive, fair, and objective full-lifecycle evaluations of supplier quality, to promote the continuous improvement of suppliers' products and services. The Company promotes LiuGong's supplier quality management mechanism by managing the "yellow, red, black and green" lists, to accelerate the optimization of suppliers who do not meet quality standards and shift business to selected suppliers.

Supplier Management Process



Strategy

Supply chain risks may come from various aspects such as supplier instability, logistics delays, and market demand fluctuations. To ensure the stable operation of the supply chain, LiuGong identifies and assesses related risks in a timely manner. By identifying and evaluating opportunities in the supply chain, LiuGong can discover potential room for optimizing supply chain management.

Type of Risk/Opportunity	Description of Risk/Opportunity	Likelihood of Occurrence	Impact Duration	Expected Financial Impact	Countermeasures	
Risk	Supply Chain Disruption	If the production capacity of raw materials does not meet LiuGong' s demand, it could lead to supply shortages, delivery delays, and impacts on LiuGong' s production plans and market supply.	Low	Short-term	Decrease in Sales Revenue	Track and manage the upstream supply chain of LiuGong' s existing suppliers to know their production conditions, quality management, delivery capability and other information, to ensure that lower-tier vendors can provide the required materials on time to support the production capacity.
	Digital Transformation of the Supply Chain	Through the integration of advanced information technologies such as IoT, big data, and artificial intelligence, LiuGong' s supply chain management becomes more intelligent and automated, thereby improving the supply chain' s responsiveness and decision-making accuracy.	Medium	Medium and Long Term	Improvement in Management Efficiency	The application of the SRM system helps digitize procurement management.

Impact, Risk, and Opportunity Management ▶

In supply chain management, LiuGong actively identifies and assesses potential risks and takes measures to reduce their impact. We are seizing opportunities such as digital transformation and cost optimization to improve the efficiency and flexibility of the supply chain.

Management Processes	Management Measures
Risk Identification	Enable SPM to organize and complete the identification of potential risks and the collection of relevant information for qualified suppliers, including historical data on supplier management and external business information obtained through surveys and intelligence gathering.
Risk Assessment	Use the scale method to estimate the probability of each risk occurrence, and evaluate the impacts that may result from the occurrence of the risk.
Risk Monitoring	Conduct surface and underlying cause analysis for risk situations and their consequences, standardize risk monitoring and response measures, and develop emergency response plans.
Risk Management	Enable SPM to organize and develop a risk response plans, implement risk mitigation measures with a seven-step method or the Six Sigma approach, based on the risk analysis results.

Indicators and Goals ▶

To strengthen supply chain risk prevention and complete supply chain risk management, market research, and material risk management, the Company has established corresponding indicators and goals.

Indicator	Goals	Achievement
Intelligence Management Platform Construction	The Company aims to complete the construction of the supply market dynamic intelligence and supplier resource base platform functions.	In progress >>>
Supplier Sustainable Development Risk Management	The Company aims to build a long-term supplier certification system and manage suppliers through the 528 management concept from a category dimension.	In progress >>>
Strategic Supplier System Construction and Risk Prevention	Core components localization rate ≥98%.	In progress >>>

Supplier Management

LiuGong focuses on environmental friendliness, social responsibility and corporate governance in its supply chain management, and works with its partners to build a sustainable future by strengthening ESG assessment of suppliers. The Company signs the *Agreement on Safety and Environment-friendly Production* and the *Commitment to Supplier Health, Safety, and Environmental Protection* with suppliers, provides safety training for suppliers entering the factory, and guides and encourages suppliers to meet the requirements for the ESG system.

Key Performance

During the Reporting Period, the signing rate of the *Agreement on Safety and Environment-friendly Production* was **99%**, and that of the *Commitment to Supplier Health, Safety, and Environmental Protection* was **99%**.



LiuGong Safety Training in Suppliers' Factories

Implementation of Responsible Procurement

LiuGong consistently adheres to the modern development principles of “leading with innovation, advancing through coordination, prioritizing green practices, encouraging open collaboration, sharing technological achievements” , deeply embeds the core values of green development into the Company’ s strategic planning and daily operations, and builds a green supply chain management system, to promote the green and low-carbon development of the entire industry chain.

To ensure fairness and transparency in the procurement process, LiuGong has developed the *Procurement Control Procedure* and requires employees to sign the *Commitment to Integrity for Procurement Personnel* to ensure the Company’ s procurement procedures are legal and compliant. We prioritize the selection of environment-friendly materials and green suppliers, and use the SRM system for the digitization of procurement management, to achieve more sustainable and intelligent supply chain management. During the Reporting Period, LiuGong was recognized as a Guangxi Green Supply Chain Management Enterprise. On January 23, 2025, LiuGong was successfully selected as a green supply chain management enterprise by the Ministry of Industry and Information Technology.



Commitment to Integrity for Procurement Personnel



Functional Framework of SRM System

Promotion of Sunshine Procurement Month for the Supply Chain



From July to August 2024, LiuGong launched the Sunshine Procurement Month activity for employees and suppliers on the supply chain, and hosted the General Manager's Lecture on "Integrity in Business", the Supply Chain Knowledge Contest, the Clean Calligraphy and Painting Competition, and the Integrity-related Short Video Competition, to raise the integrity awareness of internal and external stakeholders.



Promotion of Sunshine Procurement Month for the Supply Chain

Equal Treatment of Small and Medium-sized Enterprises

In LiuGong's supply chain ecosystem, small and medium-sized enterprises (SMEs) play an indispensable role. The Company always adheres to the principle of equal and win-win cooperation, creating a fair and transparent supply chain environment. LiuGong helps SMEs to improve their core competitiveness and promote the continuous optimization of their product and service quality by providing multi-dimensional support such as technical support, management consulting and market access. What's more, we encourage SMEs upstream and downstream of the supply chain to participate in innovation collaboration, and jointly explore the application of new technologies and new processes, to promote the technological upgrading and value reshaping of the entire industrial chain. LiuGong, working hand in hand with SMEs, has created value together and achieved the transformation from single-product transactions to deep strategic cooperation models. This not only strengthens the resilience of the supply chain but also opens up vast development space for SMEs.

During the Reporting Period, LiuGong did not make any late payments to SMEs.

Promotion of LiuGong's Advanced Management Practices through Co-creation and Win-win Project



LiuGong focuses on building the "Co-creation and Win-win" Project that combines theoretical training and on-site practice, to continuously promote LiuGong's advanced manufacturing concepts and quality management models to small and medium-sized enterprises upstream and downstream of the industrial chain and supply chain, and continuously drive the optimization and upgrading of the industrial chain and supply chain.



Launching Ceremony of the "Co-creation and Win-win" Project

Pursuit of Craftsmanship Quality

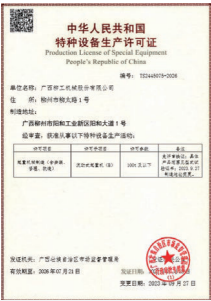
As a leading equipment manufacturing enterprise, LiuGong has established an independently controllable core component system and is committed to delivering first-class products and quality to meet customers' needs, thus providing global customers with a full range of construction machinery products with high construction efficiency, high reliability and high cost-effectiveness. The Company adheres to the "customer first" philosophy, provides all-around, one-stop after-sales service, solves the problems encountered by users in a timely manner, and provides excellent service experience.

Product Quality Management

Governance

LiuGong continuously implements the quality policy of "expanding development space through technological innovation; achieving LiuGong's internationalization through high quality; and regarding customer satisfaction as our eternal pursuit. The Company has formulated management systems related to product quality, such as the *Quality Manual*, the *Quality Target Control Procedure*, and the *Non-Conforming Product Control Procedure*. Additionally, the Company has set up the Quality Committee and implemented the mechanism of Chief Quality Officer (CQO), with the CQO having veto power over product quality and safety and being responsible for product quality and safety. LiuGong also has a strict quality control and quality safety inspection mechanism to ensure the stability of product quality. During the Reporting Period, no major quality safety incidents or quality safety complaints occurred in the Company.

LiuGong and its subsidiaries have passed ISO9001 & GB/T19001 quality system certification. Among others, mobile cranes and forklift products have been awarded with the Production License of Special Equipment; and truck cranes have passed the China Compulsory Certification. The Company has implemented the ISO10012 Measurement Management System and passed the AAA-level certification for the measurement management system. The Company uses over 46,000 sets of equipment, including high-precision measuring equipment such as five-axis large coordinate measuring machines, gear measuring systems, electric torque tightening systems, and cleanliness online detectors, to ensure the detection capability of key dimensions and product characteristics.



Production License of
Special Equipment



China Compulsory
Certification Certificate



Quality Management
System Certificate



Measurement Management
System Certification Certificate

Strategy ▶

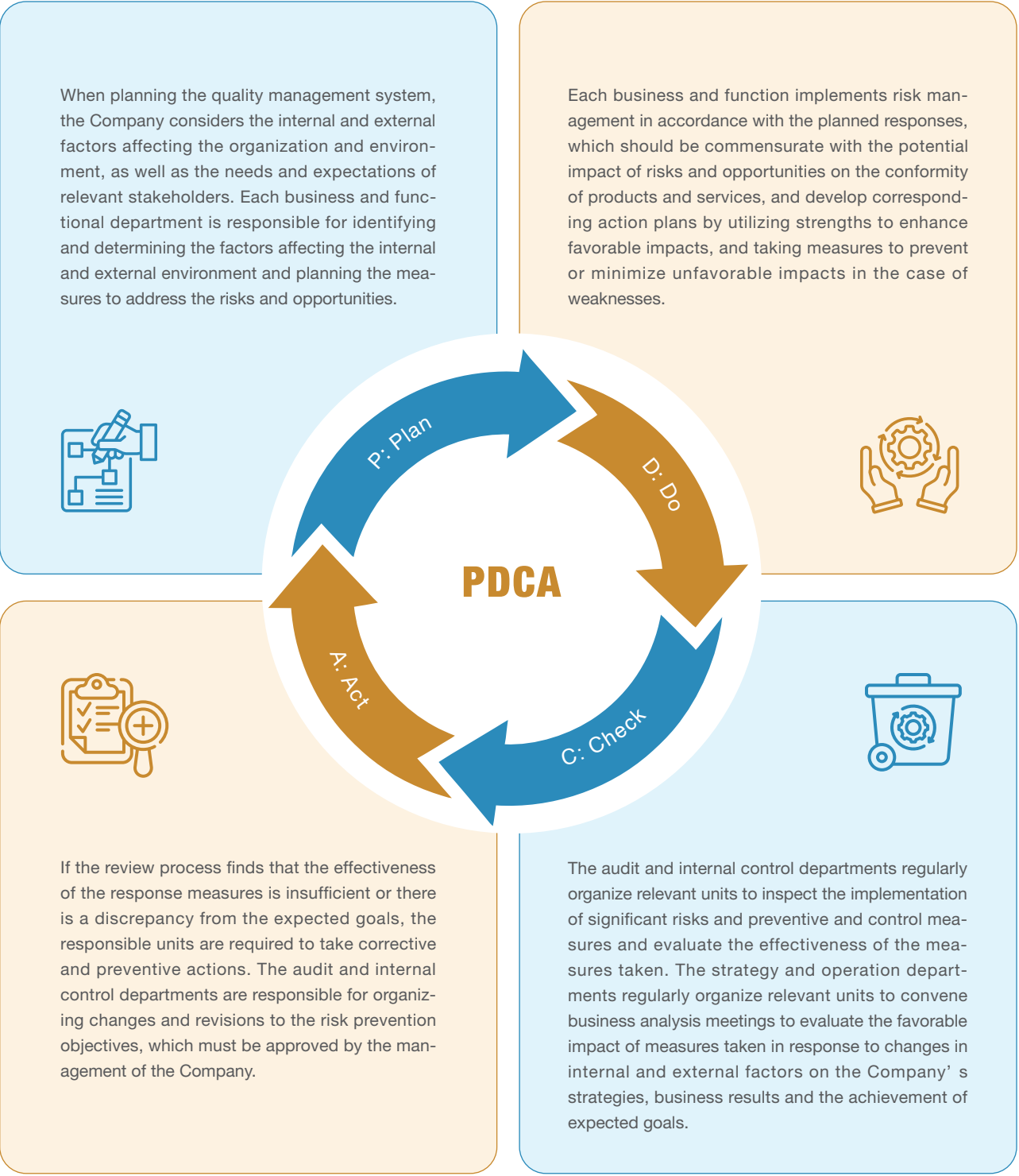
Based on the Company’ s strategy, mission, vision and core values, LiuGong collects data and information from multiple channels, including changes in the internal and external environment, opportunity and challenge analysis, industry quality competition trends, and internal operations and capability analysis, to establish the quality strategy of the Company. We break down the strategic initiatives into three dimensions: “building a systematic and preventive quality management system, building excellent quality management capability, and improving product quality competitiveness” .

