



2024

XCMG Construction Machinery Co., Ltd.

Environmental, Social And Governance Report

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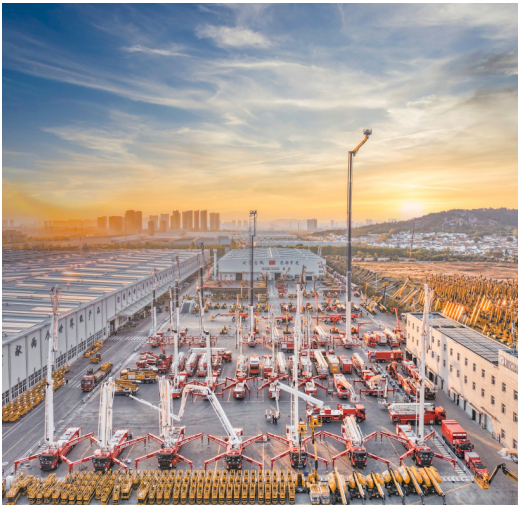
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About this Report

Introduction

This is an Environmental, Social, and Governance (ESG) Report issued by XCMG Construction Machinery Co., Ltd. to disclose and demonstrate its ESG practices and performance to stakeholders. The Board of Directors guarantees that there are no false records, misleading statements or material omissions in this Report and is responsible for the authenticity and validity of the information contained herein.

Reporting Period

The period covered by this Report is from January 01, 2024 to December 31, 2024 unless otherwise specified. Some information has exceeded the said period to ensure the completeness of this Report.

Reporting Scope

Unless otherwise specified, this Report is about the XCMG Construction Machinery Co., Ltd. and covers its Head Office, Branches and Subsidiaries, a scope that is identical to the scope of its consolidated financial statements. Any deviation from the said scope will be stated in the Report.

Data Sources

All information and data used in this Report are from materials made public by governmental agencies, and the formal documents and disclosures of the Company. All financial data referenced in this Report are subject to the annual report and other data are from internal statistics of the Company. All monetary amounts are expressed in Chinese RMB unless otherwise stated.

Basic Framework

This Report is prepared with references to in particular general frameworks on ESG/ sustainability/social responsibility both at home and abroad, including the Guidance on Social Responsibility (GB/T 36000), the Self-Regulatory Guidelines No. 17 for Companies Listed on Shenzhen Stock Exchange—Sustainability Report (Trial), the Self-Regulatory Guidelines No. 3 for Companies Listed on Shenzhen Stock Exchange-Compilation of Sustainability Reports, the Hong Kong Stock Exchange's Environmental, Social, and Governance Reporting Guide, Global Reporting Initiative (GRI) Sustainability Reporting Standards and ISO 26000:2010 Guidance on Social Responsibility and with a focus on the industry context and featuring the Company's distinctiveness.

Names and Abbreviations

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

Company name	Short name
XCMG Construction Machinery Co., Ltd.	XCMG, XCMG Machinery, Company, We
Xuzhou Construction Machinery Group Co., Ltd.	XCMG Group, Group
XCMG Heavy Machinery Co., Ltd.	XCMG Heavy Machinery
Xuzhou Construction Machinery Co., Ltd.	XCMG Crane
XCMG Finance Co., Ltd.	XCMG Finance
Xuzhou XCMG Mining Machinery Co., Ltd.	XCMG Mining Machinery
Xuzhou XCMG Infrastructure Construction Machinery Co., Ltd.	XCMG Infrastructure
Xuzhou XCMG Excavator Machinery Co., Ltd.	XCMG Excavator
Road Machinery Branch, XCMG Construction Machinery Co., Ltd.	XCMG Road
Xuzhou XCMG Hydraulic Co. Ltd.	XCMG Hydraulic
Xuzhou XCMG Zhilian Logistics Service Co., Ltd.	XCMG Zhilian
Xuzhou XCMG Schwing Machinery Co., Ltd.	XCMG Schwing
Xuzhou XCMG Hanyun Technologies Co., Ltd.	XCMG Hanyun
Xuzhou XCMG Driveline Technology Co., Ltd.	XCMG Driveline
Xuzhou XCMG Environment Technology Co., Ltd.	XCMG Environment
Xuzhou XCMG Truck Mounted Crane Co., Ltd.	XCMG Truck Mounted
Xuzhou XCMG Rongpiao E-Technology Co., Ltd.	XCMG Rongpiao
Xuzhou XCMG Port Machinery Co., Ltd.	XCMG Port Machinery
Science and Technology Branch, XCMG Construction Machinery Co., Ltd.	XCMG Science and Technology
XCMG Fire-fighting Safety Equipment Co. Ltd.	XCMG Fire-fighting
Xuzhou XCMG Precision Industrial Technology Co., Ltd.	XCMG Precision
Xuzhou XCMG Crawler Chassis Co., Ltd.	XCMG Crawler
Xuzhou XCMG Fudi Battery Technology Co., Ltd	XCMG Fudi

Report Publication

This Report is issued electronically, which is available on the website of Shenzhen Stock Exchange, and the Company's website <http://xgjx.xcmg.com/>.This Report is published in both Chinese and English versions. In case of discrepancies, the Chinese version shall prevail.

Feedback

To better address your and other stakeholders' needs, and to enhance the value of our ESG information provided for you, we seek your valuable feedback on this Report. Your insights will help us improve our ESG management capabilities and performance. We sincerely expect your valuable comments or suggestions and email the feedback to us by sending the Reader Feedback Form attached to zqb@xcmg.com.

Message from the Chairman



杨东升

Chairman of XCMG
Construction Machinery Co., Ltd.



In 2024, we anchored ourselves to the two-phase strategic blueprint named Everest Summit. We strengthened our confidence with boosted morale, and courageously shouldered major responsibilities. Our operational quality became more stable with profitability improved, while technological innovation capabilities and internationalization levels grew stronger. The outcomes of our digital transformation efforts have become increasingly pronounced, demonstrating our commitment to achieving measurable progress. We have made significant strides toward establishing a world-class enterprise, marked by tangible accomplishments that underscore our mantra of “progress amid stability”.



Green Manufacturing: Protecting Our Planet. We have meticulously outlined technical pathways for the development of new energy vehicles, including electric, hybrid, and hydrogen-powered options. Our commitment to innovation is evident in our vigorous advancement of comprehensive new energy product sets and our efforts to explore green, low-carbon application scenarios throughout the industrial chain. In this regard, we have successfully established a circular low-carbon ecosystem that promotes energy conservation, emission reduction, and the broader green transformation of all industrial chain processes. Concurrently, we have accelerated the transition of our industry toward premium, intelligent, and environmentally sustainable development. By leveraging our 5G+ Industrial Internet Platform, we have expedited our intelligent transformation and digital transition. We have consistently been recognized as a national benchmark for smart manufacturing, underscoring our leadership in this vital sector. Notably, our digital coverage has expanded significantly, and we have achieved impressive advancements in the numerical control rate of key processes.

Putting People First: Building a Better Life Together. We have significantly increased our investment in public welfare initiatives, encompassing education, poverty alleviation, and disaster relief. Our commitment to actively participating in community development underscores our dedication to fulfilling our corporate social responsibility. In terms of employee welfare, we have made substantial enhancements to our talent development system, thereby providing our staff with broader career advancement opportunities and avenues for personal growth. We prioritize health and safety, fostering a harmonious and inclusive work environment. We firmly assert that the value of a business extends beyond its economic performance; it is also linked to the well-being of the society it serves. We believe that sustainable development can only be achieved when we grow in tandem with the communities around us.

Excellent Governance: Leading toward the Future of the Industry. We have remained steadfast in our commitment to the principles articulated by General Secretary Xi Jinping during his inspection of Xuzhou, embodying a spirit of gratitude and determination. Our mission is clear: to foster the growth and strengthening of national industries and state-owned enterprises. In this context, we have intensified our focus on our core business, reinforcing the real economy in the face of significant downward pressures within a highly competitive market. Our efforts have underscored the pivotal role of the construction machinery sector, which we confidently regard as the “No. 1 industry”. We are dedicated to advancing integrated innovation, reform, and openness. Our relentless pursuit of vitality through innovation, coupled with a commitment to reform, has led to the continual enhancement of the “1+6+N” technological innovation system. This strategy has effectively expanded our development horizons and created new competitive advantages, promoting stability and ensuring the sustained, high-quality development of the business.

We stand at a pivotal juncture and embark on a transformative journey. We are resolutely committed to the principles of sustainable development. We will continue to deepen our green innovation initiatives, fulfill our social responsibilities, and enhance our governance practices, with the aim of establishing ourselves as a leader in the sustainable development of the global construction machinery industry. We recognize that the pursuit of sustainable development is a long-term and challenging endeavor, one that necessitates the collective efforts of all XCMG employees, our partners, and various sectors of society. We are eager to collaborate closely with all stakeholders to forge a greener, more harmonious, and prosperous future.

In closing, I would like to extend my heartfelt gratitude on behalf of the Company to our shareholders, customers, partners, and friends from across society who have consistently supported and nurtured our growth. We are determined to advance with conviction through actionable initiatives, drive progress through innovation, and remain steadfast in our pursuit of our vision: to become a trustworthy and value creating international enterprise!

About XCMG Machinery

Introduction

Incorporated in December 1993, XCMG Construction Machinery Co., Ltd. was listed on the Shenzhen Stock Exchange in August 1996 under the abbreviation "XCMG Machinery" with the stock code 000425. As a core member of Xuzhou Construction Machinery Group Co., Ltd. (XCMG), it stands as a prominent enterprise within China's construction machinery industry. Renowned for its extensive scale, comprehensive product range, it demonstrates competitiveness, influence, and strategic significance on a national level.

The Company maintains undisputed domestic industry leadership across all key metrics, with a longstanding global top-tier position and recognition as World's 500 Most Influential Brands, Fortune China 500, and Forbes China Go-International Brands Top 30. 16 equipment categories hold domestic market leadership, including truck cranes, mobile cranes, and road rollers. Globally, the Company dominates in lifting equipment (world No.1 in cranes, mobile cranes and horizontal directional drilling), foundation machinery (global leader in pile drivers, concrete machinery), specialized vehicles (top 3 in road machinery, aerial work platforms, tower cranes), earthmoving (world No.4 in mining trucks, world No.6 and domestic No. 2 in excavators), loaders (domestic No.1, global leader in new energy loaders).

XCMG has established a modern industrial system of "5+1" covering construction machinery, mining machinery, agricultural machinery, sanitation machinery, emergency rescue equipment, and the modern service industry. Our products are sold to over 190 countries and regions, with coverage of the Belt and Road Initiative countries exceeding 95%, solidifying our role as a key player in China's global equipment manufacturing industry.

Corporate Culture



Mission

Empower Solid Future



Vision

To Build a Modern World-class Enterprise and Peak at The Global High-end Equipment Manufacturing Industry



Annual Milestones

Steady Improvement in Quality

We resolutely implemented the business development policy focused on high quality, risk control, world-class standards, and stable growth. This strategic approach has already begun to manifest in a progressive and favorable development trajectory for our operations.

Digital and Intelligent Transformation

We fully initiated the “three battles” encompassing intelligent transformation, digital transformation, and network connectivity to forge a new type of productive force that embodies the unique characteristics of XCMG Machinery.

Global Expansion along the Value Chain

Through the continuous renewal and enhancement of the “1 + 14 + N” international operation system, we have enhanced augmenting our global brand reputation and influence.

Responsibility in Premium Transition

We unwaveringly advanced the high-end transformation of our operations, accelerating the achievement of high-level technological self-reliance and self-improvement.

Focusing on New Development

With firm and resolute adherence to a green development strategy, we comprehensively positioned ourselves within the new energy sector to reinforce the foundation for high-quality development.

Advancing in Mining

The large-scale delivery of complete sets of mining machinery represented a significant milestone, effectively establishing a “second growth curve” for the industry.

Grand Presence

Our presence at the Bauma China 2024 marked a remarkable achievement, signifying a transformative leap from “seeing the world at Bauma exhibition” to “showcasing China to the world”.

Talent Responsibilities

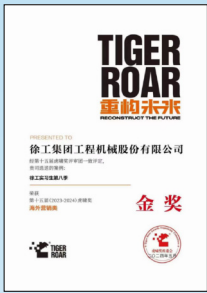
We diligently strengthened our talent pool, ensuring that our soft power effectively translates into a foundational support system for the Company's sustained development.

Awards and Honors



2023 Forbes China Globalization
Innovators Selection Top 30 Brands

Forbes



Golden Award in Overseas
Marketing at the 15th Tiger Roar
Awards

Tiger Roar Awards
Organizing Committee



Gold Winner in Cross-Border
Marketing Category at TopDigital
Innovative Marketing Awards

TopDigital Organizing
Committee



Fortune China 500

Fortune magazine



2024 Phoenix Star: A-share
Overseas Innovation Award

Phoenix Television, ifeng.
com



26th Golden Bull Award of Listed Companies
Best Project to Invest Award, Golden Bull
Board Secretary Award, Golden Information
Disclosure Award

China Securities News



2024 Fortune China's Most Admired
Companies

Fortune magazine



Forbes China Go-International
Brands Top 30

Forbes



2024 LinkedIn "Best in Content
Marketing Award"

LinkedIn



World's 500 Most Influential Brands

World BrandLab



13 Science and Technology Awards in the Mechanical Industry, among
which the project Key Technological Innovations and Applications
in High-Mobility Wheeled Engineering Vehicle Suspension Systems
received the First Prize for Technological Invention.

China Machinery Industry Federation,
Chinese Mechanical Engineering Society

Industry Organizations

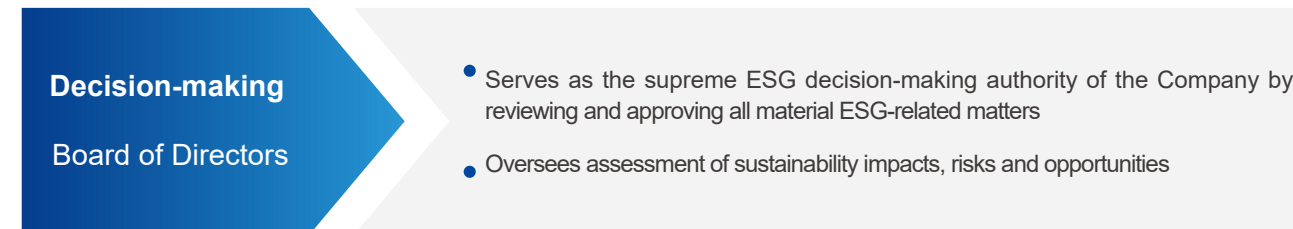
Association name	Association membership
Asia Quality Function Deployment Association	Standing Director Entity
China Association for Public Companies	Directing Entity
National Association of Financial Market Institutional Investors	Membership Entity
China Construction Machinery Association	Vice Chair Entity
China Machinery Industry Federation	Vice Chair Entity
China Federation of Industrial Economics	Vice Chair Entity
China Machine Building Quality Management Association	Vice Chair Entity
Zhantianyou Development Foundation of Science and Technology	Vice Chair Entity
Mechanical Design Branch, Chinese Mechanical Engineering Society	Deputy Director Entity
Chinese Association for Quality	Standing Director Entity

Responsibility Management

ESG Management

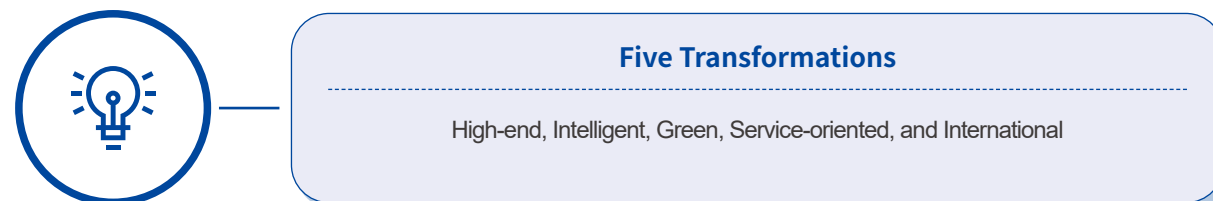
ESG Structure

The Company is committed to refining its ESG governance framework by seamlessly incorporating sustainable development principles into its corporate policies and processes. We have implemented a robust ESG reporting mechanism to effectively advance our management initiatives.



ESG Strategy and Vision

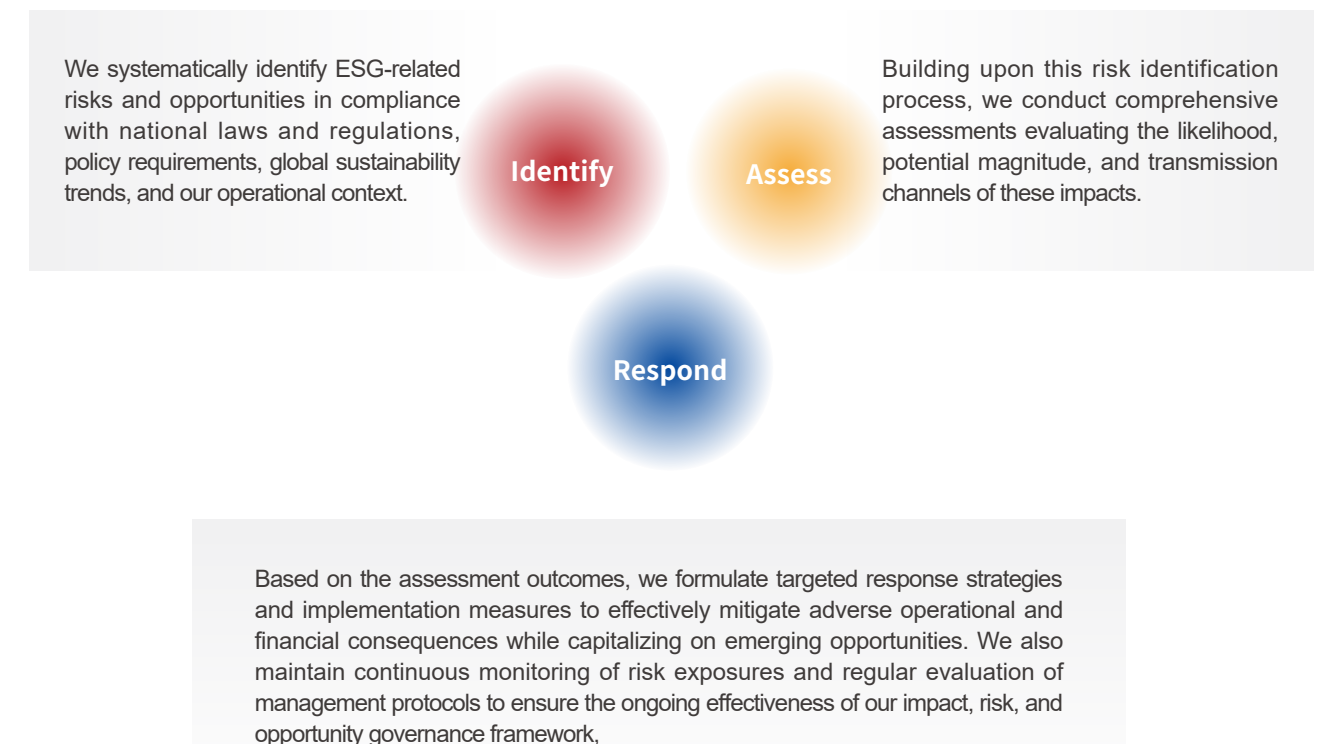
The Company adeptly integrates sustainable development principles into its corporate strategy and decision-making processes. Anchored by its Five Transformations as well as a comprehensive risk control and compliance framework, it adeptly harmonizes development with security. This is achieved through the enhancement of environmental protection, the fulfillment of social responsibilities, and the strengthening of corporate governance. Consequently, the Company continuously elevates its governance capabilities, competitiveness, innovation capacity, risk resilience, and value creation. Ultimately, this strategic approach not only advances corporate objectives but also fosters socio-economic sustainable development, amplifying positive economic, social, and environmental impacts while reinforcing alignment with sustainable business models








ESG Impacts, Risks and Opportunities

The Company effectively incorporates ESG-related impact, risk, and opportunity management into its internal governance frameworks. We perform thorough assessments of sustainability factors that could significantly affect our business model resilience, operational continuity, strategic development, financial position and performance, cash flow stability, and financing structures and cost efficiency over short, medium, and long-term periods. Material ESG factors identified are systematically prioritized for mitigation or capitalization through targeted actions, ensuring robust organizational resilience.

Management Process



Identification Result and Responses

Risk/opportunity type	 Risk/opportunity description	 Probability	 Impact time-frame	 Expected impact	 Responses
Country-specific and policy risk	Government and regulatory requirements for construction projects vary across countries (including aspects such as human rights protection and environmental compliance). In operations, the Company face political, economic, social, financial, and legal risks in host countries, which impose higher demands on compliance management capabilities.	High	Medium to long term	Revenue decline	<ul style="list-style-type: none"> • Develop a robust and comprehensive risk assessment framework. Formulate flexible and adaptive market entry strategies and operational models. • Establish an effective compliance management system. • Diversify market presence to mitigate risks associated with reliance on a single market.
Clean technology opportunity	The global focus on environmental protection and sustainable development has led to a steady increase in market demand for clean technology products. The research, development, and implementation of these technologies significantly contribute to lowering production costs by optimizing production processes and enhancing energy efficiency. This trend reflects a crucial shift towards sustainable industrial practices.	High	Medium to long term	Revenue increase	<ul style="list-style-type: none"> • We bolster our position in clean technology, we consistently increase research and development expenditures, foster robust collaborations with universities and research institutions, and enhance our innovation capabilities. • We intensify the promotion of proprietary clean technology achievements, strategically articulate our green brand positioning, and elevate brand awareness and reputation in sustainable development.
Supply chain risk	Suppliers and partners are widely distributed across various regions, and these suppliers face significant ESG-related risks related to contract performance, quality management, safety management, environmental protection, and labor management.	High	Short term, medium to long term	Cost increase	<ul style="list-style-type: none"> • Conduct regular assessments of suppliers' ESG performance to ensure alignment with corporate sustainability goals and standards; • Build a geographically diversified supplier base to mitigate disruption risks from regional natural disasters; • Foster long-term partnerships with key suppliers to improve supply chain efficiency and sustainability performance
Local operations risk	Cultural disparities across various countries and regions significantly impact project execution, necessitating refined management strategies for local employees. Non-governmental organizations (NGOs) closely scrutinize Chinese enterprises in these locations, particularly regarding their environmental practices, labor management, and the frequency of safety incidents.	High	Medium to long term	Cost increase	<ul style="list-style-type: none"> • To ensure successful project execution, it is imperative to conduct comprehensive market research to grasp the local market demand, competitive landscape, and sociocultural context. • Proactively fostering strong partnerships with local governments is essential; staying informed on policy developments will facilitate access to enhanced support and resources. • Implementing cross-cultural training for foreign employees is vital in fostering an understanding and appreciation of local customs and social norms, thereby minimizing cultural conflicts.

ESG Indicators and Objectives

The establishment of sustainability indicators and targets by the Company reflects its commitment to environmental protection, social responsibility, and the optimization of governance practices. Furthermore, this strategic initiative not only articulates a clear direction for corporate development but also establishes a measurable framework for evaluating progress and success.

E

Environmental

Reduce carbon emission intensity;
Expand sales of new energy products

S

Social

Enhance global responsible brand recognition;

Increase investment in technological innovation

G

Governance

Build intelligent upgrade, digital transformation and connectivity;

Improve internal control & compliance management

Communication with Stakeholder

XCMG Machinery attaches equal importance to the legal rights and interests of its stakeholders while taking attention to its own high-quality development. The Company fully understands the expectations and demands of its stakeholders. It actively builds communication channels and engages in dialogues with stakeholders, responding to their needs and concerns.