Product quality is directly related to customer life safety, property security, and user experience. The Company fully identifies and evaluates risks and opportunities related to product quality and safety, continuously improves product quality, and enhances market competitiveness, to meet customers’ needs and expectations.

Type of Risk/Opportunity		Description of Risk/Opportunity	Likelihood of Occurrence	Impact Duration	Expected Financial Impact	Countermeasures
Risk	Market Risk	Quality problems or customer complaints during the after-sales phase, especially bulk returns, will seriously affect the Company' s brand image and customer loyalty	Medium	Short and Medium Term	Increase in after-sales service costs and operational costs	Strengthen and optimize the quality management system, ensure product quality, and provide all-around and one-stop after-sales service
Opportunities	Intelligent and Digital Transformation	With the advancement of intelligent manufacturing and digital transformation, the Company can use technologies such as big data and artificial intelligence to optimize production processes and improve the accuracy and efficiency of product quality control.	High	Short, Medium and Long Term	Reduction in production costs and improvement of management efficiency	Deepen the digitalization in product quality management.

Impact, Risk, and Opportunity Management ▶

LiuGong fully identifies and assesses risks and opportunities related to product quality and safety, and is committed to continuously improving product quality, enhancing market competitiveness, and meeting customers’ needs and expectations. The Company places great importance on quality risk management and adopts the PDCA method to develop management measures to address quality risks and opportunities.



Indicators and Goals

LiuGong has clearly set up a lofty strategic goal in strengthening product quality management and customer service management, and is committed to building an excellent quality management system.

Indicator	Goals	Achievement
Quality Benchmarking Against International Standards	Product quality and reliability will reach international benchmark levels, and the zero-defect quality goal will be gradually achieved.	In progress >>>
Application of Automatic Testing Technology	A full-process quality data analysis and monitoring system will be established to provide real-time warnings for quality issues, implement unmanned online automatic testing in the smart factory, and improve quality management efficiency.	In progress >>>

Measures for Product Quality Management

The product manufacturing process of LiuGong includes important nodes such as incoming inspection, part assembly, in-line assembly, process inspection, debugging, inspection and warehousing. The Company has formulated systems such as the *Incoming Inspection and Test Procedure*, the *Whole Machine Inspection and Test Procedure*, and the *Process Inspection and Test Procedure*. We also implement the “Three Don’ ts” (i.e., do not accept non-conforming products, do not manufacture non-conforming products, and do not pass non-conforming products) system to strictly control the quality, and hire a third-party testing organization to carry out type tests on the products.

Key Performance

During the Reporting Period, the product factory pass rate was **100**%, and the annual quality internal audit was conducted for **1** time, and a third-party organization was hired to conduct spot inspections for **6** times.

Cultivation of Quality Culture

Exemplary Role of Leaders

The Company’ s senior leaders personally participate in product audits and hierarchical audit activities. Directors and managers take the lead in conducting core process briefings, demonstrating hands-on operations, and showing visible, tangible leadership.



Exemplary Role of Leaders

Transmission of Quality Culture to Stakeholders

The Company promotes and transmits LiuGong’ s quality culture to customers, dealers, suppliers, and employees through information disclosure, exhibitions, visits, meetings, communications, internal quality special activities and other forms.

Stakeholders	Quality Culture Delivery Methods
Employees	Quality month, advanced quality competition, slogan/big screen/mobile phone/OA publicity, quality competition, skill competition, quality education and training, etc.
Suppliers	Supplier conference, sharing by excellent suppliers, supplier empowerment, co-creation and win-win projects, etc.
Dealers	Dealer conferences, dealer empowerment, dealer visits, meetings and communication activities, etc.
Customers	Information disclosure, exhibition promotion, customer visits, etc.



◀ Quality Month Activities
Extended to Suppliers

Quality Training for Suppliers

The Company offers quality training for internal employees and external suppliers every year, and provides courses in six categories: quality leadership, quality system, process control, quality improvement, quality information, and measurement management, through online learning, lecture, and hands-on operation, to enhance the quality awareness of both employees and suppliers.

Quality Training for Internal Em- ployees



Six Sigma Green Belt #77



Training for Internal Auditors



Training for Chief Quality Officer



Training for Self-assessor in Performance Excellence

Quality Training for Suppliers



Training on Quality Analysis Methods and Preventive Measure Formulation



Product Appearance On-site Review and Training

Key Performance

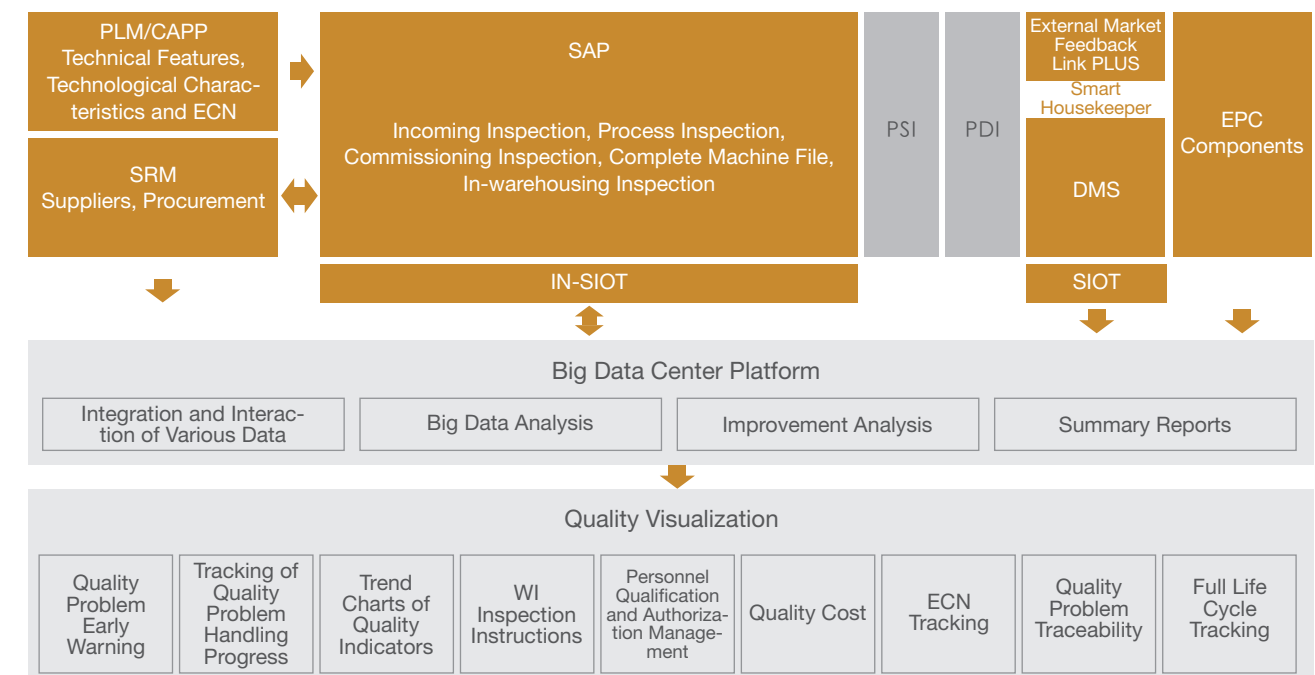
During the Reporting Period, the Company offered **220** quality training sessions for internal employees, with **24,641** person-times of participants and a total training duration of **65,788** hours, and **6** quality training sessions for suppliers, with **140** person-times of participants and a total training duration of **295** hours.

Monitoring of Production Equipment

To ensure product quality and safety, LiuGong has established systems such as the *Equipment Management System*, the *Equipment Inspection Management System*, and the *Special Equipment Repair Management Process*. The Company strictly implements the quality assurance system in production equipment management, conducting regular preventive maintenance and repairs on equipment to ensure the efficient and stable operation of production equipment, controlling product quality from the source.

Construction of Digital Platform

LiuGong has established a scientific, systematic, standardized, and digital quality management platform that is based on quality management systems such as GB/T19001/ISO9001 and GJB9001C, framed by the excellence performance model, and driven by benchmarking management. The Company uses SAP and MES systems for quality inspection control, quality issue handling in the manufacturing process, and the file management of complete machines. Through the DQM digital quality platform, the Company has achieved closed-loop management from market feedback to quality improvement. Through digital means, LiuGong performs process quality control at every stage from procurement to the entire product lifecycle, enhancing the granularity and sensitivity of quality data analysis, enabling rapid identification of abnormalities and the implementation of improvements, thus realizing process control of market issues.



Digitalization of Quality Management

Protecting the Rights and Interests of Customers

Customer Service Management System

LiuGong has established and improved its customer service management system, and formulated systems such as the *Customer Requirements Review Control Procedure*, the *Customer Satisfaction Measurement Procedure*, the *Product Service Work Procedure*, and the *Management Measures for Quality Complaint Handling*, to improve internal customer service management and enhance the efficiency of responding to customer needs. The Company has dedicated departments to handle or respond to customer complaints. In particular, the Technical Service Center is responsible for receiving and transmitting customer complaint information, and tracking, analyzing, and evaluating the handling of customer complaints, and product lines analyze customer complaint issues and take corrective actions.

Customer Complaint Response Mechanism

LiuGong has 1,090 customer service outlets, covering all 31 provinces and cities in China. The Company adopts diversified and intelligent service and repair methods, optimizes repair reminder functions, and collects real service data from the system. Customers dissatisfied with product quality or pre-sales, in-sales, or after-sales service quality can report by calling the service hotline, scanning WeChat QR Code, or logging into the Smart Butler APP.



Monitoring Screen for Service Work Orders

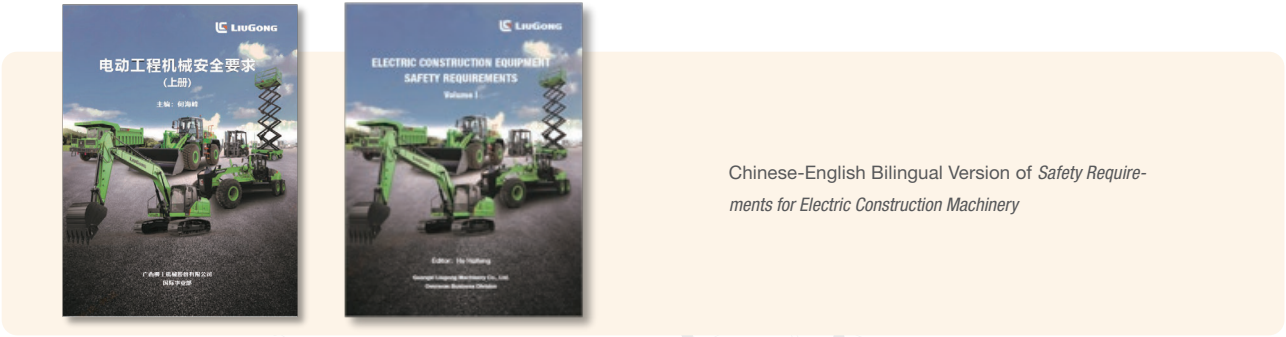
Customer Service Training

LiuGong attaches great importance to customer service experience and regularly conducts special training on customer service for dealers. During the Reporting Period, the Company offered 27 online special training sessions for domestic dealers. The training mainly covered customer service communication skills, complaint handling techniques, complaint handling procedures, and customer service performance evaluation standards. A total of 253 staff members from 117 dealers participated in the training.