Key stakeholders	Expectations and requests	Communication channels
Governmental bodies and regulators	<ul style="list-style-type: none">•Compliance with national laws and regulations•Alignment with national and regional strategies•Compliant operation•Tax payments under laws	<ul style="list-style-type: none">•Supervision and assessment•Information submission•Work meetings
Investors/shareholders	<ul style="list-style-type: none">•Robust corporate governance mechanisms•Better information disclosure•Performance growth and return on investments	<ul style="list-style-type: none">•Official website and WeChat public accounts•Information disclosure•Performance briefing•Roadshows/reverse roadshows•http://irm.cninfo.com.cn•Other exchanges and interviews
Employees	<ul style="list-style-type: none">•Protection of basic rights•Better salaries and benefits•Facilitating career development•Safe workplace•Work wellbeing	<ul style="list-style-type: none">•Trade union•WeChat public account•Questionnaires
Customers	<ul style="list-style-type: none">•Trade union•WeChat public account•Questionnaires	<ul style="list-style-type: none">•Customer satisfaction survey•Messages via WeChat official account and official website•Customer visits
Suppliers	<ul style="list-style-type: none">•Fair biddings•Sustainable supply chain	<ul style="list-style-type: none">•Procurement information disclosure•Supplier exchanges and training
Communities	<ul style="list-style-type: none">•Driving economic development in the community•Activities for public interest•Reducing the impact of production activities on community	<ul style="list-style-type: none">•Communication and exchanges•Daily visits•Transparent information

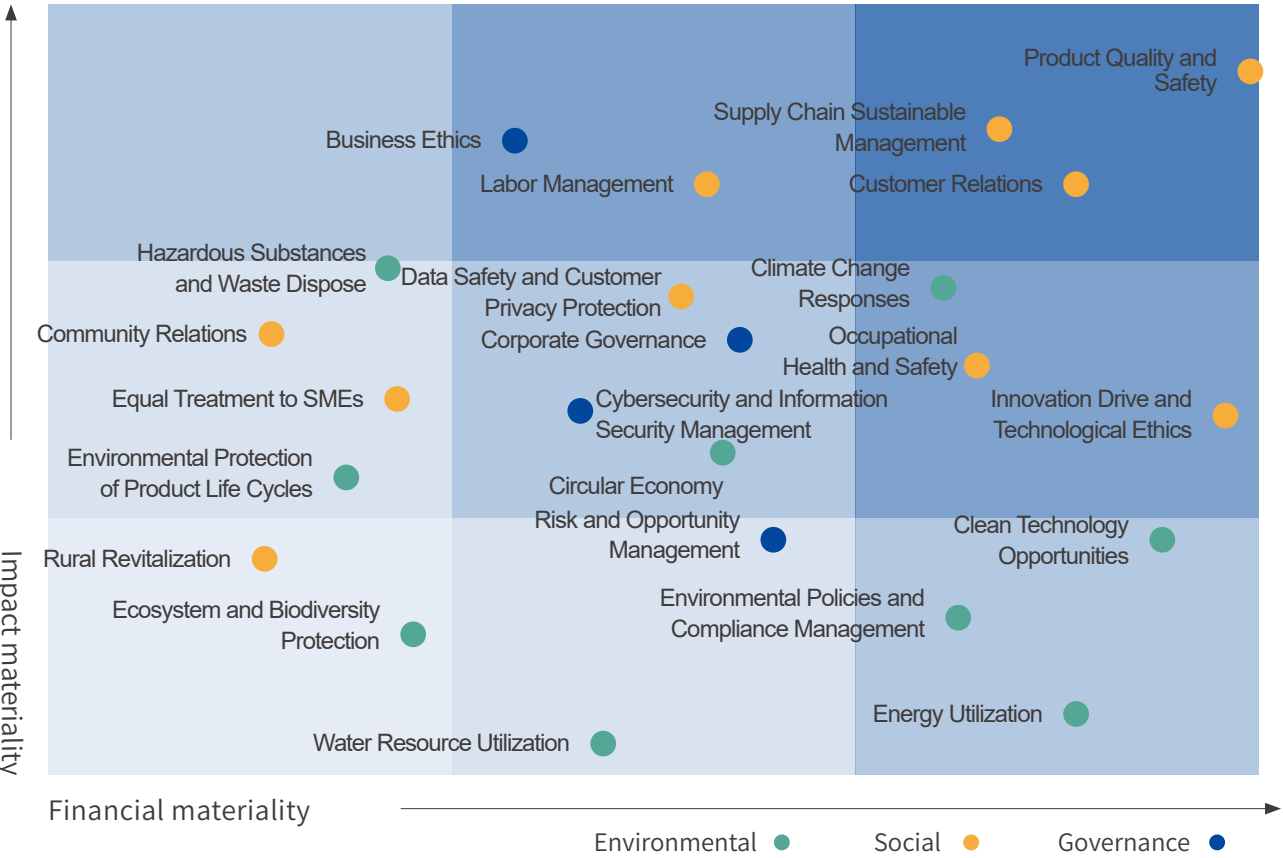
Analysis of Material Issues

XCMG Machinery is committed to enhancing its identification and management of material issues. By analyzing industry policy trends and benchmarking against peers, the Company actively gathers stakeholders' concerns and expectations through various channels. The identification of key material issues is based on two critical dimensions: materiality on the Company's financial conditions and the materiality of impact on economic, social, and environmental systems. This dual-focus approach guides the Company in advancing its sustainability initiatives with clear objectives and prioritized actions.

Process to Analyze Material Issues

Screen	The Company systematically identifies key sustainability issues examining national macroeconomic policies, industry development trends, corporate strategic objectives, and both global and domestic sustainability standards. This analytical approach emphasizes both financial significance and the broader economic, social, and environmental impacts of its operations.
Assess	The Company engages key internal and external stakeholders through comprehensive surveys to quantitatively assess the materiality of identified issues. This analysis evaluates the materiality of these issues concerning corporate financial performance and their broader economic, social, and environmental impacts.
Rank and approve	The board of directors employs a materiality matrix to conduct a thorough final review, resulting in a prioritized list of sustainability issues ranked by materiality. High-priority issues are afforded comprehensive disclosure in corporate reports, ensuring transparency and accountability.

Matrix of Material Issues



01

Comprehensive Governance for Quality and Efficiency: Efficient Management for Development

XCMG Machinery demonstrates an unwavering commitment to its business development strategy, characterized by a focus on high quality, effective risk management, world-class standards, and stable growth. Through deep reforms, the Company has achieved significant advancements in enhancing its modern corporate system. Moreover, it has accelerated the modernization of its management practices and fostered the development of new quality productive forces. These strategic initiatives signify that XCMG Machinery is taking decisive and measured steps towards establishing itself as a world-class enterprise.

Responses to UN SDGs



Performance Highlights in 2024

Total participation in business ethics, anti-corruption and anti-bribery training

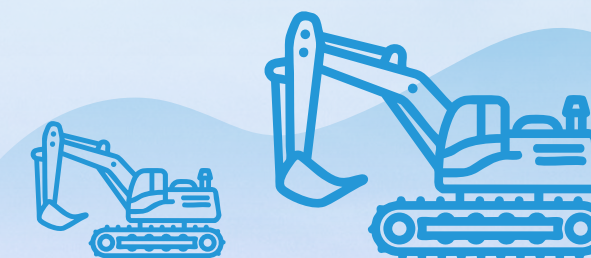
67,334

A-rated information disclosure

7 years in a row

R&D cost

559,790.76 RMB 10,000



Corporate Governance

XCMG Machinery rigorously adheres to established laws and regulations, including the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, and the Corporate Governance Guidelines for Listed Companies. The Company is committed to formulating and continuously refining its corporate governance system in alignment with the latest legal and regulatory standards. In response to evolving requirements and the practicalities of corporate governance operations, XCMG Machinery promptly undertakes revisions to enhance its governance framework. The Company has established a robust corporate governance mechanism that includes the general meeting, the Board of Directors, the Supervisory Committee, and the management team. This structure delineates clear legal rights and responsibilities, promotes transparency, ensures coordinated operations, and implements effective checks and balances. Upholding the fundamental business principles of steady operation, standardized operation, and strengthening the core business, XCMG Machinery persistently enhances its governance structure for corporate legal entity.

In October 2024, the 26th Golden Bull Award for Listed Companies were announced, and XCMG Machinery distinguished itself by securing three prestigious accolades: the Most Value to Invest Award, the Golden Bull Board Secretary Award, and the Golden Information Disclosure Award.



Governance Structure

General Meeting

The general meeting is the highest body of power of the Company. In 2024, the Company held 2 general meetings where 13 proposals were approved.

Performance on General Meeting of Shareholders

Number of general meetings	Number of proposals approved at general meetings
2	13

Board of Directors

The Board of Directors serves as the primary decision-making entity and the cornerstone of the corporate governance framework. The Company actively enhances the development of its Board, with the objective of establishing a well-structured, efficiently operating, and results-driven governing body. By doing so, the Company aims to maximize the Board's pivotal role in corporate governance.

The Board of Directors has instituted several critical committees, including a Strategy Committee, an Audit Committee, a Nomination Committee, and a Remuneration and Assessment committee. Notably, the Remuneration and Assessment Committee is tasked with the formulation and evaluation of the Company's remuneration strategy. This Committee conducts regular reviews and timely adjustments to the remuneration policy, ensuring alignment with current market best practices and regulatory requirements. Furthermore, the Committee undertakes comprehensive benchmarking analyses of remuneration levels and structures in comparison to industry peers, thereby ensuring the competitiveness of the Company's remuneration plan. Members of the Remuneration and Assessment Committee possess specialized expertise in remuneration design and governance. They have a profound understanding of the Company's strategic objectives and associated risks, enabling them to assist in the development of a sound and equitable remuneration system. Consequently, the Committee plays a pivotal role in enhancing the overall level of corporate governance within the Company.

As of the end of 2024, the Board of Directors comprised nine members, including three independent directors, which constitutes one-third of the Board; and two female directors, accounting for two-ninths of its composition. The establishment of a Board Observer position further underscored the Company's commitment to inclusivity, allowing small and medium-sized shareholders to engage in the decision-making process regarding significant corporate matters. In 2024, the Board conducted a total of 13 meetings, during which it reviewed and deliberated on 50 proposals.

Performance on Board Meetings

Board meetings	Expected attendance	Actual attendance	Proposals considered
13	117	117	50

General Information of Supervisors					
Name	Position	Gender	Age	Education background	Industry experience
Yang Dongsheng	Chairman	Male	56	Master's degree	Management, R&D, production, and marketing
Sun Lei	Director	Male	47	Master's degree	Management
Lu Chuan	Director and President	Male	58	Master's degree	Management, technology, finance
Shao Danlei	Director	Female	51	Master's degree	Management, and finance
Xia Yongyong	Director	Male	52	Master's degree	Management, and production
Tian Yu	Director	Male	59	Doctoral degree	Finance, marketing and risk
Geng Chengxuan	Independent director	Female	59	Doctoral degree	Finance
Kuang Shidao	Independent director	Male	55	Bachelor's degree	Law
Yang Lin	Independent director	Male	55	Doctoral degree	R&D

Supervisory Committee

The Supervisory Committee independently exercises its authority in accordance with laws, effectively supervising to ensure the Company operates in compliance with regulations. As of the end of 2024, the Company had 7 supervisors. In 2024, the Company held 7 Supervisory Committee meetings where 15 proposals were considered.

Performance of Supervisory Committee Meetings

Supervisory Committee meetings	Actual attendance	Proposals considered
5	35	15

General Information of Supervisors

Name	Position	Gender	Age	Education background	Industry experience
Zhen Wenqing	Chairman of the Supervisory Committee	Male	55	Bachelor's degree	Management
Zhang Liankai	Vice chair of the Supervisory Committee	Male	47	Master's degree	Management and investment
Cheng Qian	Supervisor	Female	55	Doctoral degree	Finance, investment, and management
Zhang Xu	Supervisor	Female	49	Bachelor's degree	Finance
Li Ge	Supervisor	Female	58	Master's degree	Management
Jiang Lei	Supervisor	Female	50	Master's degree	Management
Ma Jingya	Secretary of the Supervisory Committee	Male	40	Bachelor's degree	Management

Senior Management

As of the conclusion of 2024, the Company had a distinguished team of 12 senior executives, comprising one president, ten vice presidents—including the executive responsible for finance—and one secretary of the Board of Directors. This team possesses extensive management experience, reflecting a deep comprehension of industry dynamics and a keen understanding of market and customer needs. Moreover, their expertise equips them with the capability to accurately anticipate market cycles.

The Company is actively implementing a professional management system that encompasses the establishment and enhancement of tenure and contractual management frameworks. It has devised assessment criteria that align with its goals for high-quality development, and institutionalized a dynamic cadre management mechanism with bidirectional mobility. By adopting a performance-oriented and market-sensitive approach, the Company rigorously manages tenure while conducting thorough target assessments, through strict implementation of Two Letters & Two Contracts that define responsibilities, rights, and obligations. The introduction of customized employment agreements and targeted performance contracts allows for a market-driven salary distribution model, providing a robust framework for performance evaluation, assessment, and the exit process for professional managers. Furthermore, the Company has optimized its salary management strategy by incorporating tenure-based incentives in addition to the existing annual basic salary, position salary, and performance salary structures. This strategic alignment encourages senior executives to prioritize the achievement of the Company's long-term strategic objectives, thereby fostering a culture of accountability and excellence. The Company has launched a 2,000-person equity incentive plan, granting 118 million shares to create a shared-destiny community between key employees and the organization.

The Company has implemented a robust clawback mechanism for executive compensation, ensuring that professional managers are held accountable for the precision and accuracy of key performance indicators throughout their tenure. In instances of fraudulent reporting or mismanaged accrued costs and deferred expenses, the Company reserves the right to retrospectively evaluate and adjust performance outcomes, recouping any excess annual bonuses or tenure-based incentives awarded. Furthermore, the 2023 Restricted Stock Incentive Plan delineates three critical performance metrics—return on equity (ROE), net profit growth rate, and dividend payout ratio—as benchmarks for equity incentive evaluation. These metrics will be rigorously assessed on an annual basis over the three fiscal years (2023–2025), with the vesting of restricted shares contingent upon meeting established performance targets.



Risk Management

We resolutely follow the business development policy focused on high quality, risk control, world-class standards, and stable growth. We consistently enhance risk management capabilities, and bolster internal audit and internal control processes, ensuring that operations are compliant with established regulations and standards.

Risk Control and Compliance

In alignment with the principle of coordinated linkage and the integrated efforts of "control, management, and implementation", the Company has developed a robust three-level management organizational structure. This structure encompasses the headquarters assuming overall responsibility, the platform providing essential support, and the front line bearing primary accountability. Such an arrangement is pivotal in advancing the establishment of the three lines of defense for compliance risk management. Utilizing the Risk, Governance, and Control (RGC) methodology, the Company continually refreshes its business compliance management guidelines, compliance dashboards, and risk panorama diagrams. This dynamic approach facilitates comprehensive review of compliance risks and enables timely adjustments to risk levels. Additionally, the Company prioritizes risk control and compliance training, thereby enhancing the risk and compliance management capabilities of all employees.

In 2024, the Company established a Risk Management Office, which serves as the authoritative decision-making body for the Company's comprehensive risk management efforts. This office is tasked with planning and orchestrating the Company's integrated risk management framework while formulating a strategic path for the transformation of the risk management system. The Company is committed to the continuous enhancement of its risk management policies and procedures. It strengthens the standardized implementation, establishes a dynamic mechanism for risk scanning and evaluation, and promotes specialized handling of risk-related issues. Furthermore, the Company is advancing the development of a digital risk management platform to bolster its digital capabilities in this domain.

Risk Compliance Management Performance

Risk control and compliance training sessions

54

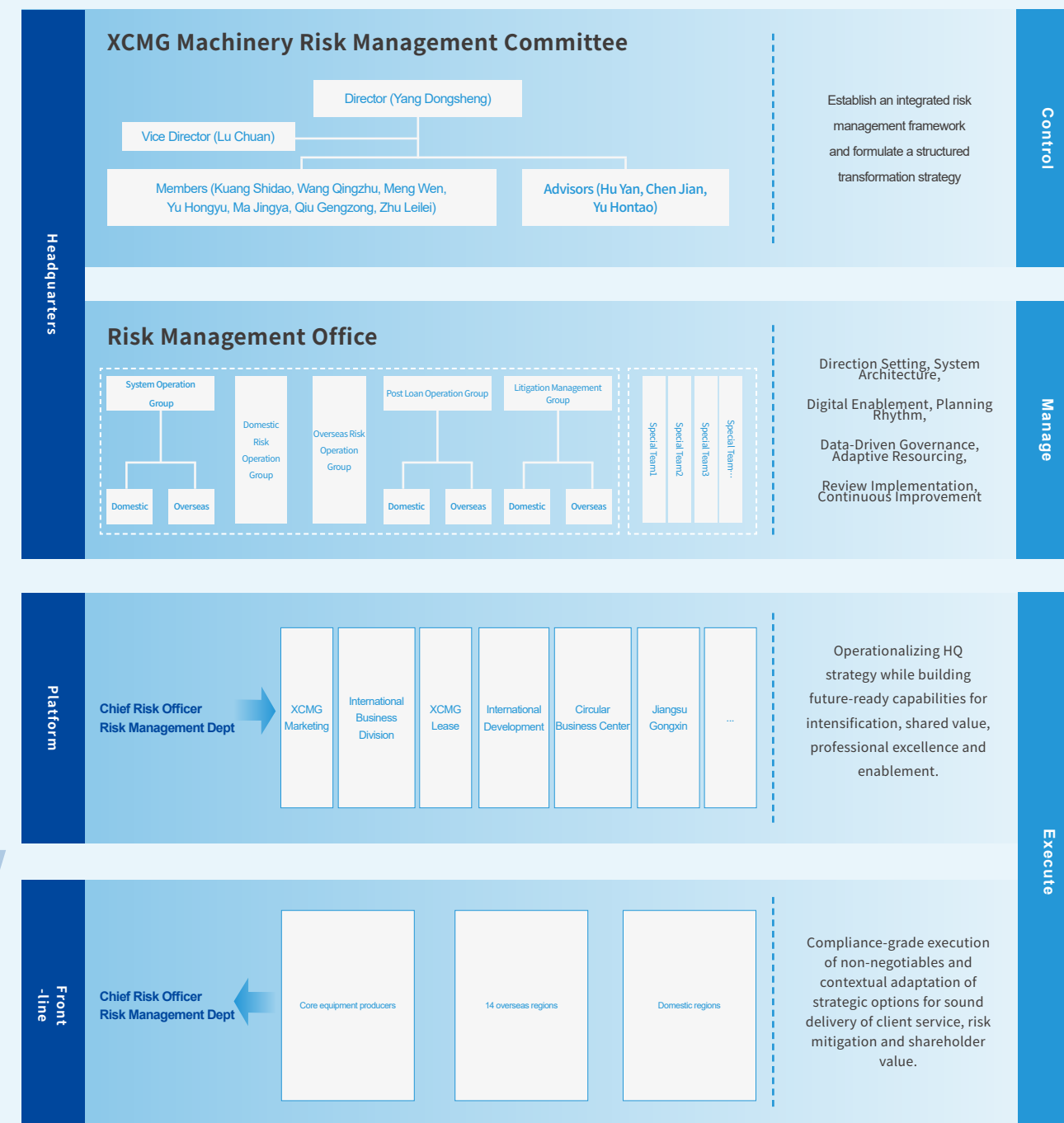
Risk control and compliance training duration

152 Hours

Risk control and compliance training participation

4,787

Organizational Framework for Risk Management



Risk Management Initiatives

In 2024, the Company strengthened its four core risk management capabilities—risk identification, assessment, response, and operations—proactively addressing current risks and effectively mitigating emerging threats.

Enhancing Risk Identification Capabilities

The Company executed comprehensive end-to-end risk mapping across all business processes, achieving a 360-degree risk perspective encompassing operating units, distributors, and customers. A robust risk evaluation framework was instituted, comprising 10 primary categories and 41 subcategories of risk indicators, including asset security risks, supported by a dedicated reporting system. Monthly risk scans and evaluations informed dynamic management strategy adjustments based on identified gaps and trend analyses.

Strengthening Risk Assessment Capabilities

The Company developed and continuously refined risk control models, rules, and algorithms for pre-screening, credit rating, credit approval, and utilization. Enhanced due diligence was rigorously applied in new business approvals, with distributor onboarding incorporating pre-admission credit assessments and risk evaluations. Dynamic credit rating systems for clients and distributors were effectively implemented. Additionally, a monthly inspection mechanism was established, involving on-site compliance verification and subsequent targeted communications to address identified issues.

Improving Risk Response Capabilities

Standardized risk control manuals were developed to enhance operational consistency across the organization. Identified risks underwent systematic assessment, with mitigation strategies disseminated through risk alerts and compliance notices, ensuring comprehensive resolution of issues identified during audits and monitoring. A unified risk classification framework for accounts receivable was instituted, categorizing risks into major, significant, or general levels. This facilitated tiered resource allocation and targeted countermeasures, thereby safeguarding corporate assets effectively. Judicial resource optimization initiatives encompassed pre-litigation mediation protocols, multi-jurisdictional case coordination, innovative arbitration methods, standardized outsourced legal management, and specialized criminal case handling. Collectively, these measures addressed the escalating caseloads relative to limited judicial resources and refined multi-channel dispute resolution frameworks, enhancing case management precision.

Advancing Risk Operationalization

An enterprise-wide risk reporting and closed-loop management system was established to enhance organizational risk awareness. A risk knowledge repository effectively consolidates and disseminates critical information. Additionally, an annual risk management training program—integrating classroom instruction with practical exercises—was implemented, alongside a certification system designed to develop and sustain a skilled talent pipeline for risk control functions.

Internal Audit and Internal Controls

The Company is committed to continuously enhancing the capabilities of its internal audit team while intensifying audit supervision. In alignment with the high-quality development goals encapsulated by the principles of high quality, high efficiency, high level, and sustainability, the Company implements robust oversight and audit support across various key areas, including engineering projects, overseas asset management, and dealer management. This strategic approach not only identifies weaknesses in management processes but also ensures the effective supervision of corrective actions stemming from audit findings, thereby establishing a comprehensive closed-loop management system. Furthermore, the Company analyzes and extracts the issues identified during audits, compiles a collection of typical audit cases, and conducts targeted training for key stakeholders, including senior leadership, overseas regional business managers, and personnel within the audit system. This initiative aims to enhance the overall professional competency within the Company.

In 2024, the Company undertook a comprehensive revision of its internal audit procedures, including the Internal Audit Policy, in response to adjustments in the organizational structure. This initiative marked a significant step towards enhancing the internal control framework, as it introduced 33 new internal control rules and revised 49 existing ones. To further bolster this framework, a management model, characterized by two levels, four layers, and eleven categories was established for the internal control system. This model delineates the management procedures associated with internal control systems, and underscores the Company's commitment to developing a systematic, standardized, and efficient internal control management system.

Performance on Internal Audit and Internal Controls

Correction rate of issues

100 %

Audits on operational performance of overseas subsidiaries

18

Cybersecurity and Information Security

The Company has formulated and adheres to robust internal protocols, including the Digital Security and Confidentiality Management Policy and the Information Security, Confidentiality, and Authorization Management Policy. By leveraging an industrial situation awareness platform, it continuously enhances the security capabilities protecting its IoT assets. This initiative integrates the industrial security components of subordinate companies, thereby fostering the development of industrial security protection measures and facilitating secure data access across all branches and subsidiaries. Furthermore, the Company has transformed its application release methodology by deploying an intranet load balancer, effectively reducing the exposure of its systems to the Internet. Additionally, the implementation of a web application firewall in the internet-facing areas reinforces its security architecture. Through the integration of certificate loading, the Company achieves full-link traffic encryption, significantly bolstering the security integrity of its operations.

Performance on Cybersecurity and Information Security Management

Information security training sessions

3

Information security training duration

6 Hours

Information security training participation

300

Number of data breach incidents

0

The Company organizes information security specialists from each branch and subsidiary to conduct a series of comprehensive training sessions. Additionally, it actively participates in prominent events such as the Jiangsu Province Information Security Competition and the Xuzhou Network Protection Action Drills, thereby ensuring that robust network and information security measures are in place. The Company was awarded the prestigious China's Leading Enterprise Award in the 2024 China Industrial Data Governance initiative. Furthermore, three of its subordinate companies achieved recognition as star-level enterprises in the realm of industrial information security protection.



China's Leading Enterprise in Industrial Data Governance for the Year 2024

Business Ethics

XCMG Machinery adheres to ethical standards and actively cultivates a positive corporate image. In its pursuit of economic objectives, the Company demonstrates a profound respect for social values, diligently safeguards the rights and interests of its stakeholders, and contributes meaningfully to the broader community.

Fair Competition

The Company steadfastly upholds the principles of fair competition, promoting ethical business practices and eschewing unjust competitive behaviors such as price manipulation and monopolistic actions. It has developed and implemented comprehensive frameworks, including the Business Code of Conduct and the Management Policy for Competition Law Compliance. Through these initiatives, the Company diligently identifies and manages risks, optimizing risk scenarios and refining risk areas to enhance the precision and effectiveness of risk assessment and management. Furthermore, the Company has established a robust internal supervision and management mechanism designed to ensure the fairness and transparency of all business activities.

Anti-bribery and Anti-corruption

The Company continuously strengthens its anti-corruption and anti-bribery management. It adds corresponding management policies during the supplier screening and due diligence process, and conducts inspections from time to time. An effective reporting mechanism is established to enable convenient and safe reporting of supplier violations. The Company has formulated the Several Provisions on the Clean and Self-discipline of Leaders, the Code of Conduct for Business Managers, and the Regulations on the Clean Performance of Duties by Personnel in Key and Highlighted Positions to urge employees to perform their duties conscientiously and work with integrity, and prevent major violations of discipline and law or acts of embezzlement for personal gain. It conducts training sessions on the themes of business ethics, anti-corruption, and anti-bribery for employees and suppliers, creating a good atmosphere that upholds integrity and resists corruption.

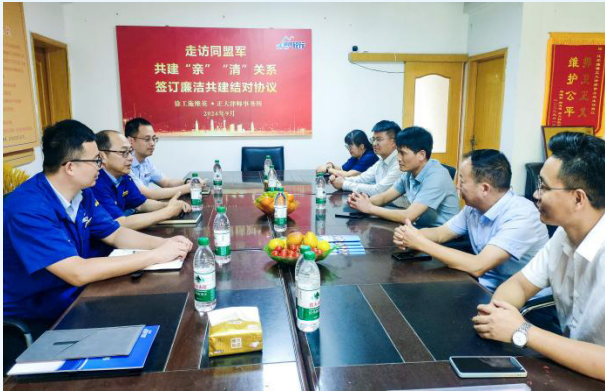
Performance on Business Ethics, Anti-bribery and Anti-corruption Training

Indicator	Unit	2024 value
Total training sessions	/	707
Including: Manager training sessions	/	4
Employee training sessions	/	703
Total training duration	Hours	711
Including: Manager training duration	Hours	8
Employee training duration	Hours	703
Total participation	/	67,334
Including: Manager participation	/	735
Employee participation	/	66,599
Employees covered by the training	%	100
Supplier training sessions	/	6
Suppliers covered by the training	/	5,531
Supplier training duration	Hours	9

Business Ethics Audits

To effectively mitigate commercial bribery and corruption, the Company conducts annual reviews at all operational sites to ensure the internal control system is both effective and compliant with regulatory standards. Acknowledging the diverse functions and operations of various departments, the Company implements tailored self-assessments through focused review processes. This approach enables a precise identification and evaluation of potential corruption risks, thereby enhancing the robustness and effectiveness of internal control measures.

Joint Training on Business Ethics,
Anti-corruption and Anti-bribery for Stakeholders



Joint Integrity-building to Pool Strength and Promote Development with Peers



Joint Efforts in Upholding Integrity with Stakeholders



Special Promotion of the Code of Conduct on Integrity in Business Activities with Stakeholders

The Company has developed the Code of Conduct on Integrity in Business Activities with Stakeholders. This code serves to clearly define the expected behavioral norms and regulatory protocols for all stakeholders, including partners such as suppliers, distributors, agents, and service providers. By establishing standardized business practices, the Company aims to foster a culture of integrity and accountability. A critical component of this initiative is the creation of a blacklist for individuals found guilty of bribery, which reinforces the Company's commitment to transparency and ethical conduct. This approach not only strengthens the enforcement of sanctions against bribery-related behaviors but also clearly communicates the Company's zero-tolerance policy regarding corruption.

Reporting mechanism

- The discipline inspection departments at all levels are tasked with receiving reports of violations and conducting investigations to hold accountable those who commit fraudulent activities. These departments operate under the supervision of management and higher-level discipline inspection entities.
- Each unit and function bear the responsibility for implementing anti-fraud measures within its respective area; and is expected to assist the discipline inspection departments at all levels during investigations.
- When the Company's Discipline Committee receives complaints and reports from subordinate units, they are required to promptly complete the Notification of Investigation and Handling of Accusations, Charges, and Appeals. This notification must be submitted to the discipline inspection departments of the respective subordinate units for further investigation and resolution. In cases involving significant or particularly noteworthy issues, the Office may directly undertake the investigation and resolution process.
- When the discipline inspection departments of each branch and subsidiary receive complaints and reports from their organization, they should promptly communicate the handling of these leads as well as the findings of any investigations to the superior Discipline Committee. Additionally, such notifications should also be relayed to the Party Committee at the corresponding level.
- The discipline inspection departments at all levels are required to promptly and accurately report their findings regarding complaints and reports assigned to them by the Company's Discipline Committee or other senior leadership. This includes providing detailed verification results and the outcomes of any investigations within the established time frame. Should these departments fail to submit their reports within the stipulated deadline, they are obligated to provide a comprehensive explanation detailing the reasons for the delay.

Whistleblower Protection

The Company has clear policies for managing whistleblowing, establishing robust mechanisms that facilitate anonymous reporting. Furthermore, it has developed a comprehensive confidentiality framework designed to safeguard the safety, privacy, and legal rights of whistleblowers.

Whistleblower Protection Measures

Whistleblowing management policy	We formulate the Whistleblowing and Anti-Fraud Policy.
Anonymous whistleblowing channels	We employ various channels, including hotline, email addresses, and mailing addresses for reporting complaints and whistleblowing incidents.
A comprehensive confidentiality mechanism	The identities and pertinent information of whistleblowers—including their names, work units, home addresses, and the details of their disclosures—will be maintained with the utmost confidentiality. Any personnel found to be in violation of these confidentiality regulations or who engage in retaliatory actions against whistleblowers will face serious consequences, as stipulated by the applicable organizational policies and relevant legal frameworks.
Relevant training and education	We have established whistleblower protection education as a fundamental aspect of our disciplinary inspection processes. By conducting regular training sessions for pertinent personnel, we reinforce adherence to regulations, disciplinary protocols, and legal requirements, thereby effectively safeguarding whistleblowers.

Interests and Rights of Shareholders and Creditors

XCMG Machinery adopts a proactive investor relations strategy that emphasizes extensive communication and engagement through a variety of channels and formats. This approach is designed to effectively articulate the Company's multifaceted intrinsic value to global investors. While pursuing economic performance, the Company remains committed to safeguarding the interests of shareholders and creditors. By offering a diverse array of rewarding measures, XCMG Machinery empowers investors to participate in and benefit from the successful outcomes of its long-term sustainable development as a world-class enterprise.

Information Disclosure and Investor Communication

The Company strictly adheres to the laws and regulations governing corporate conduct, including the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, and the Regulations on Information Disclosure of Listed Companies. In this context, it has developed and implemented the Regulations on the Management of Information Disclosure Affairs. This framework not only standardizes the information disclosure processes but also upholds the rights of all investors to be informed and engage in decision-making, with particular attention to small and medium-sized shareholders. Furthermore, the Company actively strengthens its communication with global investors. The chairman has taken a hands-on approach by personally participating in performance briefings and investor meetings on multiple occasions. This direct engagement has significantly enhanced the Company's image and influence within the capital markets. The Company has been awarded the Best Practice Case of Annual Report Performance Briefing featuring technological by the China Association for Listed Companies for two consecutive years.

Information Disclosure and Investor Communication Measures

Strengthening Investor Relations Management	Creating Market Value Management System
The Company engages in proactive communication activities with both domestic and international investors through a variety of channels, with its inaugural Environmental, Social, and Governance (ESG) report in both Chinese and English disclosed in April 2024.	This system incorporates a scientific approach to value creation, thereby promoting sustainable development, fostering robust interactions with the capital market, and safeguarding the rights and interests of investors.
Consolidating the Governance Foundation and Improving Standardized Operations	Optimizing Information Disclosure System to Elevate the Quality of Disclosures
The Company is committed to upholding exemplary corporate governance practices to foster high-quality development. By expanding channels for investor participation in governance, we facilitate diverse stakeholder involvement in decision-making processes, thereby enhancing our shareholders' rights to information and promoting the rigor of our decision-making.	The Company obtained the A-rating for information disclosure for seven years in a row. Over the past three years, the Company has disclosed an average of more than 150 announcements annually, maintaining an impeccable record with no corrections or supplementary announcements.

Interests and Rights of Investors

Interests and Rights of Shareholders

The Company places significant emphasis on shareholder returns, recognizing the importance of rewarding a broad base of investors with the benefits derived from high-quality development achievements. In 2024, the Company proudly introduced the Global Investor Return Plan for the Next Three Years (2025-2027). This strategic initiative is designed to enhance the Company's investment value, safeguard the legitimate rights and interests of investors, increase shareholders' sense of fulfillment and foster a community of shared future between the Company and its investors.

Sustainable and Stable Cash Returns

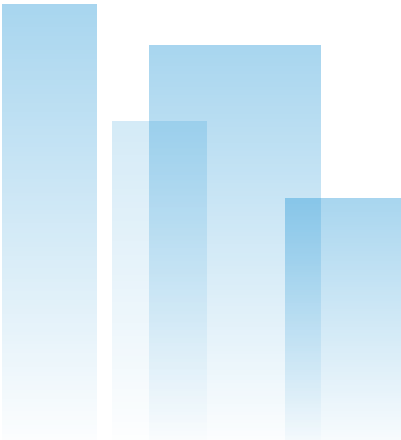
In any given fiscal year where profits are generated, the Company will proactively explore the feasibility of multiple dividend distributions throughout that year. In the absence of substantial investment initiatives or major cash outflows, the Company pledges that, over the next three years (2025 to 2027), the aggregate amount of cumulative cash dividends—encompassing share repurchases and cancellations—will not fall below 40% of the distributable profit realized each year.

Regular Shareholding Increases by the Controlling Shareholder

XCMG Group has committed, following the completion of necessary approval processes over the next three years, to allocate no less than 20% of the cash dividends received from XCMG Machinery on an average annual basis toward augmenting its shareholdings in the listed company.

Interests and Rights of Creditors

The Company upholds a steadfast commitment to integrity in its business operations, diligently fulfilling its responsibilities as a debtor by making timely repayments to protect the legitimate rights and interests of its creditors. The internal Information Disclosure Management Policy encompasses comprehensive provisions for bond-related disclosures, ensuring that material information is communicated to bond investors in a truthful, accurate, and timely manner. Annually, the Company engages rating agencies for surveillance reviews of its outstanding bonds, thereby empowering creditors to thoroughly evaluate its financial, operational, and governance circumstances. With a distinguished record of on-time debt servicing and no repayment defaults, the Company's strong performance and creditworthiness have garnered exceptional accolades in capital markets. Remarkably, XCMG Machinery has consistently maintained China's highest AAA credit rating since its initial bond issuance in 2011—an honor that sets it apart as the only major domestic construction machinery enterprise to achieve this distinction.



Technological Innovation

XCMG Machinery regards innovation as the cornerstone of its core competitiveness, driving a transformative shift from traditional manufacturing to advanced, high-quality, and intelligent production through its Intelligent Upgrade, Digital Transformation and Connectivity strategy. The Company is committed to fostering a deep integration of technological advancements with industrial innovation. By cultivating and developing new quality productive forces, XCMG Machinery is actively accelerating its pursuit of high-level self-reliance and self-improvement in science and technology.

Intelligent Upgrade, Digital Transformation and Connectivity

XCMG Machinery has strategically anchored its digital transformation around three core objectives: achieving full-chain interconnectivity with 100% process digitization, establishing whole-element digital twins with 100% business digitalization, and fostering pan-scenario human-machine collaboration with 100% intelligent decision-making. This transformation is propelled by the dual engines of robust business strategy and cutting-edge IT innovation. The firm fervently embraces its Chairman's No.1 Project—Intelligent Upgrade, Digital Transformation and Connectivity—aiming to establish world-class advanced manufacturing clusters in the construction machinery sector. As a pioneering first-mover, XCMG Machinery has introduced the Three Domains & Six Dimensions smart manufacturing evaluation standard for China's engineering machinery industry, with its Lean Intelligent Pilot Factory setting a benchmark that significantly enhances productivity and fosters new-growth trajectories.

Relevant Awards and Honors

Awards and Honors

- Recognized as a 2024 Jiangsu Province Benchmark Enterprise for Intelligent Upgrade, Digital Transformation and Connectivity
- Achieved Level 4 Smart Manufacturing Capability Maturity and Level 3 Data Management Capability Maturity
- Awarded 2024 Digital Transformation Leading Case by The Economic Observer-Qianxing List for Intelligent Upgrade, Digital Transformation and Connectivity Initiatives
- Two case studies—Digital Transformation Practices Based on the No.1 Intelligent Upgrade, Digital Transformation and Connectivity Project and Application and Promotion of Construction Equipment Operations Management Platform—selected as MIIT 2024 Exemplary Cases for deep integration of real economy and digital economy, and IoT-enabled industry development
- XCMG Crawler and XCMG Fudi included in 2024 5G Factory Directory
- XCMG Heavy Machinery listed in both China's First Batch of Excellence-Level Smart Factories and Industrial Internet Pilot Demonstration Projects
- XCMG Driveline designated as Industrial Internet Pilot 5G Factory



Examples of Digital Transformation and Intelligent Upgrade



Manufacturing → Intelligent Manufacturing

We successfully convened the kick-off meeting for the Planning and Construction Project of the Leading Lean Intelligent Manufacturing Factory. This initiative aims to establish a state-of-the-art, intelligent, and efficient manufacturing facility within the construction machinery sector. Our endeavor will significantly expedite the development of a cluster of world-class lean and intelligent manufacturing factories.



Smart XCMG Showcased on Bauma Expo

The XCMG Digital and Intelligent Space Station presents an innovative smart display solution characterized by its "one engine and four cabins" framework, incorporating cutting-edge models and technologies. This initiative effectively illustrates XCMG's significant advancements in digital and intelligent transformation across diverse domains, including operational efficiency, circular economy, and industry empowerment, showcased at Bauma China 2024. Additionally, the introduction of XCMG's inaugural artificial intelligence assistant platform for intelligent services, leveraging AIGC, was met with considerable acclaim from industry stakeholders, further affirming the Company's pivotal role in shaping the future of construction technology.



Cooperation for Digital Economy Blueprint

We strategically leverage external resources to drive our efforts in intelligent upgrade, digital transformation, and connectivity. Collaborating with 42 external consulting institutions and implementation companies, we have engaged over 800 professionals from these teams in various projects across seven major clusters. Additionally, we have established robust digital ecological partnerships with leading companies such as IBM and Huawei. Our strategic collaboration with Huawei focuses on advancing intelligent driving and developing innovative solutions for open-pit mines, significantly enhancing the speed and depth of our research and development initiatives in intelligent technologies.



Robotic Solutions in Workshops

XCMG Driveline emphasizes a strategic commitment to technological transformation and equipment modernization. By integrating robotics within its automated machining production lines, the company leverages advanced intelligent manufacturing processes, including proprietary machining, assembly testing, and heat treatment. Furthermore, the incorporation of 5G industrial Internet technologies has markedly enhanced high-end development, intelligence, sustainable practices, and safety in production.

Lean Manufacturing

XCMG Excavators has successfully established a joint team focused on digitalization, technology, and craftsmanship, thereby clarifying objectives for product research and development, streamlining processes, and enhancing overall efficiency. This initiative has led to the creation of an advanced intelligent service model. Utilizing sophisticated platforms such as XCMG e-Repair, Mine Management Master, and Service Big Screen 3.0, the company facilitates remote connection, monitoring, diagnosis, and guidance. These innovations significantly expand service reach and elevate service quality. Furthermore, the integration of 5G technology with the industrial Internet fosters seamless data collection and interoperability within the 5M2E system.



Digit-driven Intelligent Construction

XCMG Road enhances its comprehensive range of construction equipment by employing advanced algorithms and sophisticated data processing capabilities. Through the integration of innovative technologies such as precise preparation, 3D leveling, and intelligent compaction, combined with state-of-the-art applications like the Beidou Navigation Satellite System and 5G connectivity, it is transforming the landscape of road construction. This approach facilitates comprehensive monitoring and management of construction data, establishing a robust foundation for full-life cycle management of roadways and infusing the transportation construction sector with enhanced intelligence and efficiency.



Smart Mining Solution for Open-pit Mines

XCMG Machinery's intelligent mining solution for open-pit mines establishes a comprehensive, real-time, and intelligent mine management platform through the integration of cutting-edge technologies, including the Internet of Things, big data, and cloud computing. Real-time data on equipment status, production progress, and personnel safety is captured via advanced sensors and monitoring systems, subsequently uploaded to the cloud for thorough analysis and processing. This robust intelligent dispatching and management system, coupled with state-of-the-art construction equipment, delivers a holistic solution that significantly optimizes the operational efficiency and safety of open-pit mining operations.



Innovation Drive and Technological Ethics

Governance

Guided by the strategic objectives of high-end manufacturing, intelligence, sustainability, service orientation, and internationalization, XCMG Machinery is firmly committed to implementing an innovation-driven development strategy. The Company enhances its technological innovation framework through the consolidation of the 1+6+N system. Furthermore, XCMG Machinery has established and operationalized a comprehensive suite of internal management policies, including the Technical Planning Management Policy, Technical Planning Review Management Measures, Management Measures for Core and Key Technologies, R&D Management Index Policy, General Rules for R&D Project Management, Management Measures for Industry-University-Research Collaborations, Management Measures for External Technological Cooperation, Patent Management Measures, Work Specifications for Patent Classification and Grading and Work Specifications for Quality Management of Patent Applications. Under the auspices of the XCMG Technical Committee, the Company is building a premier R&D management system designed to foster world-class research and innovation capabilities featuring technological advancement, product competitiveness and R&D efficiency.

The Company is steadfast in its commitment to the continuous exploration of engineering technologies while providing innovative solutions for global engineering construction and sustainable development. It has established 42 research and development (R&D) platforms recognized at or above the provincial level. Among these are the National Key Laboratory of Intelligent Manufacturing for High-end Construction Machinery, a national industrial design center, two provincial manufacturing innovation centers, nine provincial engineering technology research centers, and 17 provincial enterprise technology centers.

By the end of 2024, the Company had secured a total of 11,981 authorized patents, including 4,252 inventions and 329 international patents. Additionally, it had developed and issued five international standards and 333 national and industry standards, demonstrating robust innovation leadership.

XCMG Machinery’s Technological Innovation Performance

Indicator		Unit	2024 value
R&D cost		RMB 10,000	559,790.76
Number of R&D employees		/	7,619
IPR expenditure		RMB 10,000	2,810.59
Patents authorized in the year		/	1,675
Standards for which the Company played a role in their formulation in the year	Standards newly formulated in the year	/	56
	National standards	/	33
	Industrial standards	/	13
	Group standards	/	10
Innovative R&D projects		/	581
Accumulative authorized patents		/	11,981

Strategies

In pursuing innovation-driven development, the Company systematically identifies and manages associated risks by implementing robust preventive strategies designed to minimize both the probability and impact of potential challenges. By proactively identifying and evaluating opportunities, the organization consistently cultivates competitive new products, thereby securing market advantages and ensuring sustainable growth. Importantly, the Company achieved a commendable record of zero technological ethics violations in 2024.

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Expected financial impact	Responses
Risk	Market risk	The emergence of competing substitute products in the market represents a significant challenge to the Company's market share, necessitating strategic responses to mitigate potential losses.	High	Medium to long term	Revenue decrease	The Company will enhance its market monitoring and analytical capabilities, facilitating timely strategic adjustments that will effectively consolidate its market position.
	Technology ethics risk	The advancement of smart manufacturing, data-driven operations, and AI applications may entail technology ethics risks arising from improper implementation or inadequate management oversight.	Medium	Short to medium term	Cost increase	The company firmly adheres to the Science and Technology Progress Law of the People's Republic of China, upholding rigorous standards of technologic ethics in our decision-making and innovation practices. We are committed to the principles of integrity and ethical conduct in research and development, thereby fostering a healthy and sustainable environment for technological advancement.
Opportunity	Technology opportunity	Through strategic technological innovation, the Company cultivates proprietary core technologies that possess independent intellectual property rights. This approach not only creates distinct competitive advantages in the marketplace but also solidifies its leadership position within the industry.	High	Medium to long term	Revenue increase	We will consistently innovate to enhance our product competitiveness.
	Product opportunity	Diversifying market demands provide opportunities for the Company in product innovation.	High	Medium to long term	Revenue increase	The Company adeptly crafts tailored and specialized products designed to meet the unique demands of various industries and application contexts. This strategic focus fulfills clients' operational requirements in specific environments and effectively enhances market share.

Management of Impacts, Risks and Opportunities

The Company exemplifies a proactive approach in identifying and managing risks and opportunities within its R&D innovation initiatives, thus effectively responding to industry transformations. By consistently developing cutting-edge technologies and products, it has significantly bolstered its competitiveness and exerted a considerable influence on the sector's overall progress, facilitating industrial advancement. To address potential challenges, such as rapid technological obsolescence, the Company emphasizes sustainable development through rigorous strategic planning and robust risk management practices.

Identify

The Company navigates several critical uncertainties in its development, including technological obsolescence, market volatility, regulatory shifts, and reputation management challenges. To effectively mitigate these risks, it has established clear management objectives and defined implementation scopes, prioritizing crucial areas for risk identification. By systematically collecting and analyzing customer needs, industry trends, competitor intelligence, and emerging technological advancements, the Company enhances the precision and comprehensiveness of its risk identification processes, thereby providing strong support for the formulation of evidence-based risk management strategies.

Assess

The Company employs a systematic methodology to assess both the probability of risk occurrences and their potential severity of impact. Then risks are classified and ranked based on likelihood and consequences. this approach enhances the rigor of risk identification and management, establishing a robust data-driven foundation for the development of targeted mitigation strategies.

Monitor and manage

To enhance R&D efficiency and advance progress, we continuously optimize the execution process. This involves strengthening oversight of the entire workflow, actively monitoring potential risks in new product development, standardizing research practices, and ensuring that all R&D activities are both scientific and controllable.

Indicators and Objectives

The Company has established a R&D Management Index System (Trial) designed to create a comprehensive framework centered on three strategic pillars: technology, product competitiveness, and R&D efficiency. This initiative clearly delineates our development objectives and commits to the vigorous execution of nine key technological plans and R&D projects, reinforcing our position in the industry.