LiuGong's after-market team actively deepens its presence in overseas market, makes every effort to complete the on-site service guarantee and support, optimizes the products and services in time, and continuously improves customer satisfaction and loyalty. The Company utilizes a series of specialized tools and equipment, such as the self-developed all-in-one training platform, connector electrical teaching board, and dedicated containers, to enable service personnel to quickly master equipment operation and maintenance skills through practical learning and improving service efficiency and quality. In 2024, at the LiuGong Global Customer Festival, the Company released the bilingual version of the *Safety Requirements for Electric Construction Machinery* edited by skill master He Haifeng, to provide systematic safety training for electric construction machinery operators and technical service personnel, thus effectively preventing safety accidents and ensuring personal safety and the normal operation of equipment. During the Reporting Period, the Company provided 71 training sessions on customer service skills for subsidiaries and dealers in overseas markets, with 679 person-times of participants and a total training duration of 2,895 class hours



Service Support and Training for Overseas Sites



Chinese-English Bilingual Version of Safety Requirements for Electric Construction Machinery

Customer Satisfaction ▶

LiuGong actively listens to customer feedback and has developed systems such as the *Customer Satisfaction Measurement Procedure* and the *Customer Satisfaction Degree (CSD) Measurement Method*. Through methods like online surveys, face-to-face interviews, phone follow-ups, and meetings, the Company regularly assesses the satisfaction of end-users and dealers, accurately captures market demand and customer expectations, and continuously optimizes products and services, to improve customer satisfaction and consolidate its market-leading position.

Key Performance

During the Reporting Period, the Company distributed **4,966** customer satisfaction survey questionnaires, with a customer satisfaction rate of **81.30**%.

Customer Privacy Protection ▶

In order to strengthen the protection of customer privacy and standardize the management of LiuGong's customer files, the Company formulated systems such as the *Customer Files Management System* and the *Customer Information Application Process*, strictly implemented the requirements for the confidentiality of customer information, and effectively protected the security of customer information. During the Reporting Period, no incidents of customer privacy leakage occurred in the Company.

Data Security Management

Digitalization and intelligence cannot be developed without data security protection. LiuGong attaches great importance to the construction of the information security management system, strengthens network security grading protection, and classifies, backs up, and encrypts important data. We actively fulfill our responsibilities in personal information protection, to ensure personal information security and prevent data leakage, tampering, and loss. During the Reporting Period, no negative incidents due to data security occurred in the Company.

Information Security Management ▶

LiuGong strictly abides by the laws and regulations on privacy protection and data security of the countries in which it operates, formulates systems such as the *Provisions on the Management of Network Security Protection* and the *Information Security Incident Management System*, and sets up the Information Technology Management Committee to standardize the management of the Company's network information security.

Regularized Safety Governance Measures ▶

Security Technology and Capabilities

LiuGong released the *Trade Secret Management Measures*, which categorizes data into core trade secrets, important trade secrets, and internal public trade secrets, and adopts different protection techniques for different levels of data. The Company adopts advanced encryption technology to protect sensitive data, and conducts regular system vulnerability scanning and repair to ensure the safety of information assets and maintain the stable operation of the enterprise. We have established the LiuGong Data Lake system to collect product operation and maintenance data and business operation data, as well as basic processes for data ownership, data sharing, and data mining.

Information Security Training

To further enhance the overall information security capabilities of the Company, LiuGong actively conducts regular information security training to raise employees' awareness of security, continuously strengthens and optimizes the defense line for information security, and improves the ability to resist new and complex security threats.

Emergency Incident Management ▶

The Company has formulated the *Emergency Response System for IT Anomaly Events* and detailed emergency response plans to establish a rapid response mechanism to ensure that measures can be taken quickly to protect information and data security and reduce risks in the event of emergencies such as the discovery of information system anomalies. The Company participates in network security attack and defense drills organized by local government agencies every year to test the effectiveness of emergency response and to maintain corporate reputation and user trust.

IT Anomaly Event Handling Process



United Strength: Creating a Shared Better Future Together

Our Philosophy

Employees are the true craftsmen who drive the continuous progress of the Company and shape its value and brilliance. Adhering to the “people-oriented” business philosophy, we create a healthy, safe, inclusive and open working environment, and insist on deepening the reform of the talent development system and mechanism, to create a high-quality and professional talent team. We focus on the construction of corporate culture, create a positive and harmonious working atmosphere, and stimulate the sense of belonging and creativity of employees.

Our Actions

- ▶ We ensure occupational health and safety
- ▶ protect employees’ rights and interests
- ▶ provide welfare and care for employees
- ▶ strengthen democratic management
- ▶ and focus on employee training and development

SDGs Responded



Responsibility Focus: Building an Excellent Talent Ecosystem to Empower Corporate Strategy and Business Growth

Upholding the talent development goal of “meeting strategic needs, enabling forward-looking layout, combining external introduction and internal cultivation, and establishing a talent ecosystem”, LiuGong plans clear career development paths for employees, establishes a scientific and sound talent management system, continuously discovers and cultivates high-potential talents, and improves the quality of the talent team and optimizes the talent structure. The full lifecycle management of talents has injected strong momentum into the innovation and development of the Company.

Creation of a Globalized Training System

To meet the organizational and talent requirements of the Company’s strategy of “Total Solution, Total Intelligence and Total Internationalization”, LiuGong focuses on the construction of its training system, actively promotes the development and operation model of professional colleges, continuously develops specialized courses, trains internal trainers, and enhances the professional competency of employees. The Company sets up LiuGong University to establish a globalized talent training system, and continuously provides rich online learning resources for global employees through the E-learning learning platform. In 2024, the total number of internal trainers reached 532, and the learning platform currently offers more than 2,400 courses, with over 2,200 of those courses developed internally.






Category	Curriculum System					Classic Projects	
Leadership Training	Training for Directors with High Potential					LEAD	High-End External Training
	Training for Current Directors					International Talent	Required Knowledge and Skills for the General Manager
						Special Training on R&D/Manufacturing/Marketing	Strong Leadership
	Training for Managers with High Potential					Elite Manager	
	Training for Current/Back-Up Managers					New Managers	Talent Program
Training on Professional Competency	Specialized Training for Professional					Forward-Looking Courses Special Courses Basic Courses	
	Training for R&D/Technical Groups	Training for Manufacturing Group	Training for Marketing Group	Training for Functional Group	Training for Skilled Group		
	Training on General Skills					Skills Lecture Hall	Shift Leader
Training on General Ability	Strategy, Culture Promotion; General Competencies: E.g. communication skills, English, presentation					Top 10 General Public Courses	
	Training for New Employee Hired via Campus Recruitment	raining for New Employee Hired via Social Recruitment	On-the-Job Training for New Employees in Departments			Yulong	Mentor Coaching
						Talent Program	
DHR Learning Management Platform							

Talent Cultivation System of LiuGong University

Establishment of a Diversified Talent Team

LiuGong builds a smooth career advancement path for employees. According to the overall plan of the skilled talent development strategy, the Company closely focuses on the three major transformations and upgrades in skilled talent management. We implement a performance- and ability-oriented skill level recognition mechanism to cultivate talented craftsmen with exceptional skills. We have established two main position channels: management and business. Each year, the promotion process is initiated, and a series of scientific and comprehensive evaluation methods are used to assess employees’ promotion qualifications, to ensure fair and transparent promotion opportunities for employees.


LiuGong Employee Development Program

 Managerial Talent	Senior Management: Expand leaders’ international perspectives, and enhance strategic foresight, innovation, and leadership transformation.
	Middle-level Management: Help middle management improve their core competencies, manage affairs efficiently, motivate teams proactively, improve themselves continuously, and accelerate leadership transfo
	Primary-level Management: Assist frontline managers in the smooth transition from “individual contributors” to “team managers”, and enhance their work concepts, leadership skills, and time management capabilities.
 Technical Talent	Technical Management Talent: Enhance technical and product planning capabilities, improve recognition skills, guide the direction of professional technical development, and build professional talent teams.
	Professional and Technical Talents: Utilize resources from the manufacturing and high-tech industries to carry out talent and technology exchanges in areas like automation, electrification, and digitalization, and accelerate the implementation of new technologies and methods.
 Marketing Talent	Marketing Management Talent: Help marketing management talent foster entrepreneurial thinking and comprehensive business management capabilities.
	Marketing Professional Talent: Train marketing professionals who excel in market expansion and cross-cultural communication to drive global business growth.
 Functional Talent	Functional Management Talent: Enhance their ability to drive innovation and effectively and efficiently formu- late development strategies for the assigned areas.
	Functional Professional Talent: Train employees to be well-versed in modern enterprise functional manage- ment knowledge, strengthen professional skills in functional areas, and promote the improvement of their abilities in planning, organizing, coordinating, communicating, and problem-solving.
 Skilled Talent	Skilled Talent: Cultivate smart manufacturing skilled craftsmen through mentoring, on-the-job training, classroom training, and technical problem-solving.
	Management Talent: Select skilled employees with good management potential and help them enhance their team management, self-management, and business management capabilities, and build a skilled talent management team that understands the site and excels in management.

Support for Comprehensive Skill Development


The Company fully implements multi-dimensional talent development measures. Based on the employee training plan and leveraging LiuGong University, a series of targeted, layered, and tiered talent development projects have been carefully planned and implemented. The training methods include online & offline courses, project-based practices, and challenging tasks, covering all employees from frontline workers to top management. In 2024, the Company offered 184 training sessions, with 6,646 person-times of participants and a total training duration of 75,530 hours.

Leading Talent Program




Case Study

In 2024, LiuGong launched the “Leading Talent Program” for skilled workers, selecting outstanding skilled personnel to cultivate them into middle and frontline managers. The goal is to open up a career development channel for skilled talent management and train a group of well-rounded professionals with both technical and management capabilities. Thirty-five employees were selected in the first phase to participate in the Leading Talent Program.




Leading Talent Program

Post-90s Talent Program



Case Study

In 2024, LiuGong launched the “Post-90s Talent Program”, targeting recent university graduates with one year of work experience, excellent performance, and development potential. The program focuses on self-management, team collaboration, and problem-solving skills. It offered online courses, offline workshops, essential knowledge learning, practical improvement projects using the “Seven-Step Method”, and book sharing sessions, to help participants transition smoothly from “new employees” to “core staff”.



Post-90s Talent Program

Occupational Safety and Health

LiuGong adheres to the philosophy that “safety is the premise and foundation of all work; all accidents can be prevented; all safety hazards can be eliminated; management at all levels is fully responsible for safety within their business scope; safety is the primary condition for employee employment and career development”. We are committed to creating a healthy, safe, and green work environment for our employees and striving to become a leader in HSE management in the domestic equipment manufacturing industry. With the joint efforts of all the staff, LiuGong has received honors such as the “Special Safety Enterprise of the Ministry of Machinery”, the “Advanced Unit of Safety Production in the National Machinery Industry”, and the “National Model Enterprise of Safe Culture Construction”.