Objectives

- In pursuit of “high-end development, intelligence, green innovation, service orientation, and internationalization”, we are committed to establishing a robust industrial ecosystem for new energy and intelligent technologies. Our objective is to develop cutting-edge, internationalized products while enhancing gross profit margins and precisely addressing market demands.
- To fortify our competitive edge, we aim to drive advancements in nine core technologies through strategic planning.
- We will construct a first-class R&D management system that fosters world-class capabilities in technological leadership, product competitiveness, and R&D efficiency.

Progress

In progress

Technological Innovation Achievements

The Company bravely ascends to the forefront of science and technology, strategically positioning itself at the pinnacle of the industry. It is actively engaged in the vigorous development of emerging sectors while expanding and reinforcing the emergency rescue equipment industry. Additionally, the Company has established an intelligent production line that currently boasts the shortest cycle time, largest scale, and highest efficiency in the sector. Leveraging advancements in cloud computing, intelligent manufacturing, smart vehicle networking, and large model algorithm platforms, the Company integrates cutting-edge technologies such as artificial intelligence into industrial applications. This commitment to technological innovation is instrumental in cultivating new-quality productive forces and driving the transformation and upgrading of traditional industries.

Technological Innovation Awards and Achievements

附件

2024 年安全应急装备应用推广典型案例（拟入选）
(共计 150 项)

一、工业生产安全事故（33 项）

序号	装备产品名称	典型应用案例	单位名称	推荐单位
1	大热管区域中气流通率 智能监测系统	应用于某石化企业，有效监测、及时发现、快速处置 风险隐患，有效防止重大事故发生。	徐州重工机械 有限公司	江苏省工业 和信息化厅

三、矿山（隧道）安全事故（21 项）

序号	装备产品名称	典型应用案例	单位名称	推荐单位
20	10-15 吨矿用履带式 装载机	应用于某煤矿露天煤矿，有效提高 生产效率和安全水平。	徐州重工机械 有限公司	江苏省工业 和信息化厅

四、地震和地质灾害（18 项）

序号	装备产品名称	典型应用案例	单位名称	推荐单位
2	“智能感知”边坡监测 系统	应用于 2020 年 9 月某高速公路边坡监测预警系统， 2023 年 12 月某城市山体滑坡救援，设备在复杂环境 条件下成功部署，有效监测、及时发现、快速处置。	徐州重工机械 有限公司	江苏省工业 和信息化厅

六、城市内涝灾害（9 项）

序号	装备产品名称	典型应用案例	单位名称	推荐单位
2	大流量排水抢险车	应用于 2023 年 6 月“7·30”内涝救援，快速处置 内涝险情，有效防止人员伤亡和财产损失。	徐州重工机械 有限公司	江苏省工业 和信息化厅

七、冰雪灾害（5 项）

序号	装备产品名称	典型应用案例	单位名称	推荐单位
1	履带式雪地工程车 （含履带式装载机、 履带式运输车等）	应用于 2023 年 12 月江苏省某地区雪灾救援，快速 清除积雪，保障道路畅通。	徐州重工机械 有限公司	江苏省工业 和信息化厅

中国机械工业联合会 文件

中国机械工程学会

机械科〔2024〕316 号

关于表彰 2024 年度“机械工业科学技术奖”
奖励项目的通报

各有关单位：

2024 年度“机械工业科学技术奖”拟授奖项目公示工作已结束。
现决定表彰奖励项目共 430 项，其中，特等奖 5 项，一等奖 40 项，
二等奖 197 项，三等奖 188 项。

现将获奖名单予以公布，各获奖单位可根据国家或地方有关规
定给予获奖人员相应奖励。

附件：2024 年度“机械工业科学技术奖”授奖项目目录

中国机械工业联合会 2024 年 10 月 22 日

中国机械工程学会 2024 年 10 月 22 日

中国机械工业联合会 2024 年 10 月 22 日印发

In 2024, the Ministry of Industry and Information Technology published a list of typical cases for the application and promotion of safety and emergency equipment, wherein five major products from XCMG Machinery were featured. These products encompass five categories of significant promotional cases: industrial work safety accidents, mine (tunnel) safety accidents, earthquake and geological disasters, urban waterlogging disasters, and ice and snow disasters.

XCMG Machinery demonstrated exemplary performance in technological innovation, winning a total of 13 awards at the Machinery Industry Science and Technology Awards in 2024. Notably, the project titled Innovation and Application of Key Technologies for the Suspension of High-Mobility Wheeled Engineering Vehicles was distinguished with the first prize for the Technological Invention Award. In addition to this prestigious recognition, the Company also secured eight accolades from the Jiangsu Provincial Science and Technology Awards.

Technological Innovation Achievements

Strategic Emerging Sectors

XCMG Machinery has set a new benchmark in the Asian market for aerial platform fire trucks, becoming one of the select few enterprises globally that possesses the capability to research, develop, and manufacture high-end fire trucks with an impressive reach of 100 meters. The construction of the phase II new base for XCMG Fire-fighting is planned in accordance with the stringent standards of Smart Manufacturing 4.0. To date, 25 intelligent production lines have been established, resulting in a high level of automation and the implementation of unmanned production processes. This state-of-the-art facility facilitates the production of a scissor lift every six minutes, while an articulated boom aerial work platform can be fully assembled and rolled off the production line every ten minutes.

Research and Development of Core Components

A total of 26 types of hydraulic, transmission, and electronic control components have been successfully developed, achieving an impressive industrial scale of RMB 600 million. This advancement significantly supports the technical upgrading of mining machinery, large-tonnage loaders, excavators, and the substitution of imports.

The Company has developed the industry's largest 570-horsepower fully automatic transmission, positioning itself as one of the few enterprises globally that has successfully launched and applied this technology at scale. This accomplishment has allowed the Company to maintain its leading position in this field within China.

Industrial Design

A new brand image and logo have been officially launched, resulting in a cohesive design for more than 110 fuel and new energy products in terms of appearance, color, and branding. This unified image made its inaugural appearance at the Bauma China 2024, underscoring the international appeal of XCMG products.

The Company fosters an intelligent interactive experience for users, driving an enhancement in construction machinery usability and achieving significant commercial viability. The vehicle-end interaction incorporates concepts of intelligent interactivity borrowed from the passenger vehicle industry. For five major product categories, the implementation of ten advanced interactive technologies—such as fatigue monitoring and facial recognition—has been successfully realized and verified.

The functional prototype of the intelligent cockpit made its debut at Bauma China 2024, paving the way for innovative advancements in interactive behavior within the construction machinery sector.

Technological Innovation-driven Industry Upgrading

Launching a Series of Groundbreaking Products that Help Maintain a Dominant Position within the Industry

We overcame critical challenges associated with key technologies, including the structural design of high-altitude and large-lifting boom structures. As a result, we introduced iconic products, such as the world's largest 4,000-ton wheeled crane, a remarkable 23,000-ton-meter tower crane, a highly efficient 2,600 kN·m rotary drilling rig, the 16,000 kN intelligent electric-driven horizontal directional drill, the world's longest 101-meter aerial platform fire truck and the largest-horsepower electric-driven grader. These help us consistently lead the trajectory of technological advancement in the construction machinery sector.

Developing A Complete Set of Solutions Tailored to the Entire Process Across Multiple Construction Scenarios

We develop complete solutions for many activities such as underground mining, tunnel excavation, transportation and loading, as well as road construction. For scenarios involving open-pit mining, road surface cluster compaction operations, bulk material handling, and elevated warehouse storage and logistics, we continuously enhance intelligent unmanned solutions, thereby accelerating their commercial implementation. By leveraging advancements in technology and automation, we aim to provide global clients with more efficient and intelligent construction options.

Technological Cooperation and Exchanges

The Company actively integrates resources across the upstream and downstream segments of the industrial chain, establishing innovation consortia that facilitate the deep integration of industry, universities, and research institutions. This strategic approach not only enhances the core competitiveness of the industrial cluster but also propels the construction machinery industry toward high-end development, intelligence, and sustainability.



In October 2024, the 26th China Mining Conference and Exhibition was held with great success. Centered around the theme of Promoting Mining Cooperation for a Better Future, the conference facilitated in-depth exchanges and discussions that addressed the evolving landscape and development patterns within the mining industry. By focusing on current hotspots and critical issues affecting the sector's advancement, the event served as a pivotal platform for dialogue among industry stakeholders. XCMG Machinery robustly showcased its comprehensive suite of mining product solutions, underscoring its commitment to advancing the creation of green and intelligent mining operations.



In September 2024, XCMG Machinery hosted the inaugural Jiangsu Provincial Young Artisan Exchange and Seminar. This significant event brought together representatives from 14 higher vocational colleges across Jiangsu. Participants had the opportunity to visit the Company's intelligent manufacturing base, where they engaged closely with the spirit of frontline workers. This experience not only highlighted the dedication and expertise of the workforce but also provided insights into the craftsmanship essential for advancing the nation's heavy equipment sector.



In October 2024, the Global Mini-Excavator Conference was held with great success in Xi'an. As a prominent leader in the construction machinery industry, XCMG Machinery showcased an impressive array of meticulously crafted products, including mini-excavators, electric excavators, and wheeled excavators. Through this exhibition, XCMG Machinery not only demonstrated its formidable capabilities and innovative vision within the mini-excavator sector but also reinforced its responsibility and commitment as a leader in the industry.



In December 2024, the 2024 Equipment Manufacturing Forum was held with great distinction, highlighting the achievements within the industry through the presentation of the Mechanical Industry Science and Technology Awards. We proudly received a total of 12 accolades, which included one special award, one first-prize award, six second-prize awards, and four third-prize awards.



In December 2024, the World Intelligent Manufacturing Conference took place in Nanjing, centered around the theme Accelerating the Upgrading of Intelligent Manufacturing and Developing New Quality Productive Forces According to Local Conditions. XCMG Machinery was invited to participate in this prestigious event. During the conference, the Company successfully formalized an agreement with the Institute of Industrial Artificial Intelligence of the Chinese Academy of Sciences and Nanjing Iron and Steel Co., Ltd. This collaboration aims to establish the Jiangsu Provincial Key Laboratory of Industrial Artificial Intelligence.



02

Green and Low-carbon
Transformation for Sustainable
Development

Green development is not only an essential requirement for the emergence of new-quality productive forces but also a defining characteristic of high-quality development. XCMG Machinery has adeptly integrated this concept into its development strategy and production management framework. By aligning with the national strategic goal of achieving dual carbon goals, the Company has effectively seized opportunities within the realm of clean energy. XCMG Machinery has committed itself to the green transformation and upgrading of its products and operations, demonstrating a proactive approach to sustainability. It has systematically implemented initiatives aimed at reducing pollution, lowering carbon emissions, conserving resources, and promoting recycling. These efforts are driving the Company's renewal, transformation, and overall development while fostering a harmonious coexistence between humanity and nature. In 2024, XCMG Machinery made a significant investment of RMB 46,343,900 in environmental protection initiatives.

Responses to UN SDGs



Performance Highlights in 2024

Clean energy consumption percentage

13.63 %

Percentage of hazardous substances
and waste disposed under laws

100 %



Climate Change Responses

In the face of the formidable challenges posed by global climate change, the transition to a green and low-carbon economy has emerged as a consensus among the international community. XCMG Machinery proactively aligned its operations with the strategic objectives of achieving carbon peaking and carbon neutrality. The Company is committed to exploring and implementing innovative solutions for attaining carbon neutrality within the machinery manufacturing sector.

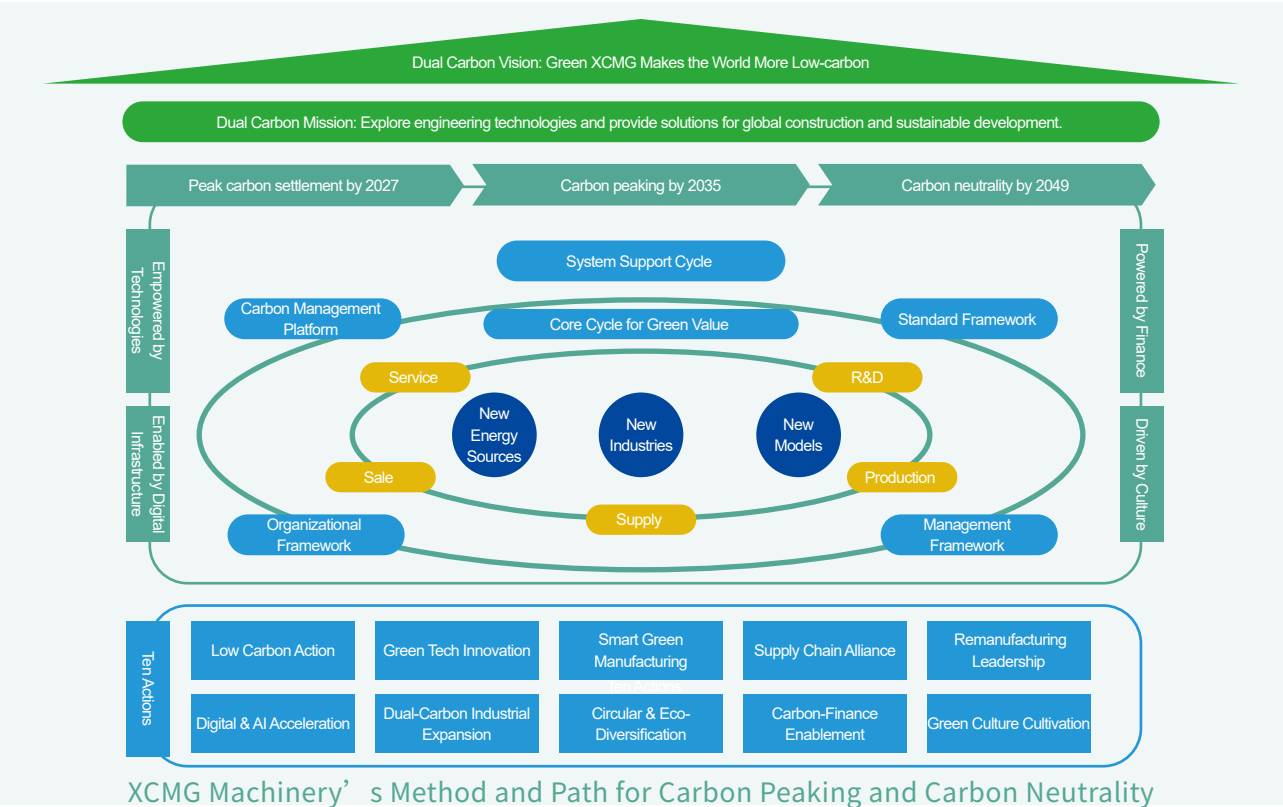
Climate Change Management

Governance

XCMG Machinery is committed to the continual optimization of its carbon emission and climate risk management framework. The Safety and Environmental Protection Department plays a pivotal role in evaluating, monitoring, and managing environmental and climate risks, while coordinating the Company's "dual carbon" operational initiatives. Concurrently, a dedicated "dual carbon" team has been established within the Research Institute, tasked with conducting comprehensive research on carbon reduction technologies and strategies for minimizing carbon emissions. This team is also responsible for developing a digital and intelligent carbon emissions management system. Through these efforts, XCMG Machinery ensures the effective management of greenhouse gas emissions, mitigates risks associated with climate change, and promotes the attainment of its climate objectives.

Strategies

The Company staunchly adheres to the dual carbon vision of Green XCMG Makes the World More Low-carbon, as well as its mission to explore engineering technologies and provide solutions for global construction and sustainable development. By taking the lead in releasing the XCMG Action Plan Outline for Carbon Peaking and Carbon Neutrality based on a robust assessment of the risks and opportunities associated with climate change, the Company has set a benchmark within the industry. Guided by the development priorities of high quality, high efficiency, high effectiveness, and sustainability, XCMG Machinery strategically focuses on new energy, emerging industries, and innovative business models. The Company leverages science and technology, digital capabilities, financial strategies, and cultural initiatives as foundational elements in its approach. Through the creation of a distinctive dual carbon implementation model—characterized by Two Rings, Three New Elements, Four Empowerments, and Ten Actions against the impact on business operations and sustainability of climate change, XCMG Machinery is unequivocally committed to advancing the strategic objectives of achieving carbon peaking and carbon neutrality.



Climate Change Strategy

Leveraging the International Sustainability Disclosure Standard No. 2—Climate-related Disclosures (IFRS S2) established by the International Sustainability Standards Board (ISSB), the Company has conducted a comprehensive analysis of the risks and opportunities associated with climate change. Furthermore, it has proactively implemented robust strategies to effectively mitigate the impacts of climate change on its sustainable development initiatives.

List of Climate Risks Identified by XCMG Machinery

Risk/ opportunity type	Climate change risk	Risk/opportunity description	Probability	Impact time- frame	Potential impact	Responses
Transformation risk/ opportunities	Policy and legal risk	The requirements from governments worldwide for identifying greenhouse gas sources, greenhouse gas accounting, and emissions monitoring are increasingly stringent.	High	Short term, medium term	Increase in carbon emissions management and compliance costs.	We should further enhance our internal carbon inventory and carbon reduction initiatives, develop a comprehensive carbon emissions management platform alongside a robust carbon footprint management system to ensure our compliance with national regulations regarding greenhouse gas emissions as well as the monitoring, reporting, and verification processes.
	Technology risk and technology opportunity	There is an increasing demand for research focused on energy-efficient and carbon-reduction technologies, alongside the development of innovative energy construction machinery and essential components.	High	Short term, medium term	The rise in technological research within the field of clean technology, along with the research and development of new energy products, increase operational costs.	We should improve the research and development framework and cultivate a team of researchers to enhance our innovation capacity regarding clean technologies. We actively engage in the research and development of sustainable products and services while optimizing energy structures. Our initiatives include the green transformation of production lines, refinement of manufacturing processes, modernization of equipment, enhancement of energy efficiency, and significant reduction of carbon emissions per product unit.
	Market risk and opportunity	Driven by evolving policies and heightened environmental awareness, consumer demands have increasingly shifted toward green, low-carbon, and intelligent products. This trend intensifies competition within the marketplace.	High	Short term, medium term	The sales of traditional construction machinery have experienced declines, resulting in sluggish market performance for these products. Concurrently, the innovative development of new energy solutions presents distinct challenges, particularly regarding technological advancements and operational costs.	We should strengthen market research to understand market demands; adaptively adjust product structure and market positioning to expand the market share of green products and optimize industrial presence.
	Reputation risk	The attention from the public and stakeholders towards the Company's response to climate change, adherence to the "carbon peaking and carbon neutrality" goals, and commitment to sustainable development has increased.	High	Short term, medium term	Failure to meet the expectations of the public and stakeholders regarding the Company's green transformation and proactive response to climate change risks could result in customer loss, decreased investor trust, and diminished competitiveness.	We should enhance public opinion monitoring, establish crisis management plans for negative publicity, foster transparent and efficient communication channels with stakeholders, and improve the quality of ESG information disclosure.

Risk/ opportunity type	Climate change risk	Risk/opportunity description	Probability	Impact time- frame	Potential impact	Responses
Physical risk	Acute risk	Extreme weather events such as low temperatures, snowfall, heavy rain, and typhoons occur more frequently.	Medium	Short term	Logistical resources will be strained, exacerbating pressure on road transportation and affecting various aspects of production and operations such as raw material supply and product delivery, resulting in financial losses.	We should monitor suppliers' regarding material preparation and production status, analyze the rationality of procurement cycles; establish a mechanism for supply chain risk supervision and management, create a weekly alert for anomalies throughout the process and follow up on closure; diversify the supply of raw materials to reduce dependence on a single supplier and supply location, thereby enhancing supply chain stability.
	Chronic risk	Global warming leads to rising sea levels, resulting in natural disasters such as high temperatures and droughts, as well as deteriorating climatic conditions in raw material production areas.	Low	Medium term, long term	There is a risk of supply chain disruptions, leading to the inability to deliver products, which in turn increases production costs.	

Strategies for Clean Technology Opportunities

XCMG Machinery is at the forefront of clean technology innovation, strategically prioritizing advancements in new energy systems. The Company meticulously charts its development trajectory in new energy and low-carbon technologies, seamlessly integrating these initiatives into its long-term strategic vision for the transformation known as the “Five Transformations”. This comprehensive approach empowers products through sustainable design principles, enhances production quality via intelligent and green manufacturing processes, and fundamentally drives the Company’s transition toward a greener, low-carbon future.



Strategy guidance

Focusing on a forward-looking approach in key areas such as electric technology, hybrid technology, and hydrogen energy technology, the Company is committed to advancing the research and development of comprehensive new energy product solutions. It delves deeply into the realm of hydrogen fuel cell systems while exploring multidimensional technical pathways. This strategic approach has culminated in the establishment of a complete set of industrial solutions that encompass the entire value chain, including upstream, midstream, and downstream processes. The R&D efforts are centered on four primary technologies: diesel hybrid, pure electric, fuel cell, and low-carbon internal combustion engines. In addition to these core technologies, it has developed nine types of essential components, along with supporting services and operational frameworks.



Organizational support

The General Research Institute of the Company assumes full responsibility for the research, development, application, and promotion of clean technologies. It is dedicated to addressing critical core technologies and essential components that enhance both intelligence and environmental sustainability. The Science and Technology Innovation Committee, comprising senior management and the chairman of the Board, plays an active role in decision-making related to clean technology innovation. This committee ensures the allocation of innovation resources and fosters external collaborations and exchanges. It is empowered to report relevant matters to the Board of Directors, affirming its status as the highest authority on these initiatives.



Financial support

The Company is committed to substantially enhancing its investment in the research and development of clean technologies. This initiative aims to facilitate the creation of innovative energy products and advanced core components for new energy solutions. By emphasizing green design, efficient resource utilization, and the implementation of clean technologies, we will effectively minimize pollution emissions across the entire life cycle of our products.

In November 2024, XCMG Machinery successfully issued the first phase of green medium-term notes (Technological Innovation Notes) in the Chinese inter-bank bond market. This issuance marks a pivotal milestone as it represents the first green medium-term note in the construction machinery industry, achieving the notable distinction of dual labeling as “green + technological innovation”. This financial instrument provides a robust source of medium-term, long-term, and low-cost capital that is crucial for the accelerated development of new energy construction machinery, and significantly bolsters the Company’s research and development initiatives in the realm of clean technologies.



Market promotion

The Company is resolutely committed to increasing the market share of its green products while expanding both the revenue scale and proportion of its new energy offerings. Through strategic enhancements in market promotion, the Company aims to significantly elevate the market penetration rate of these new energy products, thereby securing its leadership position within the industry. Furthermore, it is proactively expanding its green initiatives and poised to comprehensively lead the transformation towards sustainability within the construction machinery sector.



Internal operations

The Company strategically utilizes underutilized spaces, specifically the rooftops and parking lot canopies, for the installation of solar panels to generate electricity.



Supplier management

During the supplier screening and management process, it is essential to enhance the evaluation of suppliers' clean technology capabilities. This ensures that suppliers demonstrate both the necessary clean technology expertise and a strong commitment to environmental protection.

In 2024, the Company progressively enhanced its institutional framework to support advancements in clean technology. By vigorously implementing initiatives centered on green and low-carbon technological innovation, the Company effectively addressed critical technical barriers within the industry, including the integration of new energy systems and the development of intelligent electronic control system technology. Through these efforts, the Company not only overcame technological constraints but also significantly bolstered its capacity for independent control over key new energy technologies and core components. The results in the domain of clean technology innovation were substantial, showcasing XCMG Machinery's robust strength in innovation and its unwavering commitment to sustainable development.

XCMG Machinery's Development and Application of Clean Technologies in 2024

Optimizing Institutional Support

The Company has established the XCMG New Energy Technology Plan for 2024-2027 to strategically outline its research and development initiatives focused on clean technologies.