Safety Production Management

Governance

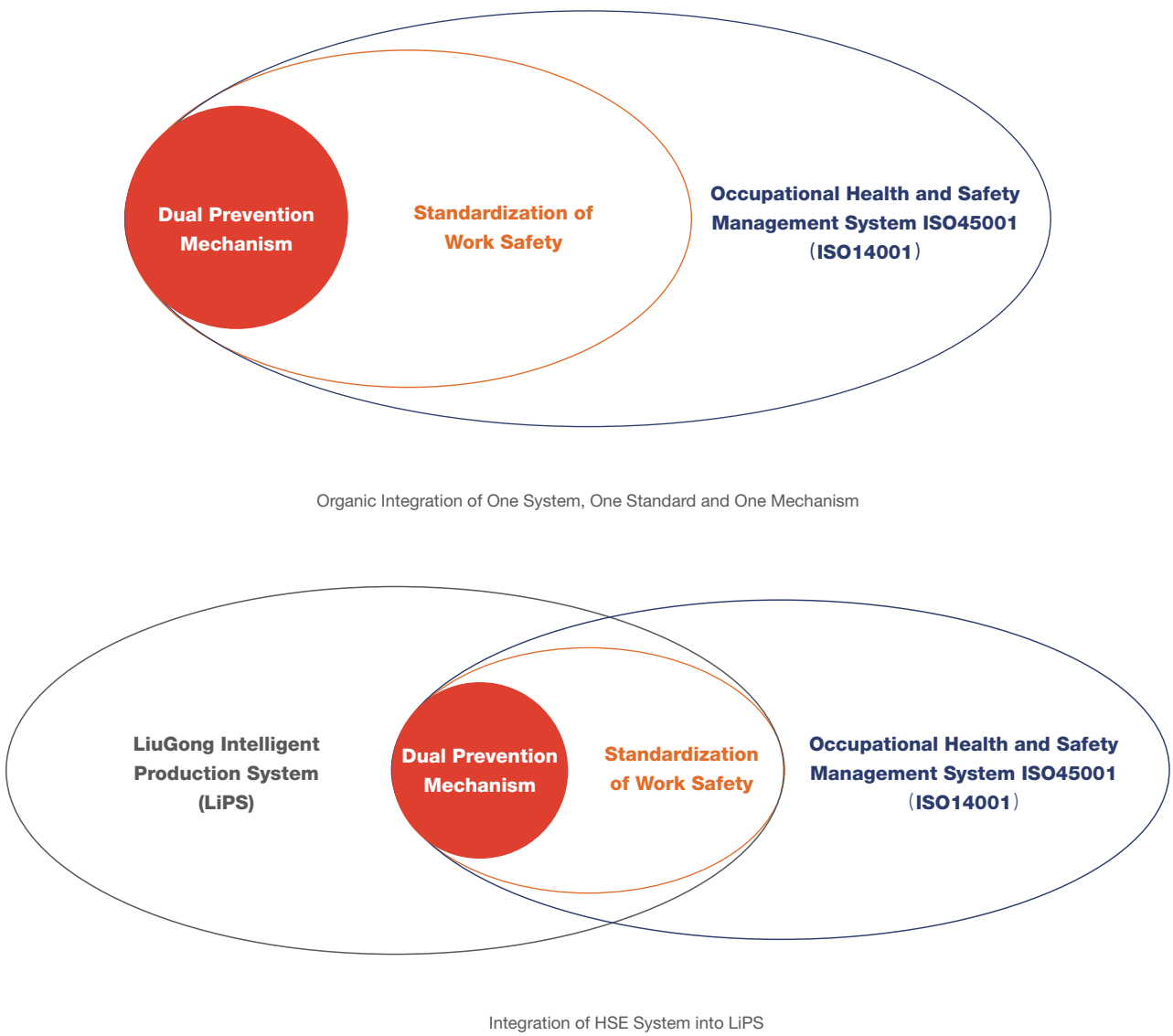
LiuGong strictly complies with the *Law of the People’s Republic of China on Work Safety* and the *Law of the People’s Republic of China on Prevention and Control of Occupational Diseases* and other related laws and regulations. The Company has established systems such as the *Occupational Health and Safety, Environmental Management System, the Safety Production Standardization Management Manual*, and the *Safety Production Standardization Management System*, to continually strengthen management in this field and ensure the safety and health of employees. The Company comprehensively controls safety affairs at the organizational level through the Health, Safety, and Environmental Management Committee.

LiuGong’s occupational health and safety management system was first certified in 2003. Every year, an independent third-party certification agency is entrusted to conduct system supervisory audits, and a re-certification (certificate renewal) audit is carried out every three years. During the Reporting Period, LiuGong and its 12 subsidiaries obtained occupational health and safety management system certification.



Occupational Health and Safety Management System Certification Certificate (Partial)

The Company continuously deepens the safety system with LiuGong’s characteristics, continuously promotes the organic integration of “one system, one standard and one mechanism”, integrates HSE work into LiPS (LiuGong Intelligent Production System) and business processes, focuses on prevention and strengthens full-process safety management.



In addition, the Company has established and improved the safety assessment mechanism. Every year, the Commitment to Safety Production Goals are signed at all levels from executives to general employees. Safety performance evaluation standards are established for each level, with safety professionals responsible for conducting safety performance assessments, which are included in the monthly or annual individual comprehensive performance evaluations.

Strategy ▶

Occupational health and safety management is directly related to the life safety, health and well-being of employees. By identifying and assessing risks related to occupational health and safety, LiuGong can promptly detect safety hazards and health threats in the workplace and take appropriate corrective measures. Through the identification and assessment of opportunities, LiuGong actively explores and implements strategies to improve occupational health and safety levels, optimizing workflows to enhance management efficiency.

Type of Risk/Opportunity	Description of Risk/Opportunity	Likelihood of Occurrence	Financial Impact	Impact Duration	Countermeasures
Risk	Operational Risk	High	Increase in operational costs/fines	Short-term	Establish hidden danger investigation, prevention and rectification standards and procedures, ensure that the preventive and corrective plans are completed in a timely and effective manner, and eliminate accident hazards.
Opportunities	Management Efficiency	High	Reduction in expense expenditure	Medium and Long Term	Optimize internal processes, such as improving the accident reporting system, strengthening risk assessments and hidden danger investigations, and implementing more effective emergency response plans; use new technologies and innovative methods to improve the efficiency of occupational health and safety management, such as using information technology for real-time monitoring and data analysis.


Impact, Risk, and Opportunity Management ▶

The Company has developed the *Risk Assessment and Graded Control Procedure* and the *Provisions on Identification, Assessment and Management of Hidden Hazards*, forming a scientifically rigorous management process that can effectively identify, assess, and manage safety risks through classification, and continuously monitor occupational disease hazards. In 2019, LiuGong became one of the pilot enterprises for the “Dual Prevention Mechanism” designated by the Emergency Management Department of the Guangxi Zhuang Autonomous Region. In 2024, the implementation of the “Dual Prevention Mechanism” will continue to be carried out as a regular and standardized practice.


Management Processes	Management Measures
Risk Grading and Control	Update the hazard sources annually, count the newly identified, reduced, and eliminated hazard sources; organize an annual risk review, adjust risk levels and update the number of risk points; promote the implementation of the HSE risk map, assess the risk levels of different risks, and carry out targeted control and guidance.
Hazard Identification and Management	Formulate and implement the <i>Hazard Identification and Governance Work Plan</i> , establish inspection mechanisms such as comprehensive and specialized inspections, build a comprehensive, dynamic safety supervision network, conduct a quarterly safety production inspection, identify hazards at all levels, and promptly correct them, continuously practice the "exposure prevention, full participation" safety culture, eliminate hidden hazards and prevent accidents.
Emergency Plan	Develop the <i>Emergency Management System</i> , improve emergency response plans and emergency supplies, strengthen emergency team building, and conduct emergency drills to effectively ensure the safety of employees' lives and property.

Leaders of LiuGong Setting Goods Examples in Fully Promoting Solutions to Address Root Causes

LiuGong' s Chairman and leaders at all levels set good examples by regularly conducting hazard identification and promoting "exposure prevention, full participation" , to increase employees' engagement in hazard investigations. This helps push for the comprehensive implementation of the three-year action plan to address root causes from the horizontal to the vertical across the Company.



Chairman Zeng Guang' an Conducting On-site Inspection





Senior Vice President Huang Xiangquan Conducting On-site Inspection

Fire Emergency Rescue Drill in Office Building

Case Study





On May 29, 2024, LiuGong organized a fire emergency drill in the Company' s headquarters building. The entire drill was well-planned, with sufficient preparation and proper implementation. All personnel were evacuated in 3 minutes and 15 seconds, achieving the target of evacuating within 4 minutes and 30 seconds. The drill further enhanced the fire safety awareness and emergency response capabilities of the Company' s senior office employees, and improved the teamwork of the emergency rescue team.



Fire Emergency Rescue Drill in Office Building

Indicators and Goals

LiuGong' s performance evaluation in occupational health and safety is divided into result-oriented indicators and process-oriented indicators.

Result-oriented Indicators	Goals	Achievement
Severe Injuries or Above	No incidents occurred in 2024	Achieved 
Light Injury Incident Rate per Million Working Hours	Incident rate in 2024 \leq 0.49	Achieved 
Fire Incidents	No incidents occurred in 2024	Achieved 
New Occupational Diseases in 2024	No increase occurred in 2024	Achieved 

Process Indicators	Goals	Achievement
Hazard Rectification Rate upon Expiry	Rectification Rate in 2024 = 100%	Achieved 
Annual HSE Training per Employee	Duration per employee in 2024 ≥ 24 hours	Achieved 
Occupational Disease Hazard Factor Detection	Compliance rate in 2024 ≥ 96%	Achieved 
Occupational Health Check Rate	completion rate in 2024 = 100%	Achieved 

Improvement of Security Assurance

Digital Intelligence to Ensure Safety

The Company actively promotes intelligent transformation. By implementing the projects of “replacing labor via mechanization, and reducing labor by automation” , we continuously improve the automation and intelligence level of the entire process, and build smart, green, and intrinsically safe factories such as the intelligent loader factory.



Feeding Robot



Assembly Robot

Since 2015, LiuGong has developed and built information-based processes and systems such as hazard reporting and rectification, incident management, and high-risk operations based on the OA office system, standardized safety work processes and data statistical analysis management, and improved daily safety production efficiency. To further strengthen digital safety management, LiuGong is developing the iHSE smart management platform. The first phase of the project, which has been nearly completed, is undergoing testing and optimization, and will be officially launched in the first half of 2025.



Company-level Safety Risk Map Display

Standardization of Safety Production

The Company leverages the professional capabilities of 6 professional groups—mechanical, electrical, thermal engineering, explosion prevention, environmental, and basic specialties—to actively promote the implementation of safety standardization across the Company. This includes comprehensive on-site standardization and normalization in project construction, processes, equipment, and visual management. All subsidiaries have passed the safety production standardization review with 100% compliance.



On-site Inspections for Professional Group Members



Training and Empowerment for Professional Group Members

Process Supervision Measures



Safety Education and Training ▶

LiuGong integrates the construction of safety culture into the annual safety production work, and sets up a leadership team led by the Chairman. The safety culture is based on full employee participation, supported by the LPS-HSE system, standardized by policies such as the *Occupational Health, Safety, and Environmental Education and Training System*, guided by safety production standardization, and centered on the dual prevention mechanism. Comprehensive safety culture efforts are made, including Visible Felt Leadership (VFL), the safety “Green Cross” , the “finger and oral” safety confirmation, and the appointment of part-time safety officers. The Company organizes annual events such as “Occupational Disease Prevention Week” and “Safety Production Month” , to create a strong safety culture atmosphere and enhance employee safety awareness. Additionally, the Company has a permanent safety feedback platform that allows employees to provide valuable suggestions for the Company’ s safety culture construction. All feasible suggestions are adopted and recognized.