Creating Standards

The Company took the lead in drafting and compiling for the Earth-Moving Machinery - Battery Electric Hydraulic Excavators for Plateau Tunnels and other six national standards' compile.

Project Efforts

The Company's clean technology research and development system encompasses three primary areas: the integration of systems, the development of core power source components, and the innovation of electric drive assemblies. By strategically prioritizing core projects such as medium-sized excavators and range extenders, the Company is significantly bolstering its research and development capabilities in clean technologies.

Generating Patents

In 2024, the Company expanded its portfolio by acquiring 517 authorized patents pertaining to clean technologies.

Applications

Focusing on three prominent new energy products: excavators, loaders, and forklifts, we explored the two principal technological pathways for new energy—hybrid power and pure electric systems. The initiative encompasses several critical aspects, including energy management technology for hybrid power systems, the optimization of power transmission systems in electric loaders based on operational scenarios, and the configuration design and parameter matching technology for electric drive assemblies. These comprehensive efforts significantly enhance the promotion and application of both hybrid and pure electric products within the construction machinery sector.

Internal Operations

The Company has made significant advancements in the construction of photovoltaic power generation. In 2024, it added over 50 megawatts of installed photovoltaic power capacity, bringing the cumulative installed capacity to an impressive 134.5 megawatts by the end of the year. In 2024, the Company's self-generated photovoltaic power reached 130 million kilowatt-hours, resulting in a reduction of 91,200 tons of carbon dioxide emissions. Furthermore, a total of 9,028.44 kilowatt-hours of clean energy were utilized within the Company, with green electricity consumption accounting for 18.63% of the total energy use.

The Company has installed 536 charging stations for electric vehicles, and encourages employees to purchase new energy vehicles.

The Company has conducted research and development on technologies for recovering and utilizing waste heat from coating exhaust gases. Furthermore, it has engineered composite phase-change heat storage materials specifically designed for a defined temperature range. These efforts have resulted in the development of the industry's first integrated equipment for low-temperature waste heat recovery, storage, and utilization of exhaust gases within the construction machinery sector. Pilot applications of this innovative equipment have been implemented on the coating production lines of XCMG Hydraulic and XCMG Excavator. This is poised to significantly enhance operational efficiency by reducing steam consumption during coating pretreatment by 30% annually, and lead to an estimated reduction carbon emissions of 1,160 tons.

Product Promotion

In 2024, the Company's new energy products generated revenue amounting to RMB 10.88 billion, reflecting a year-on-year growth rate of 22.02%.

With new energy loaders exhibiting a commanding presence in the sector, the Company secured the top position in domestic market share during the first half of 2024. This remarkable achievement was further underscored by the receipt of prestigious accolades, including the Gold Award for New Energy Market Contribution, the Gold Award for Product Quality, and the Platinum Award for Technological Innovation Products.



Case Contributing to the formulation and drafting of national standards for electric construction machinery for industry progress

In August 2024, XCMG Machinery achieved a significant milestone by contributing to the formulation and drafting of seven national standards for electric construction machinery, including the Earth-moving Machinery - Battery Electric Hydraulic Excavator for Plateau Tunnels. This official release marks a pivotal advancement in the industry, highlighting XCMG Machinery's leadership in establishing benchmarks that are critical for the evolution of clean technology within construction equipment. These newly developed standards encompass several essential aspects of the industrial chain, including definitions of key terms, specifications for entire machines, methodologies for energy consumption testing, and safety protocols for power batteries. By addressing these vital areas, it has effectively filled existing gaps in the standardization framework for electric construction machinery. This initiative not only underscores the Company's commitment to fostering green transformation but also reinforces its role as a driving force in promoting the standardized development of the entire industry.

2024年土方机械国家标准发布公告（GB） 国家标准委2024年第15号公告（发布日期2024-07-24）						
序号	国家标准编号	标准名称	代替标准	ISO/IEC编号	标准发布日期	标准实施日期
1	GB/T 44254-2024	电动土方机械 术语	新制定	—	2024-07-24	2024-07-24
2	GB/T 44255-2024	土方机械 纯电动液压挖掘机能量消耗量 试验方法	新制定	—	2024-07-24	2024-07-24
3	GB/T 44256-2024	土方机械 纯电动轮胎式装载机能量消耗量 试验方法	新制定	—	2024-07-24	2024-07-24
4	GB/T 44257.1-2024	电动土方机械动力电池 第1部分：安全要求	新制定	—	2024-07-24	2024-07-24
5	GB/T 44257.2-2024	电动土方机械动力电池 第2部分：性能要求	新制定	—	2024-07-24	2024-07-24
6	GB/T 44258-2024	土方机械 高原隧道用纯电动轮胎式装载机	新制定	—	2024-07-24	2024-07-24
7	GB/T 44259-2024	土方机械 高原隧道用纯电动液压挖掘机	新制定	—	2024-07-24	2024-07-24



The Company has made significant strides across various sectors, including building hoisting, aerial work, earthwork construction, and logistics transportation, demonstrating a comprehensive commitment to the new energy field. Through substantial and ongoing investments, the Company has launched an array of unmanned and electrified construction machinery as well as new energy heavy-duty truck products. These advancements have established multiple cutting-edge demonstration scenarios, such as unmanned intelligent mining operations and autonomous construction of road machinery. As a result, the Company is progressively cultivating a leading cluster of new energy and low-carbon products within the industry. In addition to its product innovations, the Company has also advanced the industrial framework for intelligent core components related to new energy. This approach has facilitated a new paradigm characterized by independent control, joint-venture partnerships, and reinforcement of the industrial chain. Through these initiatives, the Company is not only providing a model for the intelligent and sustainable development of the industry but also asserting its position as a leader in driving technological innovation within the sector.

New Energy Products from XCMG Machinery in 2024

New energy cranes



XCT100G5-1HEV Hybrid Crane,
XCMG's latest G2-series high-end crane



XLC450 DP Crawler Crane, an industry-exclusive
450-ton dual-power (DP) crawler crane



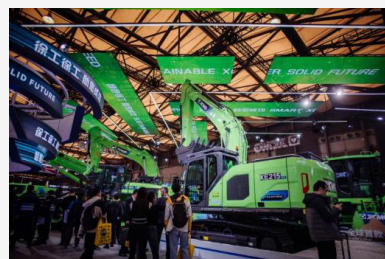
World's first Plug-In Hybrid Truck Crane

New energy aerial work platforms

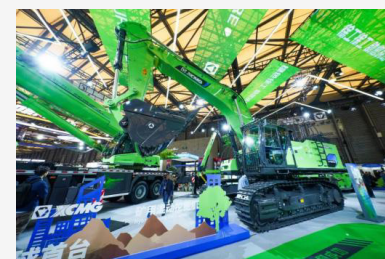
XGS52ACK-Li Pure-Electric Aerial Work Platform, the world's tallest pure-electric straight-boom aerial platform

New energy excavators

XCMG's full-spectrum electrification strategy covers three technical routes: towed-power, electric, and hybrid spanning 21 models (1.9T-90T), these excavators deliver four key advantages: greener, more economical, safer and more comfortable.



XE215EV Electric Excavator, the first-ever excavator to receive the New Energy Gold Award



XE650GK HEV, the world's first mining hybrid excavator

New energy port equipment

New generation of E5 complete sets of new energy mobile port machinery, including electric front loaders, stackers, and counterbalance forklifts



New energy dump trucks



Electric mining truck

New energy concrete equipment



Electric mixer trucks

New energy loaders

The Company's new energy loaders have found extensive applications across various sectors, including railway loading and unloading, mine excavation, coal loading and transportation, ceramic production, non-ferrous metal mining, steel plant operations, port logistics, and building materials construction. The market reliability of these loaders has been thoroughly validated through rigorous testing.



XC9260 hybrid loader, the largest load capacity within its global class



XC9108-EV, the highest tonnage electric loader in the world



GR350EP, the world's first high-power electric grader specifically designed for mining applications

New energy forklifts

Guided by the development concept of Safety, Greenness, Intelligence, and Enhanced Efficiency in Material Handling, the Company is focused on the research and development of core technologies for new energy forklifts. It has successfully achieved significant technological breakthroughs across the entire industrial chain, encompassing vital elements such as the electric system and core components like integrated electric drive assemblies and fully electronically controlled multi-way valves. By the end of 2024, XCMG Machinery established a comprehensive, multi-tiered product matrix of new energy forklifts. This matrix will include the Kunpeng series of electric counterbalance forklifts, the Peacock series of high-voltage lithium-ion battery forklifts, the Mantis series of automated guided vehicles (AGVs), and the Honghu series of warehousing forklifts. Collectively, these offerings adeptly meet the green handling requirements of diverse industries, including logistics parks, metal metallurgy, ceramics, and automobile manufacturing, across a variety of operational scenarios.



Peacock high-voltage lithium-ion battery forklifts



Kunpeng electric counterbalance forklifts

New energy underground infrastructure construction equipment



XTC150G, the world's first diesel-electric dual-power double-wheel milling machine

XZE16000, the world's largest tonnage electric intelligent horizontal directional drilling rig.

XZE8200, the first intelligent electric drive ultra-large tonnage horizontal directional drilling rig

Hydrogen battery systems

XCMG Machinery focuses on three areas: mining, logistics, and automotive. It has independently integrated a 140kW hydrogen fuel cell system, with the prototype performance reaching an industry-leading level.



New energy road equipment

RP355EP electric paver, XD120EP electric light road roller, XM505EP electric light milling machine, GR350EP electric mining grader, XLQ1005E electric wet and dry road sweeper.

Core Parts of Intelligent New Energy Products from XCMG Machinery in 2024

Cell and Battery Pack

The Company has advanced the development of cells and battery packs for driving exponential growth in the revenue of related businesses and scaling supporting facilities.

Ultra-high Voltage Motor Control System and Electric Drive Integrated System

Our focus on the industrialization of ultra-high voltage motor control systems and electric drive integrated systems has yielded remarkable results, as evidenced by the successful delivery of prototype machines.

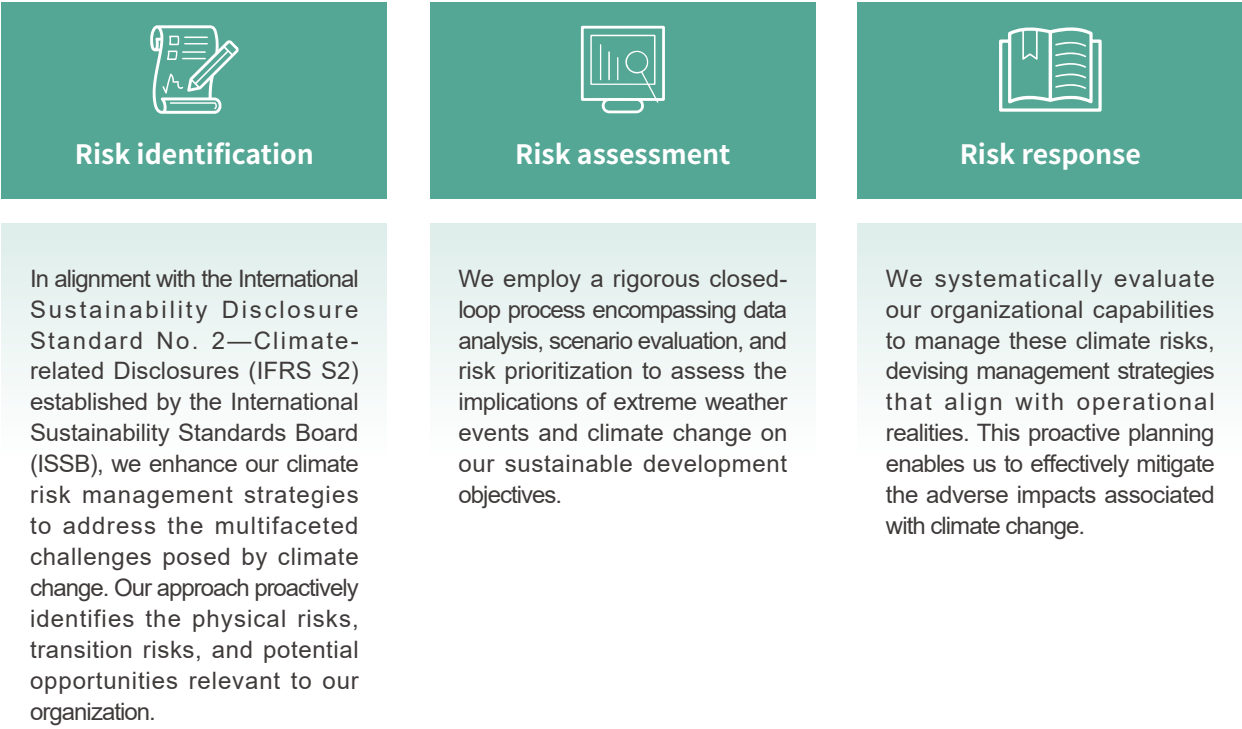
By centering our efforts on the mining machinery sector, we are actively working to bolster our competitive edge in high-voltage motors. This initiative is designed to promote steady revenue growth in domestic and overseas.



Management of Impacts, Risks and Opportunities

XCMG Machinery aligns with international standards by employing appropriate methodologies to holistically assess the financial and sustainability impacts of climate-related risks. Through systematic identification, evaluation, and management of climate-related risks and opportunities, the Company integrates operational strategies to develop pragmatic climate action plans and carbon peaking/ neutrality pathways, ensuring effective climate risk governance.

XCMG Machinery Management Process for Climate-related Risks



Indicators and Objectives

In alignment with national objectives of carbon peaking and carbon neutrality, XCMG Machinery has established its own dual carbon goals. These goals are informed by a comprehensive assessment of climate risks and opportunities, reflecting the company's operational realities. The Company is committed to advancing relevant targets and indicators, actively demonstrating its dedication to reducing greenhouse gas emissions through concrete actions.

Indicators and Targets		Completion status in 2024
Shor-term target	By 2027, carbon emissions within the operational boundaries will peak.	In progress
Medium-term target	By 2035, renewable energy sources are projected to comprise 50% of total electricity consumption.	In progress
Long-term target	Carbon neutrality will be attained within these operational boundaries by 2049.	In progress

Management of Greenhouse Gas Emissions

XCMG Machinery has made significant strides in advancing carbon accounting and inventory processes, thereby enhancing the management of greenhouse gas emissions through digitalization and intelligent technologies. The Company has established a comprehensive carbon emission control system across the entire industrial chain. This includes the development of a digital carbon emission control platform and the creation of a life cycle management system for carbon footprint accounting, evaluation, traceability, and management specifically tailored to construction machinery products. We systematically verify greenhouse gas emissions in alignment with established guidelines, ensuring that carbon emission data throughout the entire value chain is detectable, measurable, and traceable. This approach significantly enhances the Company's capabilities in greenhouse gas detection, monitoring, carbon accounting, and evaluation, thereby reinforcing our commitment to environmental responsibility. The Company has set an ambitious carbon emission reduction target for 2025, aiming for a 5%1 decrease in carbon emissions per unit of intensity. ¹

¹ NOTE: Should significant changes occur in future policies, market conditions, or the Company's strategic orientation, the carbon emission reduction targets will be adjusted accordingly to ensure continued alignment with our objectives.

XCMG Machinery's Greenhouse Gas Management Performance

Direct greenhouse gas emissions (Scope 1)

102,363.22 Tons

Indirect greenhouse gas emissions (Scope 2)

279,299.80 Tons

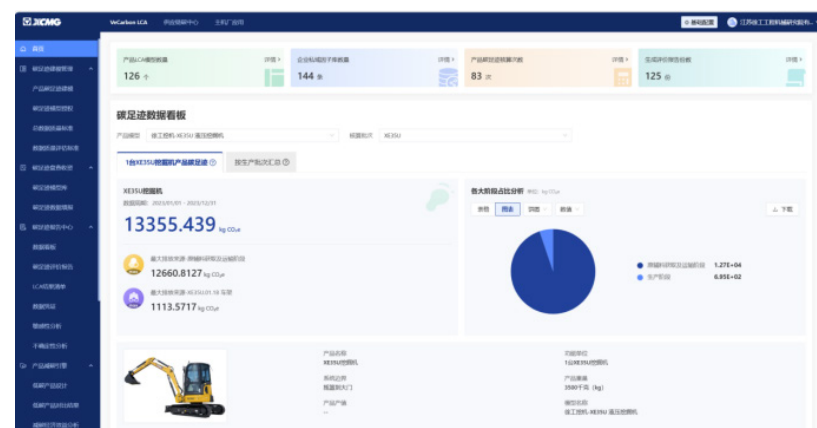
Total greenhouse gas emissions

381,663.02 Tons



Case Product Carbon Footprint Management System at XCMG Machinery

In September 2024, the Company formally introduced the Carbon Footprint Accounting, Evaluation, and Traceability Management System for the entire lifecycle of its construction machinery products. This advanced system leverages a digital carbon management framework combined with data-driven big data analysis and predictive modeling technologies. It comprises two main components: the Product Carbon Footprint Management Platform and the Product Carbon Footprint Management System. Designed specifically to address the carbon reduction needs associated with XCMG Machinery products and to facilitate the construction of a low-carbon supply chain, this system has successfully navigated several technical challenges. These include the implementation of digital supply chain carbon management and traceability, as well as the optimization and prediction of carbon emissions during the operation of downstream products through sophisticated machine learning algorithms. By enabling comprehensive accounting, evaluation, and traceability of carbon footprints throughout the entire product lifecycle, the system positions XCMG Machinery at the forefront of sustainable practices within the construction machinery industry.



2024 Product Carbon Footprint Management Progress at XCMG Machinery

Product Carbon Footprint Accounting - Parts

We undertake the comprehensive collection, modeling, accounting analysis, and traceability management of carbon footprint data across 114 core parts of our construction machinery. This initiative has resulted in the aggregation of 3,543 data entries from suppliers, encompassing information on energy consumption and waste generation. From this dataset, we have established 142 proprietary emission factors specific to the carbon footprint of our construction machinery.

We formulated an internal standard titled Guidelines for Data Collection and Management for Carbon Footprint Accounting of Construction Machinery Products Q/XCMG 1K009 - 2024. This document is designed to standardize the procedures for data collection and management.



Partial Product Carbon Footprint Model (For Parts) of XCMG Machinery and the Distribution by Category

Product Carbon Footprint Accounting - Main Units

We conducted the carbon footprint accounting and evaluation for three excavator models: XE35E, XE35U, and XE600GK. As a result of this comprehensive assessment, we proudly obtained the first internationally recognized carbon footprint certification and carbon label for low-carbon products within the domestic excavator industry.



Carbon Footprint Model and Evaluation Report for Three Excavator Models

International Certification Certificates and Carbon Footprint Labels for Three Excavator Models



Pollution Prevention and Treatment

XCMG Machinery demonstrates a robust commitment to environmental stewardship by adhering strictly to a comprehensive framework of regulations, including the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Prevention and Control of Air Pollution, the Law of the People's Republic of China on Prevention and Control of Water Pollution, the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, the Law of People's Republic of China on the Prevention and Control of Noise Pollution and the Law of People's Republic of China on the Prevention and Control of Soil Pollution. The Company is committed to ensuring that pollutant emissions do not adversely affect employees, residents, and other stakeholders. We actively enhance our processes and upgrade production equipment, while also optimizing our energy structure to improve overall energy efficiency. Our dedication to researching and developing green products and services, coupled with robust management practices, safeguards ecological integrity and biodiversity, thereby supporting sustainable economic and societal advancement. In 2024, we achieved a 100% compliance rate for wastewater, waste gas, and noise emissions at the factory boundary. Additionally, all hazardous waste was disposed of in full alignment with regulatory standards. Consequently, our production and operational activities have had no detrimental impact on ecosystems or biodiversity.

As of the end of 2024, the Company had two subsidiaries that attained national-level green factory certifications, six subsidiaries that secured provincial-level green factory certifications, and four subsidiaries earned recognition as municipal-level environmental protection demonstration enterprises and institutions. These accolades unequivocally underscore the Company's exemplary practices in the realms of green development and environmental protection.

Environmental Policies and Compliance Management

Governance

The Company is committed to the continuous enhancement of its organizational framework for environmental management. It has established robust environmental protection management institutions and appointed dedicated personnel to oversee environmental compliance. A comprehensive four-tiered environmental management network has been constructed, which operates under the unified leadership of the Safety and Environmental Protection Department. This network encompasses the safety and environmental protection departments across all branches and subsidiaries, as well as safety officers assigned to workshops and work teams. Such a structured approach ensures that environmental management responsibilities are effectively implemented at every level of the Company. Consequently, this fosters an orderly execution of management practices and promotes the stable operation of the overall management system.

The Company rigorously adheres to the Environmental Protection Supervision and Management Policy, ensuring effective management of wastewater, waste gas, hazardous substances, waste materials, and noise generated during its production and operational processes. By implementing robust pollution prevention and control measures at the source, the Company not only mitigates environmental impact but also establishes standardized protocols for the handling and investigation of environmental pollution incidents. This proactive approach is instrumental in minimizing environmental risks and reinforces the Company's commitment to advancing ecological civilization.

Strategies

XCMG Machinery prioritizes the continuous improvement of environmental risk assessment and prevention mechanisms to ensure compliance with national and local emission standards for key pollutants, maintaining all environmental risks under stringent control. Throughout 2024, the Company recorded zero major environmental incidents or regulatory violations in environmental compliance.

List of Environmental Risks/Opportunities Identified by XCMG Machinery

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Potential impact	Responses
Transition risk/opportunity	Policy and legal risks	The Dual Carbon goals are driving green transformation across industries, with traditional fuel-powered machinery facing increasingly stringent emission restrictions. Policies governing pollutant and waste discharge management continue to tighten, accompanied by progressive upgrades to emission standards.	High	Short term, medium term	Cost increase	We systematically monitor and analyze both domestic and international environmental protection laws and regulations to strategically align our corporate policies. Our implementation of stringent measures for the compliant disposal of pollutants and waste reflects our unwavering commitment to environmental stewardship. Regular specialized inspections and environmental audits are conducted to ensure adherence to regulations. We develop comprehensive environmental risk response plans and fortify our compliance capabilities. Internal training on compliance is integrated into our performance appraisal system, reinforcing our dedication to environmental responsibility.
	Technology risk/opportunity	The transformation of high-pollution processes, such as traditional coating and casting, is under significant pressure, necessitating an urgent demand for upgraded environmental protection equipment to meet contemporary regulatory standards and societal expectations.	High	Short term, medium term	Cost increase, revenue increase	We actively drive the research, development, promotion, and implementation of clean production technologies aimed at minimizing pollutant generation. We establish an intelligent waste management system that ensures comprehensive tracking throughout the classification, transportation, and disposal of hazardous waste.
	Market opportunity	The increasing focus of consumers on the circular economy business model underscores a significant shift in market demands. Consequently, there is a robust international demand for industrial machinery that is both low-emission and high-efficiency.	High	Short term, medium term	Cost increase	We offer comprehensive value-added services, including equipment leasing, trade-in, and recycling, all aimed at extending product life cycles and minimizing resource waste. We are enhancing our remanufacturing operations by transforming decommissioned machinery into marketable products, thereby establishing a closed-loop industrial chain encompassing recycling, disassembly, remanufacturing, and sales.

Management of Impacts, Risks and Opportunities

Identify and assess environmental risks

The Company rigorously applies environmental impact assessments for all construction projects, as well as the “three simultaneous” approval system. Each branch and subsidiary have developed a tailored self-monitoring plan specifically addressing the pollutants it discharges. This approach utilizes a diversified monitoring strategy that combines both automatic and manual monitoring techniques. Regular monitoring and information disclosure practices are executed in strict accordance with established monitoring plans, enabling the comprehensive evaluation of waste gases, wastewater, and noise emissions. A complete information management system is maintained for monitoring documentation, safeguarding essential materials such as original monitoring records and data reports.

Response to environmental emergencies

Each branch and subsidiary have developed a comprehensive Emergency Rescue Plan for Environmental Pollution Accidents that considers their specific production and operational characteristics. In alignment with regulatory requirements, these emergency response plans are routinely updated and filed.

Prevent hidden environmental hazards

The Company is committed to fostering a culture of environmental awareness through regular publicity and training initiatives targeting all staffs. This proactive approach is designed to cultivate an environmentally responsible enterprise and collectively promote a sustainable, low-carbon lifestyle.

Environmental Training Performance

Environmental training sessions

146

Environmental training participation

43,795

Environmental training duration

110,501 Hours

Percentage of employees covered by
environmental training

100 %

Indicators and Objectives

The Company demonstrates a strong commitment to mitigating the adverse impacts of its operations on the ecological environment and biodiversity. By aligning its environmental management goals with its specific production and operational contexts, the Company optimizes and formulates annual environmental management target indicators. These indicators are systematically incorporated into the Health, Safety, and Environment (HSE) responsibility statement. The HSE responsibility statements are executed through a hierarchical process, beginning with the chairman, followed by the general managers of branches and subsidiaries, and extending down to grassroots employees. This structured approach facilitates the implementation of environmental protection responsibilities across all levels of the Company, thereby ensuring that environmental management objectives are effectively operationalized and accomplished.

XCMG Machinery’ s Environment Management Targets and Their
Completion in 2024

Environment management objectives	Completion status in 2024
No significant environmental event or pollution	Completed
100% compliance discharge of waste and pollutants	Completed
95% operational stability rate of environmental protection facilities	Completed

Environment Audit

In alignment with the ISO 14001 standards for environmental management systems, XCMG Machinery has instituted a rigorous internal and external supervision and audit mechanism. This framework facilitates comprehensive reviews of the Company's environmental management practices on a regular basis, enabling the prompt identification of potential issues and management deficiencies. In turn, XCMG Machinery can implement effective corrective measures swiftly, thereby mitigating the risk of environmental accidents and pollution incidents. The Company is committed to the ongoing enhancement of its environmental and safety management efficiency. XCMG Machinery holds monthly safety and environmental protection meetings and conducts thorough on-site environmental audits. These audits encompass comprehensive inspections, targeted evaluations, and daily checks across all subsidiaries to ensure the robust functioning of the environmental management system.

As of the end of 2024, XCMG Machinery completed environmental management system audits for a total of 24 branches and subsidiaries, culminating in the attainment of the ISO 14001:2015 environmental management system certification.



Certificates of ISO14001 Environment
Management Systems of Some Branches
and Subsidiaries of XCMG Machinery

Hazardous Substances and Waste Management

XCMG Machinery, including its subsidiaries such as XCMG Heavy Machinery, XCMG Excavators, and XCMG Crawler, consisting of a total of 24 entities, are acknowledged as key pollutant discharge units by environmental authorities. In strict adherence to regulatory standards, we transparently disclose critical information, including: pollutant categories, emission methods, annual discharge volumes, and exceedance incidents. As of the end of 2024, all environmental protection administrative licenses remain valid. Throughout the year, the Company and its subsidiaries effectively implemented robust environmental monitoring plans and risk management measures. Notably, there were no instances of excessive pollutant emissions. Furthermore, the organization did not incur any major administrative penalties related to pollutant discharge, nor was any criminal liability pursued. Importantly, our pollutant emissions have not had a significant adverse impact on employees, local community residents, or other stakeholders, underscoring our commitment to environmental stewardship and compliance.

Waste Management

Guided by the internal specifications outlined in the Environmental Protection Supervision and Management Policy, XCMG Machinery maintains an inventory of hazardous waste in accordance with the national hazardous waste directory. The Company takes stringent practices for the collection and handling of hazardous waste generated during production, ensuring its safe transfer to designated hazardous waste storage facilities. This waste is then routinely entrusted to qualified subsidiaries for comprehensive treatment. These subsidiaries have developed centralized disposal projects specifically for hazardous waste, featuring incineration disposal production lines and systems for the cleaning and reuse of waste packaging drums. As of the end of 2024, the Company integrated cameras from its 27 hazardous waste storage facilities into the XCMG Safety Production Digital System. This advancement facilitates AI-driven automatic alerts in the event of power failures within the storage facilities.



XCMG Machinery's hazardous waste warehouse

The solid waste produced by our office and production activities predominantly comprises paper and packaging materials. In response to this challenge, the Company has employed a comprehensive strategy to promote a paperless office environment. This initiative includes advocating for online work practices and electronic document consumption, prominently displaying promotional slogans at printer locations, and encouraging the use of double-sided printing. Furthermore, the Company actively supports the recycling of packaging materials and is committed to minimizing the consumption of office supplies and production resources. Through these concerted efforts, the Company is reducing the generation of solid waste. The Company established an ambitious annual waste reduction target and successfully achieved 100% of this objective in 2024.

Performance on the Treatment of Hazardous Substances and Wastes

Indicator	Unit	2024 value
Total hazardous substance and waste generation	Tons	5,972.83
Including: Organic solvent waste and waste containing organic solvent	Tons	66.36
Mineral oil waste and waste containing mineral oil	Tons	995.34
Oil/water, hydrocarbon/water mixture or emulsion	Tons	552.63
Dye and paint waste	Tons	2,687.23
Surface treatment waste	Tons	412.05
Waste containing chromium	Tons	26.53
Waste containing lead	Tons	73.87
Waste acid	Tons	178.27
Other waste	Tons	980.55
Percentage of hazardous substances and waste disposed under laws	%	100

Wastewater Management

To effectively manage the discharge of domestic sewage, each branch and subsidiary of the Company has implemented dedicated sewage treatment facilities tailored to address specific pollution factors associated with their production activities. Adhering to the principles of “separation of clean water and sewage, and separation of rainwater and sewage”, the Company employs a diverse array of technological approaches, including both chemical and biochemical treatment methods. To optimize the performance of these sewage treatment facilities, the Company has introduced an advanced information platform that enables real-time monitoring of Chemical Oxygen Demand (COD) levels. Furthermore, the Company has partnered with a qualified professional firm to oversee the operation of these facilities, thereby minimizing the risk of excessive pollutant discharge.

To effectively manage the discharge of industrial wastewater, the Company has introduced the nano-water treatment technology, specifically designed to efficiently recover heavy metal elements from electroplating wastewater. After undergoing rigorous treatment, both the domestic sewage and industrial wastewater are subjected to thorough testing to ensure they meet the third-level standards outlined in the Integrated Wastewater Discharge Standard (GB/T 8978-1996). Once compliance is confirmed, the treated effluents are responsibly discharged into the sewage treatment plant of the development zone. The Company established an ambitious annual wastewater pollutants reduction target and successfully achieved 100% of this objective in 2024.



Waste water treatment station



Real-time COD monitoring platform

XCMG Machinery’ s Wastewater Control Performance

Indicator	Unit	2024 value
Total wastewater discharge	Tons	957,892.56
Industrial wastewater discharge	Tons	414,992.76
Domestic wastewater discharge	Tons	542,899.80
COD discharge	Tons	61.08
BOD discharge	Tons	8.93
Ammoniacal nitrogen	Tons	4.16
Total nitrogen	Tons	12.41
Total phosphorus	Tons	0.87
Suspended solids	Tons	11.67
Chromium (VI)	Tons	0.23
Total chromium	Tons	0.000018
Total nickel	Tons	0.000375

Waste Gas Management

The waste gases produced by the Company’s manufacturing processes primarily consist of volatile organic compounds (VOCs) from industrial coating operations and welding fumes. The Company employs a stringent approach to controlling waste gas emissions, implementing comprehensive equipment management systems alongside targeted control measures. Through strategic upgrades and process optimizations, the Company ensures that the concentration of emitted waste gases remains significantly below the thresholds set in national and local standards. Furthermore, the Company is resolutely committed to achieving ultra-low emissions. By adopting effective and practical measures, it aims to successfully confront the challenges associated with air pollution prevention and control. The Company set an annual target for reducing waste gas pollutants and achieved 100% of the target in 2024.

Waste Gas Management Performance		
Indicator	Unit	2024 value
Total waste gas emission	10,000 m ³	1,728,037.39
Including: Particles	Tons	102.69
Sulfur dioxide	Tons	9.98
Nitrogen oxides	Tons	40.46
NMHC VOCs	Tons	117.98



Case Management of VOC Emission from Coating Waste Gas

In the coating production units across its 21 branches and subsidiaries, XCMG Machinery has installed 56 VOC treatment systems along its coating lines. Each system utilizes the internationally recognized zeolite molecular sieve rotor combined with a regenerative thermal oxidation combustion process, representing an impressive cumulative investment of approximately RMB 220 million. The Company performs regular inspections of the operational status of its VOC treatment equipment. Furthermore, it employs an advanced information system to monitor VOC emissions in real time. By integrating VOC source substitution technologies with its existing systems, XCMG Machinery has managed to maintain the VOC emission concentration across all coating lines at approximately 10 mg/m³. This figure significantly surpasses the local emission standard of 50 mg/m³ in Jiangsu Province, thereby achieving ambitious ultra-low emissions targets.



Case Management of Welding Fume Emission

To effectively mitigate fume emissions generated during the welding process, the Company has made a substantial investment totaling nearly RMB 100 million. This investment has facilitated the acquisition of advanced treatment process equipment, including suction arm systems, blowing and suction units, integrated machines, and environmentally-friendly welding torches, all of which adhere to stringent technological standards. As a result, the average concentration of welding fume emissions has been reduced to approximately 2.16 mg/m³, below the national standard of 4 mg/m³. This achievement markedly improves the working environment for employees.

Simultaneously, the Company has completed the transformation of its welding workshops into a dust-free system. This undertaking encompasses the installation of centralized blowing and suction fume collection and treatment facilities that comprehensively cover all welding areas. Specialized personnel have been appointed to conduct regular inspections, maintenance, and management of the dust removal equipment. This proactive approach guarantees compliance with environmental regulations.

Noise Management

The Company prioritizes the optimization of production processes, along with the upgrading and replacement of equipment, facilities, and labor protection supplies, as integral components of its noise management strategy. By focusing on controlling noise at its source, the Company actively mitigates the impact of noise pollution that arises during the production and manufacturing of mechanical equipment. This concerted effort not only safeguards the occupational health of employees but also enhances their overall comfort in the workplace.

Noise Management Measures by XCMG Machinery

Process optimization

Through systematic reduction of grinding operations by championing the use of electric grinding tools in lieu of traditional pneumatic alternatives, coupled with the adoption of flexible grinding discs, it is possible to significantly diminish noise levels during the grinding process.

Equipment upgrading

Upgrading from traditional air guns to lithium-ion battery-powered impact wrenches can reduce noise levels in the workplace.

Labor protection

The advancement of labor protection products specifically designed for the grinding process can enhance noise protection measures in the workplace.



Optimization of Resource Usage

XCMG Machinery effectively integrates the principles of green development throughout its office operations and production processes. The Company explores innovative remanufacturing models, optimizes the use of water resources and enhances the management of energy consumption and conservation. By committing to the efficient utilization of waste resources, water resources, and energy, XCMG Machinery accelerates to build a more sustainable production model.

Circular Economy

As one of the pioneering national remanufacturing pilot units, XCMG Machinery is at the forefront of advancing innovative remanufacturing models. In alignment with the objectives outlined in the 14th Five-Year Plan for the Circular Economy Development, issued by the State Council and the National Development and Reform Commission, XCMG Machinery has established a comprehensive industrial waste resource recycling system. This includes the exploration and enhancement of reverse logistics systems and a recycling trading platform specifically for used products, thereby facilitating the large-scale recycling of these materials. The Company is committed to ongoing research and development in construction machinery remanufacturing technologies, establishing a robust technical and equipment framework to support these advancements. The application of these technologies extends across various remanufacturing sectors, including complete machines and components such as cranes, rotary drilling rigs, tunnel boring machines, hydraulic cylinders, pumps, and motors. The initiative effectively facilitates the valorization and recycling of end-of-life resources, including scrap steel, non-ferrous metal waste, and plastic materials. XCMG Machinery is resolutely committed to establishing a comprehensive circular industrial chain that encompasses the entire lifecycle—from resources to products, then to used products, and ultimately to remanufactured products. This commitment supports the Company's ambition to become a “waste-free enterprise”, and aligns with the broader objective of contributing to Xuzhou's pilot program for constructing a “waste-free city”.

In both supplier procurement and product distribution processes, the Company prioritizes environmentally friendly packaging materials characterized by high resource efficiency, easy recyclability, or biodegradability. This initiative reduces the use of disposable packaging materials such as cardboard and wood, minimizes waste generation from operational activities, mitigates environmental impact, and enhances resource utilization efficiency.

Performance on Packaging Materials Management

Packaging materials consumption	Consumption of recycled packaging materials	Recycling rate of packaging materials
4,931.32 Tons	3,748.77 Tons	76.02 %



Water Resource Utilization

The water utilized in our office operations and production processes is primarily sourced from the municipal pipeline network, supplemented by recycled water. To ensure the efficient and sustainable use of water resources, the Company has taken a series of strategic water-saving measures. These initiatives include daily inspections and maintenance of water-using equipment, as well as enhanced awareness campaigns focused on water conservation. By comprehensively integrating the principles of water conservation into both office and production protocols, the Company is firmly committed to minimizing unnecessary water waste.

Water Management Performance

Total water consumption	Water consumption reduction compared to 2023	Water consumption target for the next year
2,443,940 Tons	414,880 Tons	3,103,991 Tons

Water Saving Measures by XCMG Machinery

Equipment upgrading and process optimization	Upgrade critical systems including air compressors and cooling units with the use of variable frequency drive (VFD) technology. Give priority to purchasing of and promote the use of water-saving equipment and facilities.
Intelligent water management	Harness the capabilities of Internet of Things (IoT) technology, establish a sophisticated IoT platform including the installation of smart water meters and a remote monitoring system, to facilitate real-time monitoring and data analysis of water usage across various units and equipment, and optimize water management efficiency.
Managing water-consuming equipment	Focus on the efficient use of essential equipment, including water dispensers, pipes, and faucets. Rigorous regular inspections and maintenance of water-related facilities are critical to preventing issues such as leaks, drips, and other forms of water wastage.
Water recycling	Rainwater collection and recycling, wastewater treatment and reuse, steam condensate water recycling.
Water conservation awareness campaign	Hold targeted training programs focused on water-saving techniques, and place water conservation slogans and informational wall newspapers in high-traffic areas where water is utilized.

Energy Utilization

Governance

The Company firmly adheres to the principle of prioritizing energy conservation alongside development, consistently enhancing its energy management system. Relevant leadership at both the Company and its branches and subsidiaries assumes primary responsibility for energy management initiatives. The Lean Manufacturing Department serves as the centralized entity overseeing the Company's energy management efforts, ensuring cohesive coordination of relevant activities. Each branch and subsidiary have established its own energy management department, staffed with dedicated personnel tasked with full-time oversight and implementation of energy strategies. This structure guarantees that management practices, accountability, strategic measures, investment decisions, and supervisory assessments are effectively integrated and operationalized. The Company was honored with the title of Advanced Unit in Energy-Saving Management of the Year by the Xuzhou Energy-Saving Association in 2024.



XCMG Machinery Won the Title of Advanced Unit in Energy-Saving Management of the Year in 2024

In 2024, the Company undertook a comprehensive update of its Energy Management Policy. By implementing a series of strategic measures—including sound management practices, robust data monitoring, the acceleration of technological upgrades and transformations, fostering a culture of energy-saving awareness among employees, and refining the energy-saving assessment and evaluation mechanisms—the Company is poised to meet both its medium-term and long-term energy-saving objectives as well as its annual targets. These initiatives are designed to facilitate the integrated advancement of energy conservation, emissions reduction, low-carbon strategies, and high-quality green development. The overarching goal is to maximize economic benefits while minimizing energy consumption. By the end of 2024, the Company successfully achieved certification of the ISO 50001 Energy Management System.



Certificates of ISO 50001 Energy Management System of Some Branches and Subsidiaries of XCMG Machinery

Strategies

XCMG Machinery is resolutely committed to spearheading the energy transition and low-carbon transformation within the construction machinery sector. By implementing rigorous energy impact management, proactively addressing energy-related risks, and strategically seizing green opportunities, the Company ensures a harmonious balance between economic growth and environmental sustainability.

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Expected financial impact	Responses
Risk	Energy price fluctuations	The significant fluctuations in energy prices have introduced substantial market risks. This instability impacts not only operational costs and budget planning for companies but also poses threats to supply chain stability and may cause delays in production schedules.	Medium	Short term	Cost increase	We must closely monitor evolving policies and regulations, including carbon tariffs and dual energy consumption controls, while proactively optimizing the energy structure. By leveraging a digital energy monitoring platform, we can analyze energy consumption data in real time, effectively mitigating risks associated with fluctuations in energy supply and pricing.
Opportunity	Energy source structure	Reducing reliance on traditional fossil fuels allows companies to substantially decrease energy costs. Furthermore, embracing clean energy and enhancing energy efficiency not only bolster an organization's market competitiveness but also improve its social image, thereby unlocking new business opportunities and facilitating strategic partnerships.	High	Medium term to long term	Cost decline	Investment in research and development of advanced energy construction machinery is essential. We must focus on pioneering technologies, including electrification and hydrogen energy, to capture the burgeoning green equipment market. By implementing innovative applications such as smart microgrids and energy storage systems, we can significantly enhance energy utilization efficiency while effectively reducing energy consumption.

Management of Impacts, Risks and Opportunities

XCMG Machinery has positioned energy utilization management as a critical catalyst for sustainable development. The Company has instituted a robust continuous improvement mechanism for energy efficiency through systematic closed-loop management practices.

Energy Management Measures



Energy consumption management

We implement an energy consumption quota management system, promote energy performance contracting, and strengthen data monitoring and energy control. We enhance the management of energy-consuming equipment and facilities, such as lighting and air conditioning, in both office and production areas. We organize events like Energy Conservation Publicity Week, intensify energy conservation education and training, and raise energy conservation awareness among all employees.



Energy metering

We install energy metering devices for water, electricity, gas, and other utilities. Each branch and subsidiary is expected to establish a comprehensive ledger and develop an energy metering data collection and management system that facilitates real-time monitoring, storage, analysis, and processing of energy supply and consumption data. This system will be instrumental in overseeing high-energy consumption equipment, thereby enhancing energy management practices and enabling intelligent operation and maintenance solutions.



Energy saving

In pursuit of advancing our technological transformation towards energy conservation and carbon reduction, we promote the utilization of clean energy sources, such as solar energy, to achieve a complementary integration of multiple energy systems. Our initiative encompasses the implementation of over 20 innovative projects, which include a sophisticated intelligent energy management platform, systems for the utilization of waste heat and pressure from air compressors, and regenerative thermal oxidizers (RTO) for coating waste gas treatment, the deployment of distributed photovoltaic systems and enhancing the technical capabilities of heat pumps and lighting fixtures. With a cumulative investment of approximately RMB 100 million, these initiatives have collectively realized an impressive energy savings equivalent to 8,452 tons of standard coal.

We promote the adoption of advanced, efficient equipment and facilities by replacing over 20 high-energy-consuming devices, including hot blast stoves, air compressors, and transformers. Our strategy aims to integrate cutting-edge energy-saving technologies and equipment to significantly enhance the energy efficiency of our operational systems.

We accelerate the development of a comprehensive energy management information system designed to establish an effective energy and carbon emission control platform. Five branches and subsidiaries have implemented independent energy management systems, such as the EMS intelligent energy management platform. Furthermore, we plan and develop a unified Internet of Things (IoT) platform that includes an integrated energy monitoring function for the entire group, to facilitate the real-time collection and analysis of energy data.



Energy assessment

We evaluate the energy consumption target indicators and the completion status of energy metering objectives for each branch and subsidiary. The results of this evaluation will be integrated into our performance-based management assessment system.

We conduct quarterly inspections of energy usage and management practices across all units. In addition, we implement random inspections to ensure compliance and identify areas for improvement at unpredictable intervals. When issues are identified, our approach will be to issue timely rectification recommendations.



Case Energy and Carbon Emission Control Platform

The energy and carbon emission control platform developed by XCMG Machinery features a hierarchical distributed architecture that integrates cutting-edge technologies, including cloud computing, big data, and the Internet of Things (IoT). This system supports a wide array of functions, encompassing carbon emission monitoring, accounting, and management. The platform is poised to facilitate the seamless collection of energy consumption data via intelligent devices, and pave the foundation for refined management practices and intelligent control of energy resources.



Energy and Carbon Emission
Control Platform



Case EMS Energy Management Platform

XCMG Machinery is at the forefront of advancing the application and optimization of its Energy Management System (EMS) platform. Each year, the Company enhances the networked collection of energy operational data, facilitating a significant transition towards "unmanned" operations of energy facilities. The platform has established an automated framework for the collection, analysis, and early warning of workshop-level energy consumption data. This innovative model enables integrated management and intelligent operation across various energy stations, allowing for real-time monitoring and automatic notification of energy operations and efficiency indicators. As a result, XCMG Machinery is driving a comprehensive transformation in energy management, steering the industry towards an era characterized by digitalization and intelligence.



Leveraging a robust big data analysis model for energy consumption, the Company has developed targeted strategies for energy conservation and carbon reduction across three primary energy sources: electricity, steam, and natural gas. In the realm of electricity consumption, the Company employs real-time monitoring and analysis of critical indicators, including energy efficiency and associated costs. This allows for the dynamic adjustment of control strategies, thereby promoting a high utilization of green electricity and off-peak electricity, which ultimately optimizes the overall energy mix. About steam usage, the Company has achieved a three-level enhancement in central heating: progressing from basic temperature control to time-based management, and culminating in an advanced intelligent control system. This significant advancement has enabled a comprehensive exploration of precise supply modes, resulting in a reduction in steam costs exceeding RMB ten million over the past three years. Concerning natural gas, the Company has implemented real-time monitoring of measurement balances and sudden data fluctuations, thereby effectively mitigating safety risks. This vigilant oversight not only prevents potential leakage but also enhances gas use safety.

Indicators and Objectives

XCMG Machinery has developed a comprehensive energy index management framework that establishes clear, informed, and quantifiable objectives for enhancing energy efficiency. This framework systematically drives the optimization of energy structure and significantly improves energy utilization efficiency.

Energy Management Indicators and Targets

Indicator	Unit	2024 value
Comprehensive energy consumption per RMB 10,000 value of output	tce/ RMB 10,000	0.01508
Electricity consumption	10 MWh	48,461.9
Steam consumption	GJ	14,907.19
Natural gas	m³	22,347,600
Gasoline	Tons	1,687.57
Diesel	Tons	7,938.81
Comprehensive energy consumption target per RMB 10,000 value of output for the next year	tce/RMB 10, 000	0.01463
New energy consumption	kWh	9,028.44
Percentage of new energy consumption	%	18.63

03

Leading with Responsibility for
Integrity, Fostering Harmony
through Public Welfare

The Company is resolutely dedicated to achieving high-quality development, characterized by thorough quality control and the systematic implementation of supply chain management. It adheres to stringent occupational health and safety protocols, ensuring a structured approach that prioritizes the well-being of employees. By safeguarding their legitimate rights and interests, the Company cultivates a workplace environment that is not only supportive but also conducive to professional growth and talent development. In addition to its internal commitments, the Company actively engages in public welfare initiatives, exemplifying its profound social responsibility and commitment to community well-being.