Promotion of the Safety “Green Cross”



Employees Filling Out the “Green Cross”

Key Indicators	Unit	2022	2023	2024
Total Investment in Safety Training	RMB 10,000	74	85	85
Safety Education and Training Sessions	Session	19,397	20,903	21,120 ↑
Number of Participants in Safety Education and Training Sessions	Person-times	387,947	418,072	422,681 ↑
Total Hours of Safety Education and Training	Hour	415,648	459,879	468,350 ↑
Coverage Rate of Safety Education and Training	%	100	100	100
Coverage Rate of Safety Risk Protection Training	%	100	100	100

Performance of Special Inspections ▶

LiuGong has formulated and strictly implemented systems such as the *Hazardous Chemicals Management System* and the *Safety Protection Facilities Management System*. Through regular inspections of fire safety equipment and irregular special fire safety checks, the Company ensures that fire safety management work is effectively carried out across all units. The Company has established a voluntary fire brigade known as the Firefighting Vanguard of LiuGong, to create a team that can regularly conduct fire safety inspections and training and take command in emergencies.



LiuGong Firefighting Vanguard Competition

The Company regularly conducts special inspections of hazardous chemicals management in aspects of storage locations, on-site management, personnel capabilities, emergency supplies, and drill exercises. These efforts aim to prevent and control accidents such as leaks, fires, toxicity, and explosions during the storage, use, and handling of hazardous chemicals, to ensure effective control of hazardous chemicals within LiuGong and prevent harm to employees' lives and safety. In 2024, no safety incidents related to hazardous chemicals occurred in the Company.

Protection of Occupational Health

Occupational Disease Hazard Monitoring ▶

To timely understand the extent of occupational disease hazards in workplaces and prevent and control occupational hazards, the Company has established the *Occupational Disease Hazard Monitoring and Evaluation Management System*. We regularly conduct on-site testing for hazard factors of occupational diseases every year and assess the existing hazard factors of occupational diseases every three years. With the ongoing control of points with excessive hazard factors of occupational diseases and the continuous improvements in working environments, the compliance rate for dust, toxic substances, and noise in the work environment of the Company has steadily increased. In 2024, the compliance rate identified by the on-site testing for hazard factors (dust, toxins, noise) of occupational diseases was 98.5%, a 0.4% increase compared to 2023.

Prevention of Occupational Disease ▶

LiuGong prioritizes the occupational health of its employees, and actively formulates and implements a series of comprehensive and diversified protective measures to safeguard employees' health and safety.



Occupational Health Checkups

The Company strictly implements occupational health monitoring for employees engaged in toxic and hazardous work. Based on the differences in occupational groups and in accordance with the *Technical Specifications for Occupational Health Monitoring*, the Company selects targeted examination items for employees' occupational health checks. During the Reporting Period, all units of the Company scheduled occupational health checkups for 3,311 employees, with 3,311 employees actually undergoing the health checkups, achieving a checkups rate of 100%. No new cases of occupational diseases were reported.



Occupational Disease Prevention Facilities

A total of 931 occupational disease prevention facilities were installed based on the characteristics of hazardous operations. Regular inspections and maintenance were conducted to ensure their effective operation, achieving an equipment integrity rate of 100%.



Occupational Hazard Notification

A unified technical standard for warning signs and notification cards has been established. The units in the Company have installed 1,602 bulletin boards, warning signs, and notification cards, with additional signage provided as needed.



Auxiliary Rooms

According to the production characteristics, practical needs, and convenience of use at each unit's workplace, corresponding auxiliary rooms have been set up, including workshop sanitary rooms (showers, changing/wardrobe rooms, washrooms), living rooms (rest areas, dining areas, toilets), and mother-baby rooms.

LiuGong Signed the Global Strategic Cooperation Agreement with International SOS to Ensure the Health and Safety of Overseas Employees



On June 4, 2024, LiuGong and International SOS officially signed a global strategic cooperation agreement at the LiuGong Global R&D Center. The two parties will jointly launch the "Global Employee Resilience Service Solution." This solution will cover LiuGong's international travel and expatriate employees worldwide, providing 24-hour continuous medical, health, and overseas safety services for LiuGong employees through International SOS's global medical and safety network, safeguarding the health, safety, and well-being of LiuGong's overseas employees.



LiuGong's international leaders, relevant leaders from International SOS China, and representatives attended the signing ceremony.

Employees' Mental Health

LiuGong strengthens employee psychological intervention through scientific methods by conducting mental health assessment projects (SCL-90), setting up psychological counseling rooms, and organizing psychological counseling seminars, to ensure the healthy development of employees.



Promotional Poster for Employee Psychological Counseling



Employee Psychological Counseling Seminar

Protection of Employees' Rights and Interests

LiuGong consistently adheres to the "people-oriented" philosophy, respecting and safeguarding the legitimate rights and interests of every employee. The Company has established a sound remuneration and benefits system, fully leveraging the guiding role of salary incentives to stimulate employees' work enthusiasm and creativity. We emphasize democratic communication, listen to employees' voices, continuously improve internal communication mechanisms, and enhance employee satisfaction and engagement.

Adherence to Legal Employment

LiuGong strictly complies with applicable laws and regulations such as the *Labor Law of the People's Republic of China* and the *Labor Contract Law of the People's Republic of China*, and has formulated human resources management systems such as the *Employee Handbook*, *Global Employee Code of Conduct*, and *Employee Recruitment Management System*, effectively safeguarding and protecting employees' legal rights and providing an equal and democratic work environment. We adhere to the principles of fair, just, and open employment, resolutely oppose the use of child labor, forced labor, and discriminatory practices, regulate and guide subsidiaries to sign collective contracts, and strive to create harmonious labor relations. During this Reporting Period, the Company did not receive any violations related to the above aspects. In 2024, LiuGong achieved a 100% labor contract signing rate and a 100% social insurance coverage rate.

Diversity, Equality, and Inclusion

LiuGong is committed to creating an inclusive and culturally diverse workplace environment, providing equal employment and development opportunities, adhering to equal pay for equal work, and fully accommodating employees of different genders, ages, ethnicities, nationalities, religious beliefs, and family situations. In 2024, the Company employed a total of 120 disabled employees and 3,645 ethnic minority employees, including 39 ethnic minority employees in management.

We have set up accessible restrooms for disabled employees in the LiuGong International Industrial Park Global R&D Center office building to provide convenience for employees with disabilities. We also respect the traditional customs of employees from different ethnic groups. At Xinjiang Ruiyuan under Guangxi Liurui, we provide special benefits for employees from Hui and Uyghur ethnic groups, offer holiday packages to ethnic minority employees during the Roza and Corban Festivals, and provide meal subsidies for employees who follow halal diets.

Protection of the Rights and Interests of Female Employees

LiuGong offers multiple support measures based on the actual needs of female employees. The Company's collective agreement includes the *Special Collective Agreement for the Protection of Female Employees' Rights and Interests* which includes provisions on political, economic, and labor rights of female employees, as well as special protections for female employees during menstruation, pre-pregnancy, pregnancy, and breastfeeding periods. In addition, the Company's Labor Union has established a Women's Committee responsible for safeguarding the legal rights and special interests of female employees.

Key Performance

In 2024

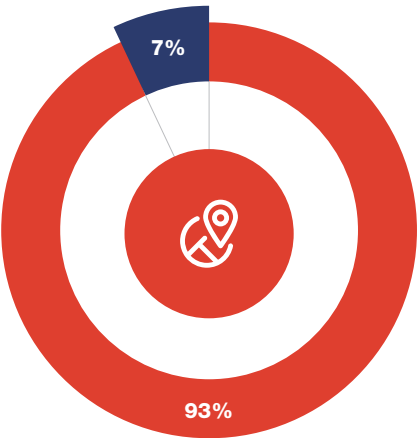
the Company had **141** employees on maternity leave, with a **100%** return-to-work rate. A total of **381** employees took parental leave, also with a **100%** return-to-work rate. Women accounted for **23%** of the management team at the manager level and above, while ethnic minorities made up **12%**.

Talent Recruitment and Retention

Talent Recruitment

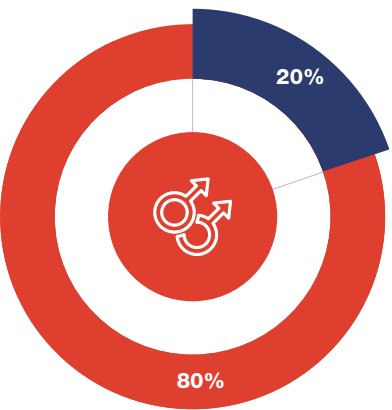
The Company is committed to attracting and retaining talent, and continuously strengthens its workforce development initiatives. In hiring decisions, the Company strictly adheres to the principle of fairness, sourcing global talent through online media platforms, head-hunters, job fairs, and other channels. All personnel processes are based on competence and job suitability, explicitly prohibiting any influence from non-objective factors such as age or gender. The Company makes full use of digital tools to explore innovative recruitment channels, breaking geographical limitations through methods such as livestreaming for overseas talent recruitment, and reaching potential talent worldwide. In addition, the Company actively assumes social responsibility for special groups such as veterans and disabled individuals, continuously providing a certain proportion of job opportunities for these special groups each year. In 2024, the Company received awards such as the “Most Popular Employer by 51job” and the “Model Employer of the Year” .

Employee Composition in 2024⁶



Number of Employees (by Region)

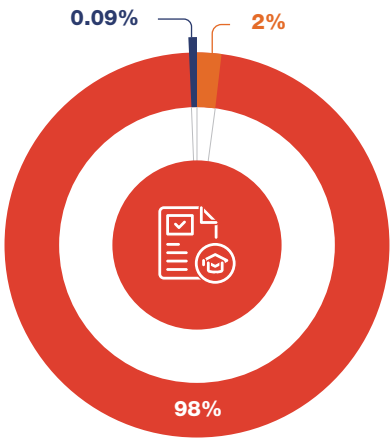
Chinese Mainland	93%
Overseas Regions	7%



Number of Employees

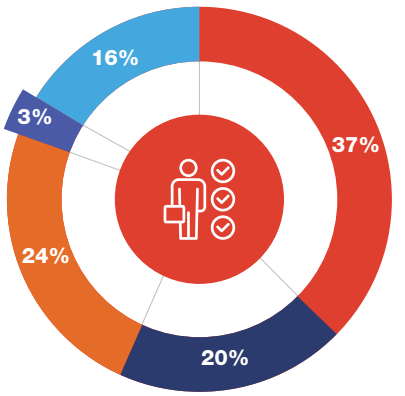
Female	20%
Male	80%

⁶The employee age/gender data included in this report is collected solely to fulfill diversity disclosure requirements while demonstrating business continuity planning, ensuring intergenerational knowledge transfer and succession pipeline development to address future strategic challenges.



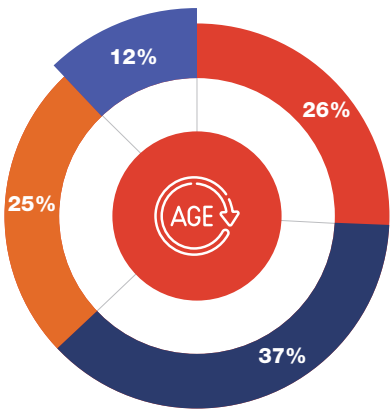
Number of Employees (by Employee Level)

The Senior Management	0.09%
Middle Management	2%
Individual Contributors	98%



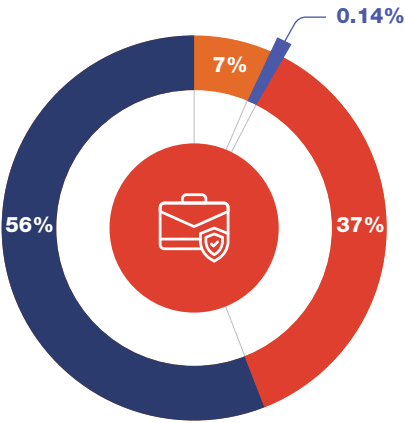
Number of Employees (by Profession)

Production	37%	Sales	20%
Technology	24%	Finance	3%
Administration	16%		



Number of Employees (by Age)

Under 30 (exclusive) years old	26%
30 (inclusive) to 40 (exclusive) years old	37%
40 (inclusive) to 50 (exclusive) years old	25%
50 years old or above	12%



Number of Employees (by Academic Qualification)

Doctoral Degree	0.14%
Master's Degree	7%
Bachelor's degree	37%
College Degree or Below	56%

Talent Retention ▶

LiuGong values talent retention and encourages employees' long-term development. Through employee stock ownership plans, stock option incentives, comprehensive career development planning, and optimizing salary structure adjustments, the Company promotes employee recognition of the corporate culture and actively retains talent resources.

In 2023, LiuGong implemented the reform strategy of national state-owned enterprises and became the first A-share listed company in Guangxi Zhuang Autonomous Region to innovate by implementing stock option incentives. As of 2024, the Company has granted a total of 55.84 million shares, incentivizing 1,118 core employees.

By implementing a series of talent incentive and retention measures, the voluntary turnover rate of key employees has continued to decline over the past three years.

Indicator	Unit	2022	2023	2024
Voluntary Turnover Rate of Key Employees	%	4.14	2.73	1.40 ↓

Remuneration and Benefits Management

As a leading company in China' s construction machinery industry, LiuGong has always deeply integrated the philosophy of sustainable development into its performance and incentive management. Through years of exploration and development in this field, the Company has effectively implemented environmental, social, and corporate governance goals. In terms of performance, incentives, and remuneration, the Company focuses on building a responsibility loop in the following areas.

Compensation System ▶

The Company create a remuneration management system guided by market value. This system forms a diversified remuneration and incentive structure based on position salaries, implementing short-, medium-, and long-term incentives according to performance evaluations, and includes honor incentives and welfare programs. The Company strictly adheres to local minimum wage standards to ensure that the monthly income of frontline employees meets legal requirements.

Multi-level ESG Goal Decomposition and Assessment ▶

Driven by core ESG goals, the Company incorporates key indicators such as energy conservation and emission reduction, safety production, supply chain responsibility, and employee development into the *Commitment to Annual Business Performance* for middle to senior management, to decompose and undertake them layer by layer. For frontline employees, ESG behavior standards are integrated into performance evaluations based on specific job requirements. In addition to the annual key performance indicators assessment, the Company also supervises execution progress through management mechanisms such as semi-annual performance reviews and quarterly business analysis.

The Company follows the PDCA principles to establish a performance assessment mechanism. In terms of assessment frequency and methods, differentiated assessments are implemented for employees at different levels. Additionally, the Company places great emphasis on performance coaching and feedback. If employees have questions regarding work progress, performance assessment results, or other matters during the performance cycle, they can file an appeal within the valid period. The appeal process includes both the appeal and review stages, which are handled by supervisors and relevant departments for inspection and organization.

Welfare System ▶

The Company provides a wide range of non-compensation benefits for employees, organizes various cultural and sports activities, and strives to help employees achieve a balance between work and life. We care about our employees, focus on the needs of female employees, and listen to their voices through multiple channels, continuously improving employee engagement. In addition to statutory benefits, the Company also offers unique benefits such as single apartments, work meals, work transportation, heatstroke prevention in the work environment, housing subsidies, paid training, and more.

Enhancement of Democratic Governance ▶

LiuGong attaches great importance to employees' opinions and requests, and quickly responds to employee demands through multiple channels such as employees' congress, democratic consultation dialogues, democratic meetings, email systems, work meetings, employee improvements, and rational suggestions. The Company holds at least one employees' congress annually to collect employee demands and provide reasonable solutions.

3rd General Meeting of 10th Employees' Congress of LiuGong



Employees' Congress

On January 31, 2024, the 3rd General Meeting of the 10th Employees' Congress and the 7th General Meeting of the 17th Labor Union Members' Congress were held in the conference hall on the second floor of the LiuGong Building, with 237 employee representatives and union member representatives in attendance. The Company' s leaders and heads of functional departments carefully listened to and provided detailed responses and explanations to the demands raised by the employee representatives, thus building a communication bridge between the Company' s leadership and employees.

Employee Engagement ▶

Since 2017, LiuGong has conducted annual employee engagement surveys at the end of each year, focusing on aspects such as organizational atmosphere, work, policies and assessments, comprehensive rewards, training and development, and work-life balance. The Company also organizes each unit to develop and implement improvement plans based on survey results, following up on the implementation of these improvements. Over the past three years, the Company' s employee engagement has continuously improved.

Indicator	Unit	2022	2023	2024
Employee Engagement	%	74.7	81.0	86.5 ↑
Survey Coverage for Employees	Person	12,601	14,055	14,21 ↑

Improvement of Happiness Index

LiuGong promotes human-centered management, taking multiple measures to care for employees. This includes actively organizing holiday celebrations, various cultural and sports activities, helping employees in difficulty, caring for retired employees, and sharing development achievements with employees, enhancing their sense of gain and satisfaction.

Care for Retired Employees

LiuGong organizes diversified activities for retired employees, showing care and concern through tangible actions.

Retired Employees' Art Performance and Photography Exhibition



In 2024, LiuGong held the Double Ninth Festival event themed “Grateful Years for Building a Happy Home Together” , with more than 200 retired employees gathering together. During the Double Ninth Festival, the Company also organized a variety of sports activities, such as table tennis and air volleyball. At the event, a photography exhibition was held, showcasing 80 excellent works. The event allowed retired employees to feel the warmth and care of the Company, and enriched their cultural lives while encouraging everyone to continue working with LiuGong’ s Labor Union to contribute more to the construction of the “Three Homes”



Art Performance on Double Ninth Festival



Gas Volleyball Competition



Photography Exhibition



Table Tennis Game

Care for Employees in Difficulty

The Company attaches great importance to the work and living conditions of employees in difficulty, and organizes visits and condolence activities during holidays, providing material and financial support to employees from financially disadvantaged families.

Golden Autumn Student Assistance



In September 2024, the Company launched the 2024 "Golden Autumn Assistance for Education" program, awarding 83 family education prizes to employees whose children were newly admitted to universities. In addition, 21 children of employees in difficulty were sponsored, with scholarships totaling RMB 95,500 distributed, bringing the warmth of the Party and the Labor Union to the hearts of families in need.

Condolence for the Spring Festival



In February 2024, company leaders led a team to visit and condole Party members, employees, rural revitalization backbones, and technical experts who are in difficulty, to offer the care and blessings of the Company. They visited the homes of Party members and employees in difficulty, encouraged them to face difficulties positively, and visited cadres who had taken medical leave, to express care for their post-surgery recovery.



Condolence for Seriously Ill and Difficult Employees during the Spring Festival

Key Performance

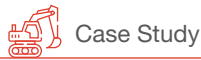
In 2024 the Company helped **306** employees in difficulty, with a total supporting fund of RMB **416,000**.



Enrichment of Employee Activities ▶

LiuGong encourages employees to love life, and organizes various activities such as sports competitions, cultural performances, and holiday celebrations, to ensure work-life balance and comprehensively improve employees’ sense of happiness and belonging.

Hiking on New Year’s Eve



Case Study

To implement the national strategy for fitness and strengthen the spiritual civilization construction of employees in the new era, the Company encouraged employees to participate in national fitness activities. On the morning of January 1, 2024, the Company launched the 2024 New Year’s Hiking Event themed “Striving for Happiness, Extending Human Power” at LiuGong Intelligent International Industrial Park. More than 1,000 employees and their families participated in the event and completed a 4.3-kilometer hike.



Hiking on New Year’s Eve

Fun Sports Meeting on Women’s Day



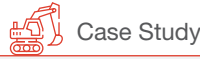
Case Study

On March 8, 2024, to celebrate the 114th International Women’s Day, LiuGong organized a variety of activities. More than 400 female employee representatives from different business lines gathered to celebrate the festival. The activities from various departments and business units were diverse and innovative, including team-building exercises, outdoor cultural exploration, tree planting, DIY lipstick, making of twisted flowers and woodcraft flowers, flower arrangement, tea art training, and collective movie watching.



Fun Sports Meeting on Women’s Day

Employee Sports Meeting of LiuGong



Case Study

On October 20, 2024, LiuGong held the 2024 LiuGong Culture Festival Employee Sports Meeting themed “Hard Work Brings Happiness, and Sports Brings Joy” at its headquarters, with over 2,000 employee representatives, 23 unit teams, and 572 athletes gathered at the sports field. This employee sports meeting, as an important part of LiuGong’s first Culture Festival, was not only a vivid display of LiuGong’s corporate culture, but also a comprehensive review of the employees’ spirit and demeanor.



Employee Sports Meeting

First Culture Festival Theme Event of LiuGong



Case Study

On the evening of December 25, 2024, to mark the 15th anniversary of the LiuGong Eastern R&D and Manufacturing Base, the LiuGong First Culture Festival theme event, themed “Extending Human Power, Creating a Beautiful Future” , was successfully held at the Wujin Sports Center in Changzhou, Jiangsu. The event integrated large-scale audiovisual dramas, skits, songs and dances, and other forms of art, showcasing LiuGong’s deep cultural heritage, innovative vitality, and fruitful achievements to over 3,400 attendees. The event presented a new chapter of LiuGong’s high-quality development, drawn together in collaboration with internal and external partners, shining brightly on the night in Changzhou.



First Culture Festival Theme Event of LiuGong

07

Social Contribution: Fulfilling the Responsibility of State-owned Enterprise

Our Philosophy

Committed to social welfare, LiuGong fulfills its responsibility as a state-owned enterprise, actively gives back to society, pursues harmonious development between the Company and society, supports social welfare, and contributes to rural revitalization. We work hand in hand with the world to create a better future and add value to the construction of a harmonious society.

Our Actions

- ▶ We participate in community construction,
- ▶ aid rural revitalization,
- ▶ and engage in public charity.

SDGs Responded



Responsibility Focus: Serving Domestic and International Projects to lead Responsible, Diverse and Win-win Practices

LiuGong adheres to the belief that responsibility shapes the future. We deeply practice national strategies and globalization layouts, and fulfill proactive responsibility for employees, customers, communities, and other key stakeholders in both domestic and international operations. Through diversified measures, the Company injects new momentum into the sustainable development of the industry, and builds a global responsibility network that benefits all parties. LiuGong’ s diversified practices not only highlight the Company’ s commitment but also set an example for “intelligent manufacturing in China” to go global.

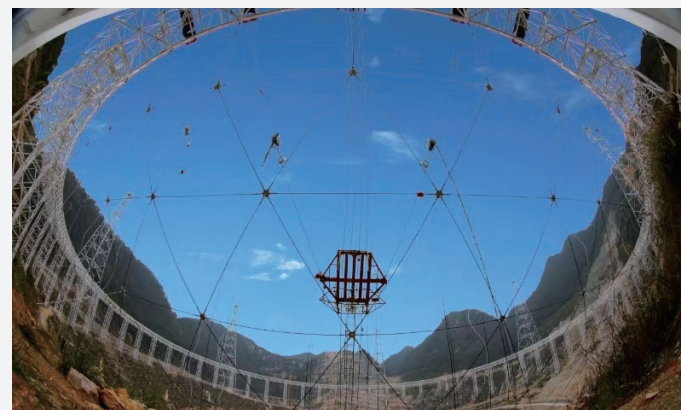
Empowerment for National Projects

LiuGong focuses on technological breakthroughs and deeply participates in the national “carbon peaking and carbon neutrality” strategy and infrastructure projects. Through innovative technologies such as ultra-high-performance concrete towers and floating wind turbines, as well as reliable equipment support, the Company promotes the development of clean energy and transportation infrastructure, providing critical support for the implementation of national strategies.