Responses to UN SDGs



Performance Highlights in 2024

Quality Technology Award from the
China Association for Quality

3

Incidence rate of occupational diseases

0 %

Percentage of products exported to
countries and regions along the Belt
and Road

95+ %

Employee training expense

2,200 RMB 10,000

Volunteering activities

200+



Product and Customer Responsibility

XCMG Machinery has created a robust and comprehensive quality management system designed to rigorously oversee quality control across the entire product life cycle. It also optimizes communication channels with customers, and prioritizes the security of customer privacy. These enable the Company to establish itself as a leader in quality management and customer service within the Chinese construction machinery industry.

Product Quality and Safety

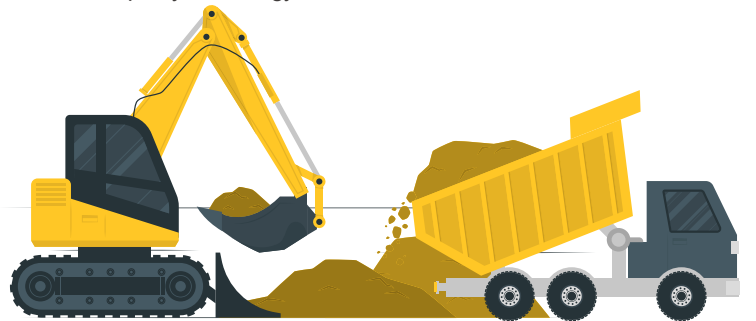
Governance

XCMG Machinery demonstrates a strong commitment to product quality and safety responsibilities, rigorously adhering to internal protocols such as the Quality Objective Management Procedure, Non-Conforming Product Control Procedure, and Product Monitoring and Measurement Control Procedure. The Company has established a robust quality control system, complemented by a comprehensive end-to-end inspection mechanism that diligently monitors each stage of production. This meticulous oversight ensures that XCMG Machinery products consistently exhibit market-leading reliability and performance. As of the end of 2024, XCMG proudly holds a valid ISO 9001 Quality Management System certification. Throughout the year, the Company has maintained an exemplary safety record, with zero major incidents related to product safety or quality and no product recalls initiated.



ISO 9001 Certificate of XCMG Machinery

In 2024, XCMG Machinery distinguished itself as the sole enterprise in Jiangsu Province to be selected for the cultivation pool of 34 leading enterprises recognized by the State Administration for Market Regulation as part of its initiative to foster a quality-driven nation. Moreover, the Company achieved remarkable recognition from the China Association for Quality, securing one first prize, three second prizes, and one third prize in the prestigious Quality Technology Award competition. This accolade represents the highest honor in the realm of quality technology within China.



附件1
2024 年度中国质量协会质量技术奖（项目奖）获奖名单

一等奖（9 项）		
序号	项目名称	主要完成单位
3	抗磨和耐磨涂层材料的研究与应用	江苏徐工工程机械研究院有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司
二等奖（117 项）		
25	工程机械用高强度钢板的研究与应用	徐州徐工工程机械研究院有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司
26	工程机械用高强度钢板的研究与应用	徐州徐工工程机械研究院有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司
27	工程机械用高强度钢板的研究与应用	徐州徐工工程机械研究院有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司
三等奖（202 项）		
83	工程机械用高强度钢板的研究与应用	徐州徐工工程机械研究院有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司、徐州徐工工程机械有限公司

Quality Technology Awards from the China Association for Quality

Strategies

XCMG Machinery has developed a comprehensive maturity evaluation model for its quality management system, which has culminated in the issuance of the Q/XCMG 25025-2024 Quality Management System Maturity Evaluation Standard (Trial). This initiative has successfully facilitated the evaluation of 24 branches and subsidiaries. Concurrently, XCMG Machinery has advanced the regional quality certification mechanism by setting certification criteria for 12 critical process types, including welding, assembly, and machining. The Company has also released the Q/XCMG 25024-2024 Regional Quality Certification Standard, which has been extensively communicated to grassroots production units. The introduction of the BLM methodology has further strengthened the Company's quality agenda, emphasizing three pivotal themes: high-end quality, first-class systems, and quality digitization. This strategic framework, encapsulated in the “three horizontal, four vertical, and one platform” model.

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Expected impact	Responses
Risk	Market risk	Concerns surrounding product quality and safety significantly impact the Company's brand image.	Medium	Short, medium and long term	Revenue decline	We enhance product quality and safety management systems to effectively minimize the incidence of quality and safety-related issues.
	Digital transition opportunity	The advancement of intelligent manufacturing and digital transformation necessitates the strategic incorporation of big data and artificial intelligence technologies. Such integration will streamline the production process and enhance the precision and efficiency of product quality control.	High	Medium and long term	Cost decline	We are actively advancing the Intelligent Upgrade, Digital Transformation, Digitalization, and Connectivity initiative to fully enhance our products through the integration of advanced technology.

Management of Impacts, Risks and Opportunities

XCMG Machinery diligently identifies and manages risks and opportunities related to quality and safety, continually enhancing product standards. This proactive approach significantly boosts customer satisfaction and strengthens market competitiveness.

Identify

The Company establishes clear management objectives and delineates the scope of implementation, emphasizing key areas for risk identification. By systematically collecting, analyzing, and managing data related to product quality and safety, the organization enhances both the accuracy and breadth of risk identification. This comprehensive approach provides robust support for the formulation of scientifically-based risk management strategies.

Assess

The Company evaluates the probability of risk occurrence and potential impact, categorizing and prioritizing risks according to their severity and likelihood. This systematic evaluation allows for more effective risk management and the development of targeted risk response strategies.

Monitor and manage

The Company continually optimizes its product quality and safety management processes while dynamically monitoring potential quality and safety risks throughout the entire production cycle.

Indicators and Objectives

The Company has established definitive product quality and safety management benchmarks for 2024, demonstrating steady improvement in operational standards. Critical achievements include 49% reduction in early failure rate (0-100h) compared to the year 2023; 38% decrease in warranty replacement frequency; and 37% decline in warranty replacement cost ratio.

Quality Management Indicators and Targets

Indicator	2024 Target	Completion status
Internal replacement rate	6.35%	4.37%(completed)
Loss rate from component replacement within the warranty period	0.42%	0.28%(completed)

Quality Management Cases in XCMG Machinery



The Company has initiated six targeted actions aimed at enhancing product quality, alongside the establishment of six specialized project teams dedicated to the implementation of these initiatives. Additionally, it has published eight comprehensive standards, including the Technical Specification for Electrical Circuit Layout. Furthermore, the Company has conducted a thorough evaluation of maturity concerning wiring and hydraulic cleanliness, completing two extensive rounds of assessment.



The Company has initiated a comprehensive audit focused on appearance review and benchmarking improvements for products showcased at the Bauma China 2024. In this endeavor, it conducted quality inspections on 147 products, assessing their overall appearance quality, the standardization of components, and compliance with CE regulations. Concurrently, the Company undertook a thorough analysis of its products, identifying existing gaps or deficiencies in appearance quality when compared to benchmark competitors. This strategic assessment illuminated opportunities for enhancement and reinforced the Company's commitment to the continuous improvement of the technical quality of its offerings.



The Company has systematically organized special overseas quality meetings, aimed at enhancing effectiveness within the internal framework to support global market initiatives. Through these initiatives, it has successfully addressed 73 significant overseas quality issues. This proactive approach facilitates comprehensive analysis and enables a robust closed-loop management system for quality concerns.



The Company has updated its Quality Supervision, Inspection, and Assessment Management Measures. This initiative has involved a thorough quality supervision and inspection process across 18 units. Additionally, the Company has conducted targeted inspections addressing five critical overseas quality issues, as well as significant projects such as the quality concerns associated with crawler cranes designated for export and the challenges faced by road rollers and cranes in the Algeria project of China Railway Construction International. As a result of these focused efforts, five detailed investigative reports have been produced, accompanied by the issuance of four company-level quality circulars.



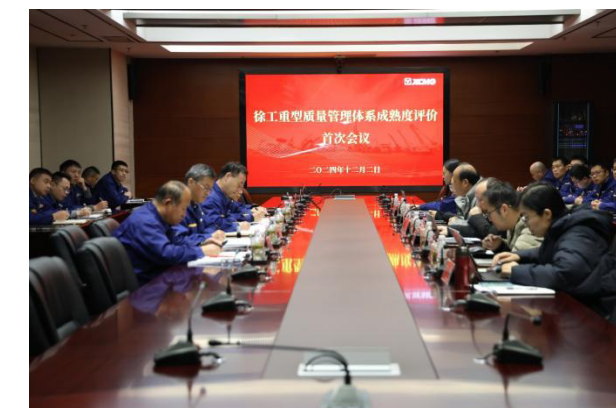
Case XPS (Lean Six Sigma) Management at XCMG Machinery

In 2024, XCMG Machinery instituted a comprehensive collaborative cultivation and development system aimed at fostering both specialized and multidisciplinary talent. To this end, XCMG Machinery established a structured three-tier training system encompassing the Company, branch and subsidiary, and departmental levels. Throughout the year, the Company delivered 356 specialized training sessions focusing on advanced methodologies, including Lean Six Sigma, Statistical Process Control (SPC), and quality leadership. This multifaceted training initiative resulted in the successful development of 9 chief quality officers, 20 quality managers, 71 quality engineers, and 102 quality technical experts. In addition, XCMG Machinery successfully advanced over 1,800 research and development, quality improvement, and lean initiatives. This comprehensive array of projects incorporated advanced methodologies such as Six Sigma Black Belt, Green Belt, as well as the 8D problem-solving technique and the seven-step approach. These initiatives spanned critical operational areas, including research and development, production, supply chain management, sales, and customer service.



Case XCMG Machinery's Implementation of Advanced Quality Management Approaches

In 2024, XCMG Machinery developed a maturity evaluation model for its quality management system. This initiative included the release, promotion, and training of the Quality Management System Maturity Evaluation Standard (Trial). The Company established a dedicated evaluation panel that conducted a comprehensive evaluation of the quality management system maturity across 22 branches and subsidiaries, encompassing a total of 53 subprocesses. The evaluation findings revealed that each branch and subsidiary achieved maturity levels classified as Level 2 (Standardized Level) and Level 3 (Advanced Level). These results indicate that the operating framework of the quality management system is standardized but also possesses the capabilities indicative of an advanced operational state.



Customer Relations

Governance

XCMG Machinery adheres to a comprehensive set of internal policies and protocols designed to manage customer interactions effectively. These include the Customer Complaint Escalation Management Policy, the Customer Service Center Follow-up Procedure, the 24-Hour Completion Rate Report, the Monthly Spare Parts Work Bulletin, the Overseas Customer Management Measures, and the Customer Complaint Escalation Management Policy. Such structured frameworks ensure that every customer appeal is addressed with timely and effective feedback. XCMG Machinery places a high priority on safeguarding customer privacy through robust measures, including data encryption, stringent restrictions on data access rights, and ongoing employee education and training. Targeting large projects, significant undertakings, and major customers, the Company is committed to developing lean operational and management capabilities. This relentless focus on efficiency enables the Company to continuously enhance the quality and effectiveness of its customer service.

Performance on Cybersecurity and Information Security Management

Rate of product/service-related complaints

0.21 %

Product recall rate due to ESG factors
(such as safety and environment)

0 %

Rate of responses to product/service-related complaints

100 %

Customer satisfaction

95.32 %

Customer Privacy Protection Measures



- We use advanced technologies such as encryption software and watermarking techniques to ensure the security of sensitive documents.
- We restrict access to customer information to only essential personnel.
- Regular training sessions on data privacy protection are conducted for employees to ensure compliance with privacy policies.

Strategies

XCMG Machinery consistently embodies a value-added service philosophy that emphasizes intimacy, attentiveness, and comprehensive support across the entire lifecycle and value chain. With the objective of maximizing customer satisfaction—indeed, exceeding expectations—the Company delivers high-efficiency and timely premium services at every stage of product life. This commitment marks a significant transition from a production-oriented manufacturing model to a service-oriented paradigm. Pioneering the industry, XCMG Machinery has adopted an innovative service model that integrates “Internet + cloud technology + manufacturing”, thereby establishing an advanced intelligent service system. This system facilitates self-diagnosis, intelligent work dispatching, and a seamless provision of services throughout the entire lifecycle, reinforcing its leadership position in the sector.

End-to-End Process Management by XCMG Machinery

01

400 Customer Service Center

The 400 Customer Service Center comprises four specialized units: Information Communication, Customer Satisfaction Improvement, Customer Behavior Analysis, and Product Marketing and Promotion. It confidently delivers comprehensive, one-stop professional services, including service outlet guidance, product pricing consultation, technical support, complaint resolution, repair requests, and spare parts inquiry and sales, ensuring exceptional customer experience.

02

Golden Operator Training Program

It demonstrates XCMG Machinery's commitment to advancing industry expertise by sponsoring national hoisting and concrete design competitions, establishing dedicated training bases, and fostering deep, reciprocal collaboration with construction enterprises to cultivate highly skilled professionals.

User Experience Day

User Experience Day facilitates comprehensive engagement by promoting new products and providing hands-on experiences, enabling customers to gain a deeper understanding of XCMG Machinery's capabilities and advanced construction solutions.



Before Sale Services

Customized Construction Solutions

XCMG Machinery leverages extensive software and hardware capabilities alongside decades of construction expertise. Moreover, it actively involves customers as consultants in shaping product design, manufacturing, and service processes, ensuring the delivery of highly efficient, tailored construction solutions that precisely meet client needs.

04

03



During Sale Services

Consultative Sales Approach

Recognizing the continuous demand for customized construction solutions, XCMG delivers comprehensive equipment selection optimization to ensure maximum client return on investment.

Worry-free Logistics Service

Our turnkey delivery program guarantees professional door-to-door transport, expert first-installation supervision by certified technicians, and comprehensive operator training for every delivered unit.

Integrated Financial Solutions

Leveraging XCMG Finance—our captive financial services platform—we architect financing packages tailored to customer needs regarding engineering machinery products through partnerships with leading institutions.

Service available 365x24

XCMG Machinery employs over 5,000 service engineers and operates 1,500 specialized service vehicles worldwide. The Company is unwaveringly committed to delivering dedicated support with a guaranteed 15-minute rapid response and task completion within 24 hours, available continuously throughout the year.

Expert Diagnosis

Leveraging the China Quality Promotion Association platform, XCMG Machinery has established a nationwide, standardized mobile service system. Over the past five years, it has conducted the Quality and Service initiative more than 90 times. Nearly ten thousand experts have traveled millions of kilometers across the country, consistently delivering exemplary, user-centered service.

Smart Keeper Service

XCMG Machinery has established a comprehensive GPS Global Service Center, leveraging an Internet of Things platform to deliver proactive, intelligent, and personalized customer support services.

Timely Delivery of Spare Parts

XCMG Machinery maintains thousands of spare parts centers across five continents, supported by a professional inventory valued at nearly one billion yuan. The Company guarantees delivery of spare parts to customers within 72 hours.

VIP Customer Club

It serves as a collaborative platform connecting customers, experts, manufacturers, and engineers. It operates under a comprehensive management system and well-defined workflows.

Worry-free Aftermarket Service

XCMG Machinery is dedicated to delivering comprehensive aftermarket services, including leasing, used equipment appraisal, trading, major repairs, and remanufacturing. Addressing customer concerns remains a core responsibility and unwavering commitment of the Company.

After Sale Services



The Company effectively identifies and manages risks associated with the protection of customer rights and interests, proactively formulating strategies to mitigate both the likelihood and impact of potential issues. By systematically identifying and assessing opportunities, the Company enhances its capacity to meet customer needs, thereby securing a competitive edge in the market.

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Expected impact	Responses
Risk	Policy risk	Risks regarding policy compliance for multinational customers	High	Medium to long term	Revenue decline	We systematically monitor and analyze the legal and regulatory requirements across various countries and regions where our customers are situated, ensuring that our products consistently comply with relevant standards. We enhance the protection of customer data security and privacy, guaranteeing the responsible and compliant use of business information.
						We actively explore and advance innovative products and emerging business scenarios, including intelligent construction solutions like autonomous technology and digital twins, to enhance operational efficiency for our customers.
Opportunity	New products and new models	Customers' demand for new products	High	Medium to long term	Revenue increase	We foster deeper collaboration with clients to ensure a mutually beneficial relationship that aligns technological innovation with sustainable development.

Management of Impacts, Risks and Opportunities

The Company adeptly identifies and manages risks and opportunities associated with customer relationships, consistently enhancing the quality of customer service while establishing long-term, stable partnerships with clients.

Identify

The Company articulates its management objectives and delineates the scope of implementation with precision. It engages proactively in customer communication to gain a comprehensive understanding of critical customer concerns, thereby providing a robust foundation for the development of effective risk management strategies.

Assess

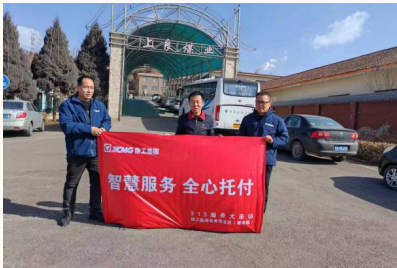
The Company articulates its management objectives and delineates the scope of implementation with precision. It engages proactively in customer communication to gain a comprehensive understanding of critical customer concerns, thereby providing a robust foundation for the development of effective risk management strategies.

Monitor and manage

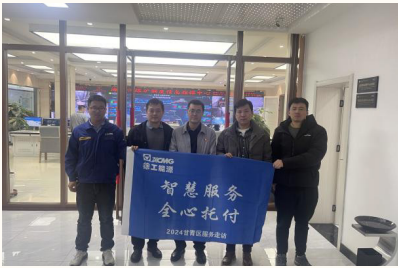
The Company continuously enhances its customer service management processes and diligently monitors potential risks that may affect customer rights and interests.

Indicators and Objectives

The Company has a robust hierarchical framework for handling customer complaints, particularly those related to privacy issues. This multi-tiered response process is designed to ensure that each complaint is addressed promptly and effectively. To facilitate this process, we have established a unified customer service hotline-4001109999, which operates 24 hours a day, 365 days a year. This hotline serves as a central point for receiving customer inquiries, repair requests, and complaints. Upon receipt of each inquiry, our team guarantees that a telephone follow-up will occur within 24 hours. In instances where issues remain unresolved within the initial 24-hour timeframe, our commitment to customer service extends to continuous follow-up until all matters are satisfactorily addressed.



Our staff at North China Service Area conducted a visit to Shangliang Coal.



Our staff at Shaanxi-Gansu-Ningxia North China Service Area conducted a visit to Yaojie Coal.



6th International Customer Festival hosted by XCMG Machinery

Cooperation for Win-Win Outcomes

XCMG Machinery is firmly dedicated to fostering a sustainable supply chain that not only enhances the resilience of both industrial and supply chains but also drives innovation and mutual development along the chain. By prioritizing win-win cooperation, XCMG Machinery aims to contribute significantly to the establishment of a modern industrial system. Furthermore, the Company actively champions high-quality collaboration within the framework of the Belt and Road Initiative, thereby reinforcing the longstanding friendships that have flourished along the Silk Road for millennia.

Sustainable Supply Chain Management

Governance

XCMG Machinery systematically identifies potential risks within critical supply chain segments, including material procurement and logistics transportation. It has developed and updated various policies, and taken proactive management strategies. XCMG Machinery not only screens but also consistently cultivates high-quality supply resources that align with its commitment to sustainable and high-caliber development. This comprehensive approach significantly strengthens the supply chain's risk resistance and overall resilience. The Company is committed to the development of a robust green and digital supply chain. It emphasizes the empowerment of suppliers and treatment with integrity, and adopts an equitable stance towards small and medium-sized enterprises (SMEs). By providing targeted financial support and capacity-building training, the Company fosters the growth of SRDI SMEs within its supply network. This initiative not only enhances the unique competitive edge of the Company's supply chain but also establishes a green alliance that facilitates synchronized progress.

Supply Chain Risk Management Mechanism



Full Lifecycle Management of Suppliers

- We have established a comprehensive management system that encompasses every aspect of supplier engagement. This system should include robust processes for supplier admission management, certification of processes, quality management, performance improvement, as well as mechanisms for freezing, withdrawal, and blacklisting of suppliers. The multi-faceted management approach will ensure the creation of high-quality supply resources.
- The Company has incorporated ESG factors such as waste management, research and utilization of new energy and materials, occupational health, environmental safety, and corruption-free management into supplier admission standards.
- The Company dynamically monitors and manages multidimensional data related to supplier product quality and material usage, and performs regular supplier quality performance evaluations. For mass-production suppliers identified as requiring performance enhancements, we implement clearly defined performance improvement protocols and to standardize the improvement process.



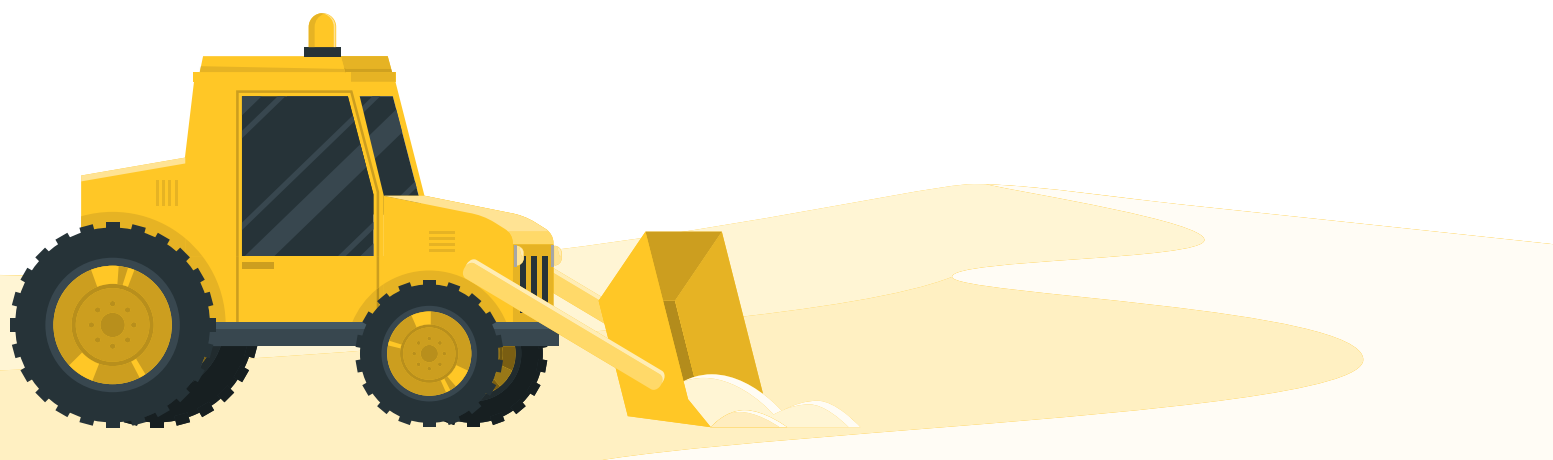
Purchase Risk Management

- To foster an effective procurement transformation, we propose a robust framework anchored in three key dimensions: a centralized procurement model, specialized procurement management, and enhanced collaboration between procurement and research teams. We establish a comprehensive management framework delineated by "three horizontals and three verticals". Within this structure, we identify 27 core links across eight major business modules, extending from the procurement phase to the final delivery. Furthermore, we empower three distinct value streams: the product life cycle, the integrated sales-production-supply life cycle, and the supplier management life cycle.
- We develop comprehensive full-lifecycle management systems that encompass various critical components, including supplier admission, process certification, quality, performance improvement and the management of freezing, withdrawal, and blacklisting processes. This initiative significantly enhances the overall planning of procurement requirements, pricing management, and supplier and pricing determination practices, augment our procurement compliance capabilities, and ensure robust quality risk control measures are in place.
- We propose the strategic implementation of localized procurement within our overseas factories. By adopting a "governance + empowerment" model, we aim to significantly enhance the procurement capabilities at the local level. This approach involves the systematic uploading of procurement business data and the vigilant monitoring of procurement function objectives, thereby providing essential guidance for procurement activities in each overseas region. In conjunction with this, we facilitate the development of a unified procurement process system tailored for our international operations. This unified system ensures the standardization of procurement practices while advancing the localized procurement across all regions.
- To advance our commitment to sustainability, we implement green procurement practices while enhancing policy risk management. As we promote localized procurement across our overseas regions, we prioritize adherence to environmental regulatory requirements specific to each project's location, and fortify our management of environmental risk assessments, as well as the auditing and certification processes of local suppliers.
- To promote the quality development of procurement, we enhance the recruitment and cultivation of technically proficient and value-driven personnel. Additionally, we strengthen support and training initiatives for suppliers, elevating their professional skills and fostering collaborative progress within our supply chain. This strategic focus will drive overall excellence and innovation.