OVM Participated in the FAST Project of China



In March 2013, OVM signed a contract with the National Astronomical Observatory of the Chinese Academy of Sciences (CAS) for the manufacturing and installation of a reflective surface cable network for the FAST Project. OVM provides cable network manufacturing and installation services for the world’ s largest (500-meter) radio telescope — the FAST Project of the National Astronomical Observatory. OVM provided nearly 9,000 cable products, with fatigue stress amplitudes as high as 500 MPa, far exceeding the cables used in bridge projects. This marks a significant improvement in the fatigue resistance of engineering cables in China, achieving a breakthrough in the cross-border application of China’ s prestressed products—from conventional engineering fields such as road bridges and stadiums to new structural construction fields. Additionally, during the Reporting Period, OVM continued to provide intelligent vibration isolation products and cable testing-related products and services for the FAST Project.



FAST Project of China

OVM Participated in the 233MW Wind Power Project in Lianshui



On April 30, 2024, China Jushi and Windey Energy held the first unit grid-connected power generation ceremony for the 233MW wind power project in Lianshui, marking the official launch of the world’ s first commercial wind power project utilizing ultra-high-performance concrete (UHPC150) towers. OVM provided the project with prestressed anchoring system products and professional installation services.



233MW Wind Power Project in Lianshui

Guangxi’s Longest Cross-sea Bridge – the Longmen Bridge - Officially Completed and Opened to Traffic



On December 29, 2024, Guangxi’ s longest cross-sea bridge, the Longmen Bridge, was officially completed and opened to traffic, injecting new momentum into the high-quality development of the Beibu Gulf Economic Zone. OVM provided major prestressed products such as main cables, suspension ropes, prestressed anchoring devices, anchor pier anchoring systems, cable cranes, as well as professional equipment and supporting technical services for the construction of the Longmen Bridge.



Guangxi’s Longest Cross-sea Bridge — Longmen Bridge

Seven Employees of LiuGong Participated in China's 41st Antarctic Scientific Expedition



Case Study

In September 2024, LiuGong received an overseas mission notice from the Ministry of Natural Resources of the People's Republic of China, inviting seven employees of LiuGong to participate in China's 41st Antarctic Scientific Expedition. Currently, 80% of the construction machinery working in Antarctica is from LiuGong. LiuGong, guided by the diversified needs of the Antarctic scientific expedition, has gained deep insights into customer needs for extreme working conditions. By analyzing the usage pain points in the extremely cold scenarios on site, LiuGong develops rugged equipment that meets polar environments. We provide a full range of products, services and solutions throughout the entire lifecycle and value chain, fully demonstrating LiuGong's continuous innovation and commitment to practicing social responsibility.



LiuGong Equipment Operates Efficiently in Antarctica.

Support for Overseas Infrastructure

LiuGong actively participates in major overseas infrastructure projects, using equipment exports as a link. We not only address local infrastructure bottlenecks, but also promote regional economic balance and the improvement of people's livelihoods, contributing Chinese wisdom and strength to global infrastructure.

A Batch of Equipment from LiuGong Supported the Construction of Indonesia's New Capital



Case Study

In the first quarter of 2024, more than 30 machines from LiuGong arrived in Indonesia to support the construction of Ibu Kota Nusantara (referred to as "IKN"), the new capital of Indonesia. The construction of IKN is a major national strategic project by the Indonesian government, aimed at relocating the capital from Jakarta on Java Island to a newly built city on Borneo Island, to alleviate the population pressure and urban problems in Jakarta and better promote balanced regional development. From participating in the construction of the Jakarta-Bandung High-speed Railway to supporting the construction of the IKN project, LiuGong equipment is playing an increasingly important role in Indonesia's engineering construction.



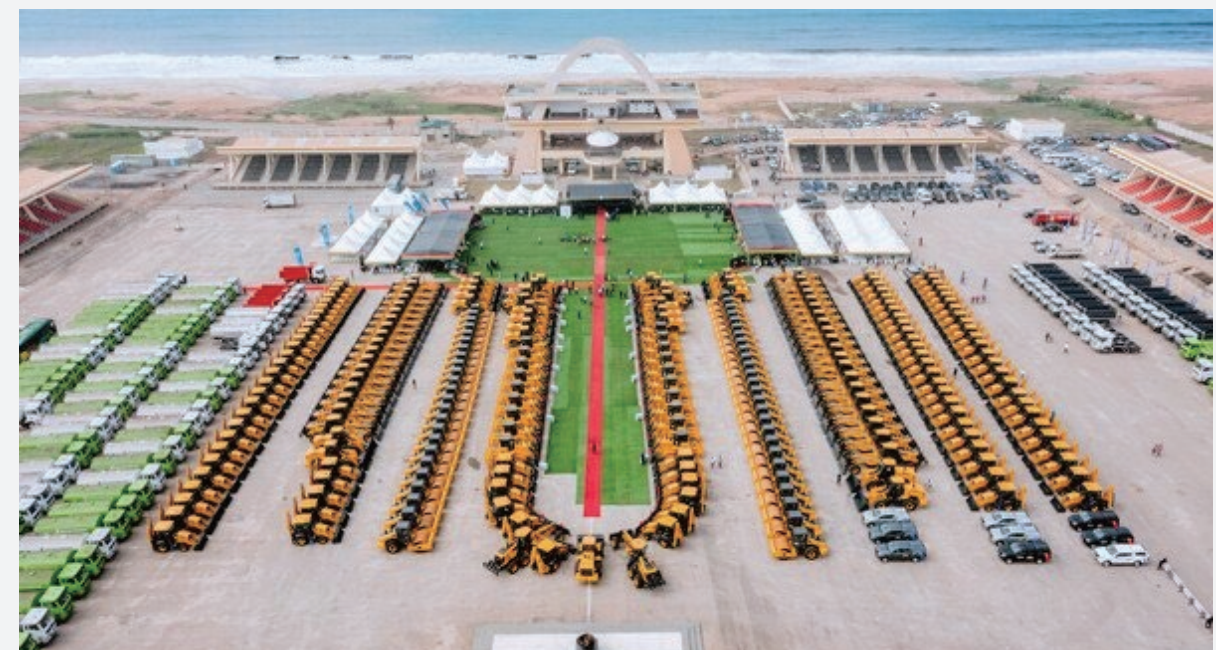
A Batch of Equipment from LiuGong Supported the Construction of Indonesia's New Capital

Thousand Units of Equipment from LiuGong Supported the Project Construction of the Ghana Government



Case Study

On July 31, 2024, a batch of LiuGong equipment was officially delivered to the Ghana government to support the District Road Improvement Program (DRIP) in the local economic development plan. LiuGong provided a full range of engineering machinery equipment, with a total of 1,000 units for the DRIP project. These units will be distributed across 261 counties in Ghana to support local economic and social development. This procurement of 1,000 units of LiuGong equipment in Ghana is of far-reaching significance for addressing the key issue of infrastructure construction in Ghana, improving transportation conditions in rural areas, enhancing local livelihoods, and achieving Ghana's economic leap. In the future, LiuGong will continue to increase its investment in the African market, establish subsidiaries and offices in key countries, deepen relationships with local partners, and build a complete distribution network, contributing greater strength to the modernization process in Africa.



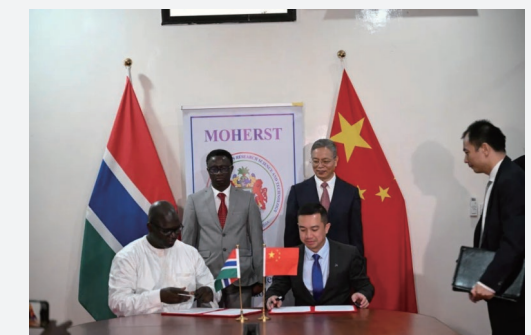
Thousand Units of Equipment from LiuGong Supported the Project Construction of the Ghana Government

LiuGong Holds a Water Well Donation Ceremony in Gambia



Case Study

On August 23, 2024, Li Yi, the General Manager of LiuGong's African region, signed a cooperation agreement on the donation of the water well project with Touré, the Permanent Secretary of the Ministry of Higher Education, Research and Science and Technology (MOHERST) of Gambia. This water well project will not only significantly improve the quality of life of the residents around Gambia, but also play a crucial role in improving sanitation conditions and reducing the spread of water-borne diseases.



LiuGong Holds a Water Well Donation Ceremony in Gambia

Cultivation of International Talent

LiuGong is committed to building an international talent development system. Through forms such as university-enterprise cooperation and skill competitions, LiuGong helps with local technological upgrades and talent cultivation, injecting vitality into the development of new production power in the industry.

LiuGong Launched a University-Enterprise Cooperation Project in Ghana



Case Study

On January 9, 2024, LiuGong held a signing ceremony for the university-enterprise cooperation with the University of Mines and Technology (Ghana) and Golden Dream at its headquarters. LiuGong hopes to make it an opportunity to deepen the integration of production and education, strengthen cooperation, and jointly cultivate talent needed by the market, thus building a community of shared destiny in university-enterprise cooperation.



Signing Ceremony of the University-Enterprise Cooperation Project

Another University-Enterprise Cooperation Project of LiuGong Indonesia



Case Study

In July 2024, LiuGong Indonesia, in collaboration with Liuzhou Polytechnic University and the Sriwijaya University, launched a university-enterprise cooperation project. LiuGong Indonesia, upholding the development philosophy of mutual cooperation and win-win outcomes, is committed to the inheritance of technology and talent cultivation, and contributes to the local development of construction machinery and the friendly cooperation between China and Indonesia through international cooperation projects.



Another University-Enterprise Cooperation Project of LiuGong Indonesia

7th Global Technical Skills Competition of LiuGong



Case Study

On October 31, 2024, the opening ceremony for the finals of the 7th Global Technical Skills Competition of LiuGong was held at the LiuGong International Industrial Park. The competition aims to promote the construction of the industrial worker team, assist the majority of workers in learning skills and improving their quality, vigorously promote the spirit of model workers, labor spirit, and craftsmanship spirit, and cultivate skilled talents to boost the development of new productivity. The competition introduced an electric product contest for the first time and also set a new record in the number of core component disassemblies and assemblies. The finalist teams came from 11 countries across 8 overseas regions and 4 domestic regions: East, North, West, and South China.

The 2024 National Labor and Skills Competition for the Construction of Western China Land-Sea New Corridor in Guangxi, Chongqing, Sichuan, Gansu, Qinghai, Xinjiang (Six Municipalities and Provinces)—“Excellent Service, Strong Industry” Skills Competition for Construction Machinery Maintenance and Operation Personnel also kicked off at the LiuGong International Industrial Park. Competitors from Chongqing, Sichuan, Gansu, Xinjiang Uygur Autonomous Region, and Guangxi Zhuang Autonomous Region participated in the competition.



7th Global Technical Skills Competition of LiuGong



2024 National Labor and Skills Competition for the Construction of Western China Land-Sea New Corridor in Guangxi, Chongqing, Sichuan, Gansu, Qinghai, Xinjiang (Six Municipalities and Provinces)—“Excellent Service, Strong Industry” Skills Competition for Construction Machinery Maintenance and Operation Personnel

Contributing to Rural Revitalization

LiuGong, in full response to the national rural revitalization strategy and in alignment with the *Law of the People's Republic of China on the Promotion of Rural Revitalization*, leverages the Company's professional advantages to consolidate poverty alleviation achievements, and further improves and strengthens the rural revitalization work system. Through various methods such as industrial driving, technical support, and talent cultivation, LiuGong continuously explores the path of integrated rural revitalization development, promotes the full-chain upgrade and value-added of rural industries, and makes substantial progress and phased achievements in advancing rural comprehensive revitalization.

Key Performance:

In 2024, LiuGong's total investment in rural revitalization reached RMB **10.0761** million.

Industrial Revitalization

LiuGong fully utilizes the resource advantages in as a state-owned enterprise to help promote the industrial revitalization of designated poverty alleviation villages, develop and nurture rural industries, and provide villagers with broad employment opportunities and income sources. In 2024, LiuGong invested a total of RMB 421,510 in industrial assistance projects.

Targeted Assistance has Borne Abundant Fruit, with a "Thriving Industry" Driving "Rural Revitalization"



Case Study

LiuGong extends support to the beekeeping industry, tea cultivation and primary processing in the villages it aids. It also helps with the cultivation and marketing of agricultural products like passion fruits, luohanguo (momordica grosvenori), sweet potatoes, and rice. By deeply rooting itself in rural industrial development, LiuGong has furnished villagers with extensive employment prospects and income streams. Through intensified consumption driven assistance measures, such as the efforts of the company's labor union and cafeteria, employees' enthusiastic support for rural produce, live streaming sales by the first secretary, and the sale of jointly branded products with Guiwei Lian, LiuGong has procured a total of 9.3335 million yuan worth of agricultural goods, including mushrooms, edible fungus, peanut oil, zongzi, and cured meats, from the targeted villages as well as the impoverished regions in Sanjiang and Rongshui counties. This amount accounts for 85.65% of the annual welfare distribution. Looking ahead, LiuGong will persist in exploring the path of integrated rural revitalization development, propelling the upgrading of the entire rural industrial chain and value addition at every link. It aims to achieve substantial progress and stage specific results in the comprehensive revitalization of the countryside.

In response to the call of the Sanjiang County Party Committee and the county government where the assisted villages are situated, LiuGong has launched a series of industry investment initiatives that benefit the local populace. These efforts are dedicated to promoting the upgrading of the entire rural industrial chain and value enhancement at all stages. On June 26, 2024, LiuGong, in collaboration with the Sanjiang County Party Committee and the county government, inaugurated the "Lighting Up Rural Revitalization" project. In 2024, LiuGong invested a total of 421,500 yuan in the construction of industrial infrastructure, significantly advancing the modernization of rural areas. On October 24, LiuGong, together with the Sanjiang County Party Committee and the county government, inaugurated the agricultural product drying workshop in Si'ou Village, Doujiang Town. The workshop has a single batch production capacity of 60,000 fruits, contributing to the industrial revitalization of ethnic minority inhabited villages with an entrepreneurial perspective.



Inauguration of the Agricultural Product Drying Workshop in Si'ou Village, Doujiang Town

Consumption Assistance

LiuGong deeply explores high-quality agricultural and special products from rural areas, and deepens consumption assistance through various forms, including purchases by labor unions and canteens, employees' efforts to help farmers, the livestream marketing by the First Secretary, and the sales of Guiweilian products. In the five assisted villages, LiuGong continuously provides "consumption-driven assistance". In 2024, the total investment in consumption assistance amounted to RMB 9.3406 million.

Education Assistance

LiuGong continues to deepen its efforts in education assistance. In 2024, it distributed RMB 116,000 of subsidies to over 100 high-school and university students from poverty-stricken households in assisted villages, providing strong support for promoting higher education among ethnic minority children in remote mountainous areas and improving the knowledge and cultural level of the population in assisted villages.

Actively Carry out Volunteer Teaching Service Activities



Case Study

On March 22, 2024, the "In the Name of Love" volunteer teaching team from the International Business Department, under the theme "Differences in Eastern and Western Food Cultures", presented vivid images and engaging explanations to students the differences in food, utensils, and table etiquette between the East and West. After the class, the LiuGong Youth League donated notebooks, stationery sets, basketballs, badminton rackets, and jump ropes to the Primary School of Linxi Town. The Party Committee of the International Business Department awarded scholarships to 6 students, i.e., 6,300 yuan of voluntary donations from primary-level youth league organizations, young members, and employees of the International Business Department.

From December 13 to 14, 2024, LiuGong held the 2024 "Hope Project" LiuGong Teaching Volunteer Service themed "Supporting Hope, Nurturing Future Dreams". This volunteer service focused on "Traditional Festivals in Eastern and Western Cultures." The International Business Department's teaching team used vibrant images and interesting explanations to show the students from the Dong Ethnic Group the origins and characteristics of Eastern and Western festivals, helping them broaden their horizons and increase their knowledge.



Volunteer Service to Support Education

Engagement in Public Welfare and Charity

LiuGong encourages employees to actively participate in public welfare and charity, take on social responsibility, shoulder and prioritize social responsibility, convey positive energy from the Company through practical actions, and give back to society through dedicated contributions.

Key Performance:

In 2024, the Company invested a total of RMB **10.1961** million in public welfare, organized **55** volunteer activities, with **1,925** person-times of participants, and an accumulated duration of **363** hours.

Community Volunteer Service

The Company promotes the volunteer spirit of “dedication, mutual assistance, friendship, and progress” , and supports community development by organizing charitable activities such as blood donation and community cleaning. Our volunteers have become a beautiful sight, spreading goodwill to more people in need and working tirelessly to support the construction of a better society.

Voluntary Blood Donation



On August 16, 2024, LiuGong, in collaboration with the Guangxi Blood Center, held a blood donation campaign themed “striving forward, spreading love, and passing on kindness” , with 209 participants contributing a total of 70,700 milliliters of blood. LiuGong has been conducting voluntary blood donation activities for more than 10 years, fully reflecting LiuGong’ s humanitarian spirit and its social responsibility as a nationally civilized entity.



LiuGong Employee Blood Donation in 2024

Volunteer Service to Learn from Lei Feng



On March 2, 2024, LiuGong organized a volunteering service to learn from Lei Feng themed “Stirring the Volunteer Spirit, Encouraging the Youth to Take Responsibility” . This event provided public services to LiuGong community residents, including free medical consultations, haircuts, knife sharpening, removal of illegal advertisements, electrical repairs, electric bike cleaning, and car maintenance. Volunteers conducted public awareness campaigns on fire safety, electricity and fire usage, anti-telecom fraud, and financial knowledge, strongly promoting and practicing the spirit of Lei Feng to help build a harmonious and beautiful society.



Volunteer Service to Learn from Lei Feng

Disaster Relief and Rescue

Many hands make light work. In the face of sudden emergency disasters, LiuGong fully demonstrates its mission and responsibility as a state-owned enterprise, steps forward and dedicates all efforts to post-disaster rescue and reconstruction, standing in solidarity with the people in the disaster areas.

Participation in Chenzhou Post-disaster Rescue and Reconstruction



In 2024, affected by Typhoon Gaemi, Zixing City in Chenzhou, Hunan Province, suffered from heavy rainfall. LiuGong actively mobilized equipment and assisted China Anneng Construction Group in rescue and post-disaster reconstruction. During the Chenzhou rescue operation, LiuGong completed more than thirty mountain landslide excavations and temporary embankment tasks for roadbed collapses, cleared and transported over 20,000 cubic meters of stone, and opened up 12 kilometers of rescue roads in the disaster-hit area.



Post-disaster Rescue and Reconstruction in Chenzhou

Participation in Mudslide Disaster Rescue in Kangding



Case Study

In August 2024, a flash flood and mudslide disaster occurred in Gushan Township, Kangding City, Ganzi Prefecture, Sichuan Province. The disaster caused the collapse of bridges between Tunnel 1 and Tunnel 2 on the Ya' an-Kangding Expressway (the Kangding-Luding Section) and the destruction of homes in Ridi Village, Gushan Township, leading to vehicles falling and people going missing. LiuGong assisted China Anneng Construction Group in mobilizing equipment to the site for rescue operations.



Disaster Relief and Rescue in Kangding

Rushing to Assist in the Brazilian Flood Disaster



Case Study

In April 2024, continuous heavy rain in the southern Brazilian state of Rio Grande do Sul triggered floods, resulting in hundreds of deaths and 600,000 people being displaced. LiuGong Latin America paid close attention to the local disaster situation and promptly dispatched equipment such as excavators to the front line of the disaster area, fully supporting reconstruction work such as road clearance and debris removal. During the rescue process, LiuGong worked closely with local partners, provided timely support to Priori, a core dealer in the disaster area, organized relief supplies donation activities, and sent relief supplies such as quilts, water, and daily necessities to the disaster area to help them tide over the difficulties.



LiuGong Latin America Donated Relief Supplies to the Brazilian Disaster Area

Looking Ahead

The saying goes that countless ships compete in the stream, and the ones that catch the wind sail ahead. In 2025, LiuGong will continue to focus on “national priorities”, and guided by Xi Jinping’s Thought on Socialism with Chinese Characteristics for a New Era, adhere to comprehensively deepening reforms, advance technological innovation, and continue its international expansion. We will walk steadily on the path to high-quality development, and work tirelessly to create new brilliance for LiuGong.

LiuGong will deepen the reform as a state-owned enterprise to stimulate innovation and vitality.

We will continue to deepen the reform of LiuGong as a state-owned enterprise, improve the modern corporate governance system, and enhance operational efficiency and management levels. We will focus on “profit growth, business growth, capability growth, and quality improvement” as our main business strategy, promote changes and innovations in our work, continuously enhance our brand value, and create value for shareholders. At the same time, we will continue to uphold Party leadership, setting a new benchmark for Party building in mixed-ownership enterprises, and providing strong political support for the Company’s sustained and healthy development.

LiuGong will promote technological innovation and lead the development of the industry.

We will increase investment in R&D, focus on key core technology researches, and promote the iterative upgrading of products and technologies. We will rely on major national science and technology projects, strengthen cooperation with research institutes and universities, and build an innovation system integrating industry, academia, research and utilization. Through intelligent and digital transformation, we will enhance the added value of products and services, provide customers with more efficient and smarter solutions, and drive the industry towards higher-end and intelligent development.

LiuGong will expand international cooperation and enhance global influence.

We will actively respond to the “Belt and Road” initiative, deepen cooperation with countries along the route, and promote the “going global” of our equipment and services. We will strengthen strategic cooperation with internationally renowned enterprises, share resources, complement each other’s advantages, and jointly explore global markets. By participating in the formulation of international standards, we will enhance the international influence of the LiuGong brand and provide high-quality products and services to global customers.

LiuGong will practice green development and achieve sustainable development goals.

We will continue to implement the “carbon peaking and carbon neutrality” goals, and promote green manufacturing and the construction of a green supply chain. We will increase the research and application of clean energy and energy-saving technologies, improve resource utilization efficiency, and reduce environmental pollution. Through the promotion of green products and solutions, we will guide the industry to green transformation and contribute to the realization of global sustainable development goals.

Under the guidance of the strategy of “Total Solution, Total Intelligence and Total Internationalization”, we will strive forward to pool collective wisdom, steadfastly follow the path of technological innovation and intelligent green development, devote ourselves to being a global leader in equipment and technology solutions, and contribute our part to realizing the Chinese Dream of the great rejuvenation of the Chinese nation.

Annex

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Feedback Form

We appreciate your time in reading the *2024 Environmental, Social and Governance (ESG) Report of Guangxi LiuGong Machinery Co., Ltd.* To improve LiuGong's performance in environment, society, and governance, further enhance our sustainable development capabilities and levels, and strengthen communication with all sectors of society, we sincerely hope that you will provide valuable feedback and suggestions on our work and report amidst your busy schedule.

Your Information

Name: _____ Tel.: _____

Unit: _____ Email: _____

Multiple Choice (Please check ☒ in the appropriate box)

1. Your overall evaluation of LiuGong' s 2024 ESG Report:

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

2. How do you think LiuGong has performed in terms of customer service?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

3. How do you think LiuGong has performed in terms of technological innovation?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

4. How do you think LiuGong has performed in terms of corporate governance?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

5. How do you think LiuGong has performed in terms of team building?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

6. How do you think LiuGong has performed in terms of social welfare?

7. How do you think LiuGong has performed in terms of environmental protection?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

8. How do you think LiuGong has performed in terms of sustainable supply chains?

☐ Good ☐ Average ☐ Needing Improvement ☐ I don't know

9. Do you have any comments on LiuGong' s performance in ESG efforts?



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