Logistics Risk Management

- We implement green logistics practices by prioritizing the design and utilization of recyclable carriers. By analyzing the material flow characteristics within Vendor Managed Inventory (VMI) distribution scenarios, we develop a modular loading plan for recyclable carriers, significantly improving vehicle loading efficiency. Additionally, we establish a reverse logistics system to facilitate a closed-loop circulation model encompassing the VMI warehouse - primary manufacturing facility - VMI warehouse pathway. The integration of electric forklifts is also emphasized, to increase our coverage rate to an impressive 95.23%. Furthermore, we are committed to establishing a verifiable and traceable green recycling system by collaborating with accredited waste recycling organizations. This partnership ensures the effective recycling, treatment, and repurposing of packaging materials and waste products. We encourage circular packaging solutions, deploying customizable, renewable, and biodegradable materials to achieve packaging standardization and promote sustainability throughout our operations.
- We promote intelligent logistics warehousing by establishing a robust big data platform for IoT-enabled forklifts, optimizing our Distributed Supply Chain (DSC), Integrated Transportation Management System (ITMS), and Warehouse Management System (WMS), monitoring vehicle operations in a real-time manner and implementing a proactive warning mechanism. This enhances supply chain efficiency and ensures cohesive production processes.
- To enhance the efficiency of logistics transportation management, we implement a dynamic rolling transportation plan that effectively aligns transportation resources with demand. Establishing a comprehensive, end-to-end logistics transportation process helps integrate critical components, including order management, transportation scheduling, real-time tracking, and receipt confirmation. This integration significantly bolsters logistics efficiency. Additionally, advancing the customer service component ensures timely communication regarding planning updates. For oversized products such as port machinery, we develop specialized disassembly and transportation plans while securing the necessary oversized transportation resources and permits.



Strategies

XCMG Machinery capitalizes on its industry leadership to establish a synergistic coalition across the supply chain, implementing an integrated supply chain strategy that promotes collective success throughout the value chain. This approach generates significant market opportunities and growth potential for both upstream and downstream enterprises. By consolidating premium resources from the construction machinery industry's value chain, XCMG Machinery collaborates with leading original equipment manufacturers (OEMs), component manufacturers, universities, and research institutions to form the High-End Construction Machinery and Core Components Industry Technology Innovation Strategic Alliance. This initiative is instrumental in driving high-quality industry development, fostering advanced manufacturing clusters, enabling differentiated competition, enhancing in-house control over critical supply chain segments, and accelerating industrial innovation.

Paths for Creating Sustainable Supply Chain Competitiveness

Green

We have released the Green Supply Chain Management Policy, and set a dedicated Green Supply Chain Management Committee along with its operational office. This initiative covers key components, including the classification of procurement materials, risk management strategies, and selection and certification of suppliers, daily supplier management, product design, production or reuse, logistics, transportation, packaging management, and the disclosure of green information within the supply chain. Such comprehensive measures will facilitate in-depth collaboration among upstream and downstream enterprises, ultimately promoting high-quality green supply chain practices. By leveraging these management advantages, we can significantly reduce environmental risks, enhance energy and resource utilization, expand the market share of green products, and establish a green alliance that drives the industry's sustainable development forward.

Digital

Guided by a strategic focus on intelligent transformation, digital transformation, and networking, XCMG Machinery has built an integrated sales-production-supply management platform. This platform encompasses nine major systems, including Product Data Management (PDM), Customer Relationship Management (CRM), Sales and Operations Planning (S&OP), Material Requirements Planning (MRP), Distribution Supply Chain (DSC), Manufacturing Control Technology (MCT), Manufacturing Execution Systems (MES), Internet of Things (IoT), and Enterprise Resource Planning (ERP). Through an end-to-end integrated management approach, this platform comprehensively addresses all aspects of the value chain. The Company has developed a supply chain management model and an integrated planning system that reflect its unique characteristics, thereby facilitating information interconnectivity throughout the entire chain. This initiative not only enhances planning coordination capabilities but also digitizes the complete supply chain. As a result, XCMG Machinery is poised to create a new digital supply chain model and business ecosystem characterized by a user-centric focus, enhanced organizational collaboration, integrated sharing, and ecological intelligence. These advancements position XCMG Machinery to emerge as a global benchmark in efficiency and responsiveness while establishing its dominance as a key player within the industrial chain, characterized by the largest chain surplus.

Supplier capabilities

The XCMG Technical School, in collaboration with its dedicated faculty, offers targeted training programs aimed at enhancing the capacity of suppliers whose product and service quality requires improvement. This initiative addresses quality defects directly, providing essential support for equipment upgrades and the development of high-standard operational sectors.

XCMG Machinery actively promotes the evaluation of suppliers' low-carbon efficiency and offers specialized low-carbon training. A comprehensive evaluation index system has been established to assess low-carbon capabilities and parts within the construction machinery sector. This system utilizes rigorous and standardized evaluation methodologies to accurately reflect the low-carbon efficiency of suppliers. Additionally, leveraging its advanced product carbon footprint management system, the Company facilitates a transparent visual representation of the evaluation results.

XCMG Machinery is resolutely committed to enhancing ESG management within its supplier network by seamlessly integrating ESG principles throughout comprehensive processes, including supplier admission, evaluation, and performance assessment. The Company prioritizes critical areas such as labor rights protection, environmental conservation, occupational health and safety, and business ethics. To effectively identify and mitigate supplier risks, XCMG Machinery has instituted a sophisticated supplier classification management system that incorporates stringent qualification reviews, dynamic performance evaluations, and well-defined exit mechanisms, thereby significantly improving the stability and reliability of its supply chain.

Risk/opportunity type		Risk/opportunity description	Probability	Impact time-frame	Expected impact	Responses
Risk	Supply chain distribution risk	Disruptions in raw material supply or logistics caused by natural disasters, political events, or supplier issues may lead to production halts or operational delays.	Low to medium	Short to long term	Revenue decline	By implementing an intelligent dynamic inventory management system, the Company effectively analyzes fluctuations in market supply and demand, logistics lead times, and production capacity. This comprehensive approach proactively identifies potential risks of supply shortages.
	ESG risk	Inadequate environmental, social, and governance (ESG) performance or noncompliance by suppliers can significantly jeopardize the Company's reputation, disrupt supply chain operations, and increase regulatory risks.	Medium to high	Short term	Cost increase	The Company has implemented a robust supplier ESG qualification and ongoing monitoring system. All new suppliers are required to successfully complete specialized audits focused on environmental management systems (ISO 14001) and labor rights (SA8000), conducted by accredited third-party certifiers. Any identified non-compliance mandates immediate, time-bound corrective actions to ensure adherence to our sustainability and ethical standards.
Opportunity	Shared value chain upgrade opportunities	By leveraging multi-stakeholder collaboration to optimize resource allocation and enhance value creation, the Company effectively capitalizes on technological advancements, adapts to evolving market demands, and utilizes policy support.	Medium	Short to long term	Revenue increase	Through strategic technology collaboration, order prioritization, and the establishment of long-term partnership mechanisms, we prioritize the support of innovative supplier partners. By jointly advancing research and development in high-end components and enhancing intelligent manufacturing processes, we effectively propel the industrial chain toward higher value-added segments, thereby achieving significant dual wins in cost optimization and market share expansion.



Management of Impacts, Risks and Opportunities

The Company actively identifies and addresses risks and opportunities associated with sustainable supply chains, thereby reinforcing its risk management framework and ensuring the security and stability of its supply chain operations.

Identify

The Company has established clear management objectives and a comprehensive implementation framework, actively engaging in thorough assessments of suppliers and the supply chain. This rigorous approach underpins the development of effective risk management strategies.

Assess

By quantifying the probability and potential impacts of risks, the Company systematically classifies and prioritizes them based on severity and likelihood, thereby facilitating targeted identification and management.

Monitor and manage

Continuous monitoring of supply chain risks is maintained, allowing for dynamic tracking of potential vulnerabilities across both suppliers and the broader supply network.

Indicators and Objectives

The Company establishes pertinent indicators and objectives for sustainable supply management, enhances its prevention and control measures for supply chain risks, and significantly elevates the standards of sustainable supply chain management.



Case Supplier Low-carbon Training

In February 2024, XCMG Machinery hosted the Launch Meeting for its Carbon Footprint Management and Low-Carbon Supply Chain Construction for supply chain components, gathering nearly 100 suppliers and partners to collaboratively explore the future of low-carbon initiatives within the construction machinery sector. XCMG Machinery showcased its innovative product carbon footprint management platform, which is implemented across its supply chain alliance partners. This platform facilitates the comprehensive accounting, analysis, and management of carbon footprints associated with component products. In addition, XCMG Machinery has a robust reward-punishment framework and an admission adjustment mechanism to elevate suppliers' carbon footprint management capabilities. A thorough tracing and management system for supply chain component products was instituted, complemented by the formulation of a rigorous carbon index evaluation system. These concerted efforts exemplify the Company's commitment to achieving synchronous development with its suppliers.



XCMG Machinery has effectively leveraged its role as a leading enterprise within the industrial chain to collaborate with suppliers in establishing a low-carbon supply chain for construction machinery products. Throughout the process of acquiring component data from core first-tier suppliers, XCMG Machinery has implemented low-carbon training initiatives aimed at enhancing suppliers' understanding of product carbon footprints and their capabilities in carbon accounting and management. By the end of 2024, the Company conducted over 20 comprehensive low-carbon training sessions for its suppliers.



Joint Efforts for the Belt and Road

XCMG Machinery adheres to the guiding principle of extensive consultation, joint contribution, and shared benefits in its commitment to advancing the Belt and Road Initiative. This strategic approach positions the Company to capitalize on development opportunities, accelerate global industrial expansion, and reinforce its core internationalization strategy. By illuminating the “light of national industry” along the Silk Road, XCMG Machinery effectively promotes its global presence.

The Company’s evolution within the Belt and Road Initiative signifies a transition from traditional international trade to a more integrated model that encompasses the global industrial value chain. With nearly 40 overseas subsidiaries and over 300 distributors worldwide, XCMG Machinery has successfully exported its products to more than 190 countries and regions, achieving coverage in over 95% of the areas along the Belt and Road Initiative.

Highlight Products of XCMG Machinery along the Belt and Road



Inauguration of the Value-added Business Center by XCMG Machinery in West Asia and North Africa



XCMG Machinery contributes to the mining of the Simandou project, the world’s largest undeveloped iron ore mine



XCMG Machinery is extensively engaged in the construction of the Astana Light Metro.



XCMG Machinery is instrumental in the operations of Laos’s largest open-pit gold mine through its complete sets of equipment.



Case XCMG Machinery Visits Local Construction Machinery Market in Saudi Arabia

In June 2024, Yang Dongsheng, Chairman and Secretary of the Party Committee of XCMG Machinery, led a delegation to research the construction machinery market in Saudi Arabia. This initiative reflects the Company’s strategic commitment to harnessing new quality productive forces to accelerate its global expansion. During the visit, the team paid a visit to the Chinese Embassy in Saudi Arabia, where they met with Minister-Counselor Xie Qinsheng. Xie Qinsheng expressed strong appreciation for XCMG Machinery’s role in fostering Sino-Saudi relations and promoting bilateral cooperation. He affirmed the embassy’s unwavering support for Chinese-funded enterprises, exemplified by XCMG Machinery, and emphasized the importance of collaborating on the Belt and Road Initiative.



Labor Administration

XCMG Machinery rigorously safeguards the legitimate rights and interests of its employees by ensuring healthy and safe working conditions. The Company commits to prompt salary disbursement, actively participates in social security contributions, bolsters employee training initiatives, and implements an effective employee grievance system. Furthermore, XCMG Machinery has developed a robust talent cultivation system aimed at enhancing employee skills and competencies. By implementing a diverse array of cultural activities and supportive measures, the Company fosters a strong sense of belonging among its workforce, thereby cultivating a warm and inclusive working environment.

Lawful Employment

XCMG Machinery demonstrates a strong commitment to compliance with the Labor Law of the People’s Republic of China, the Labor Contract Law of the People’s Republic of China, and relevant regulations specific to project locations. The Company has developed ten internal policies, including the Labor Cost Management Policy, ensuring thorough legal alignment when signing employment contracts with employees. Furthermore, XCMG Machinery unequivocally prohibits child labor and forced labor, while firmly opposing all forms of discrimination in its labor practices. The Company maintains a comprehensive recruitment management system along with detailed internal regulations that govern the hiring process. Employment standards, including age and competency requirements, are strictly adhered to in compliance with relevant laws. To protect employees’ legitimate rights, institutional documents such as attendance and leave management systems are effectively implemented, ensuring access to legal vacation time. Furthermore, the Company has established a robust labor risk assessment mechanism, which evaluates potential risks—including child labor and forced labor—prior to the initiation of new projects. As of the end of 2024, the assessment has revealed no such risks, underscoring the Company’s commitment to responsible employment practices.

Indicator		Unit	2024 value
Total employees		/	27,791
Employees by gender	Male	/	23,548
	Female	/	4,243
Employees by age	30 years old below	/	8,314
	30 - 50 years old	/	17,606
	50 years old above	/	1,871
Employees by level	Senior managers	/	12
	Middle managers	/	2,658
	Average employees	/	25,121
Employees by region	Jiangsu Province	/	15,425
	Other regions in China	/	7,661
	Overseas	/	4,705
Domestic employees by ethnic group	Ethnic minority	/	4,477
	Ethnic majority	/	18,609
Employee turnover		%	3.09

Performance on Cybersecurity and Information Security Management

Employment contract rate

100 %

Percentage of employees with social insurances

100 %

Human Resource Management Awards



2024 Best Employer Brand among Global Enterprises (MOKA)



2024 AIGC Human Resources Pathfinder (Dayee)



2024 Model Leader (Beisen)



2025 Best Employer (51job)

Salaries and Benefits

XCMG Machinery is dedicated to establishing a comprehensive and competitive compensation and benefits system tailored to its workforce. The Company implements a market-driven, differentiated floating salary structure aligned with distinct positions, and employs a closed-loop performance management model that links compensation to measurable contributions. This approach effectively drives the attainment of performance objectives and fosters continuous improvement.

XCMG Machinery ensures all employees receive mandatory social protections, including the five social insurances and one housing fund. Beyond statutory benefits, the Company offers additional incentives—such as enterprise annuities, commercial insurance, birthday recognitions, and health screenings—thereby cultivating a supportive and motivating work environment.



Compensation Management Performance System

XCMG Machinery prioritizes the development of a robust compensation system as a critical foundation for executing its strategic objectives. The Company has implemented a value-driven, market-oriented, and differentiated compensation and incentive framework that effectively maximizes employee motivation, initiative, and creativity. By tailoring specialized compensation plans to diverse job categories, XCMG Machinery aligns remuneration with individual contributions and capabilities, ensuring a direct correlation between performance and rewards. This systematic emphasis on responsibility, outcomes, and value creation consistently energizes a broad spectrum of talent, reinforcing the organization's competitive advantage and fostering sustained excellence.

The Company has developed a comprehensive employee performance management system that strengthens the integration of individual and organizational performance. By systematically decomposing organizational objectives according to job functions and responsibilities, the Company establishes clear key performance indicators (KPIs) and critical tasks tailored to various roles and levels. Performance goals emphasize not only the achievement of organizational targets but also support employees' career development and alignment with corporate culture and values. Through objective and equitable evaluations, high-performing, high-value contributors—especially those instrumental in advancing the Company's intelligent upgrade, digital transition, and connectivity—are rewarded with competitive compensation packages and increased incentives. Employing a diversified compensation strategy combined with a scientifically grounded performance management system, the Company attracts and retains top talent, fosters collective commitment, and drives the synchronized growth of both employees and the enterprise.

Diverse Employee Communication Channels

XCMG Machinery employs a robust framework for employee engagement, exemplified by multiple channels for employee feedback, including regular convening of the employee representative congress, online platforms such as the Chairman's Mailbox and in-person sessions titled Face-to-Face with the Chairman. In 2024, 102 proposals put forth by employee representatives were meticulously tracked and implemented. Additionally, a mechanism has been instituted for employee representatives to conduct inspections, allowing them to actively participate in decisions affecting their welfare. This includes oversight of key areas such as the canteens and restrooms, the selection of products for centralized welfare procurement, and the inspection of cold protection supplies across various units. Such inclusive practices not only cultivate a strong spirit of democratic management but also significantly enhance employees' sense of ownership and investment in the Company's success.

The Company administers an annual anonymous online satisfaction survey that encompasses all permanent employees, labor dispatch workers, and interns across every business unit., and uses the feedback received to drive meaningful enhancements. An evaluation model, termed the Charm Index has been developed, which encompasses critical dimensions such as job cognition, organizational effectiveness, and opportunities for growth and development. The analysis of this model is conducted with a focus on key indicators and demographic groups, resulting in the formulation of an annual key improvement list accompanied by a detailed responsibility implementation plan. To address identified issues, the Company employs various strategies, including public announcements and subsequent follow-up visits to ensure accountability and transparency. In 2024, the employee satisfaction score reached an impressive 4.49 out of a possible 5 points.



Case “Listen to Your Voice” All-Employee Satisfaction Survey in 2024

In 2024, the Company implemented the Listen to Your Voice survey that covers all employees to gain insightful understanding of employee ideas and address their needs effectively. The survey data underwent rigorous thematic analysis, focusing on problem identification to inform strategic initiatives. By leveraging the findings, the Company pinpointed key areas for improvement, thereby enhancing employee happiness and satisfaction. This proactive approach fosters a united effort towards the Company's connotative and high-quality development, reinforcing its commitment to excellence.

Career Development

XCMG Machinery has developed a comprehensive talent development system that encompasses all employees. Centered on job qualifications, rank structures, and digital badges, the system establishes multidimensional career pathways that align closely with strategic objectives and business needs while integrating with performance management. This approach consistently cultivates a high-caliber workforce distinguished by both ethical standards and professional expertise. Through a stratified and categorized training framework—including onboarding, skill enhancement, and leadership development—XCMG Machinery combines internal training with external recruitment. Leveraging industry expert resources and digital learning platforms, the company delivers targeted, career-aligned training that drives sustained organizational growth and employee advancement.

Talent Training Measures by XCMG Machinery



Onboarding System Enhancement

- The Company has implemented a structured, phased onboarding training program that integrates standardized courses focused on cultural assimilation and job competency development. By combining online and in-person resources with practical, on-the-job guidance, the program effectively accelerates new employees' role adaptation and organizational alignment, ensuring a steady supply of highly qualified talent to frontline operations.



Skills Development Perfection

- The Company has established a comprehensive skill certification system encompassing multiple sequences and levels. By aligning job qualification standards with updated competency models, and leveraging specialized training, project-based practice, and digital learning resources, it ensures precise alignment between employee capabilities and business needs, thereby strengthening the organization's core skill reserves.



Management Competency Framework Establishment

- Grounded in strategic orientation and business breakthroughs, a digital leadership development model has been established to elevate the digital transformation planning and execution capabilities of managers across all levels. Integrating systematic talent assessments and tiered leadership development, this approach cultivates management personnel endowed with practical experience and global perspectives, effectively driving the enterprise's transformation and sustainable growth.

XCMG Machinery' s Employee Training Performance

Indicator	Unit	2024 value
Internally promoted employees	/	914
Training expense	RMB 10,000	1,939
Total training sessions	/	20,945
Total training duration	Hours	2,380,000
Total training participation	/	1,550,000
Including: participation by senior managers	/	180
participation by middle managers	/	150,375
participation by average employees	/	1,393,445



Case

The Ninth Season of “XCMG Interns” and the Training Camp for XCMG’s Outstanding Overseas Employees

In October 2024, XCMG Machinery proudly hosted the ninth season of the XCMG Interns program alongside a specialized training camp for distinguished overseas employees. Chairman Yang Dongsheng, welcomed exemplary staff from 17 countries, personally attending the graduation ceremony. During the event, honorary certificates were awarded to outstanding individuals and exemplary teams, acknowledging their significant contributions to XCMG’s internationalization strategy. This recognition embodies their potential for continued excellence and innovation in the industry.



Employee Care

ESG Management

XCMG Machinery has newly started a comprehensive support program for the families of overseas employees by establishing a one-to-one assistance and communication mechanism tailored for these families. Each unit is empowered to provide funds and gifts to employees stationed abroad as well as their families during traditional festivals, ensuring that care is delivered effectively and meaningfully. This initiative not only reinforces the Company's commitment to supporting its overseas staff but also assures their families of the Company's warmth and dedication.

In 2024, the Company engaged with employees in need, extending support to those who were ill or hospitalized and their families. Over the Chinese New Year and Mid-Autumn Day festivals, gifts were offered to 45 employees, while a total of 4,879 visits and support were recorded across all departments. The investment in these initiatives amounted to RMB 2.049 million, clearly reflecting XCMG Machinery's unwavering commitment to the well-being of its employees and their families on multiple levels.

Percentage of employees with five insurances
and one housing provident fund

204.9 RMB 10,000



Visiting employees in difficulty



One-to-one assistance and communication mechanism
tailored for families of employees working overseas

Caring for Female Employees

XCMG Machinery has established a Women Employees' Committee, and each unit has formally signed the Special Collective Agreement on the Protection of Women Employees' Rights and Interests, thereby standardizing the commitment to uphold these rights across the organization. The Company has implemented a series of educational initiatives, including legal awareness programs and health-focused lectures specifically designed for female employees. Additionally, it has enacted a range of supportive measures, including protections for women in childbearing period, pregnancy period, lactation period, perimenopausal period and menopausal period, health check-ups and screenings for breast and cervical cancers. In a continued effort to enhance support for female employees, the Company established two new women service stations at provincial and municipal levels in 2024.

Examples of Caring for Female Employees



Lectures on women health



Nursing room



Women service stations



The Advanced Female Employees
Commendation Meeting, along with the
Reading for Growth Women's Story
Competition

Employee Activities

The Company consistently offers a diverse array of cultural and sports activities, including sports competitions, artistic performances, team-building exercises, and birthday celebrations. These initiatives not only provide employees with enriching options for their leisure time but also foster enhanced interaction and collaboration among colleagues. Moreover, these activities significantly contribute to the overall physical and mental well-being of employees.



The Company effectively leverages the staff reading room to enhance its intellectual environment. Through the initiative Reading for Growth, it actively promotes the development of a knowledge-driven culture.



Annual meeting activities for overseas employees



The Company consistently organizes competitive swimming events for its staff.



The Company hosted the 11th XCMG Staff Sports Meeting, a remarkable event that drew nearly 20,000 employees. This gathering not only highlighted the robust and dedicated spirit of XCMG employees but also exemplified their commitment to excellence and hard work in the modern era.



The Company facilitates a range of sports activities, including table tennis tournaments, basketball games, badminton competitions, and football matches.

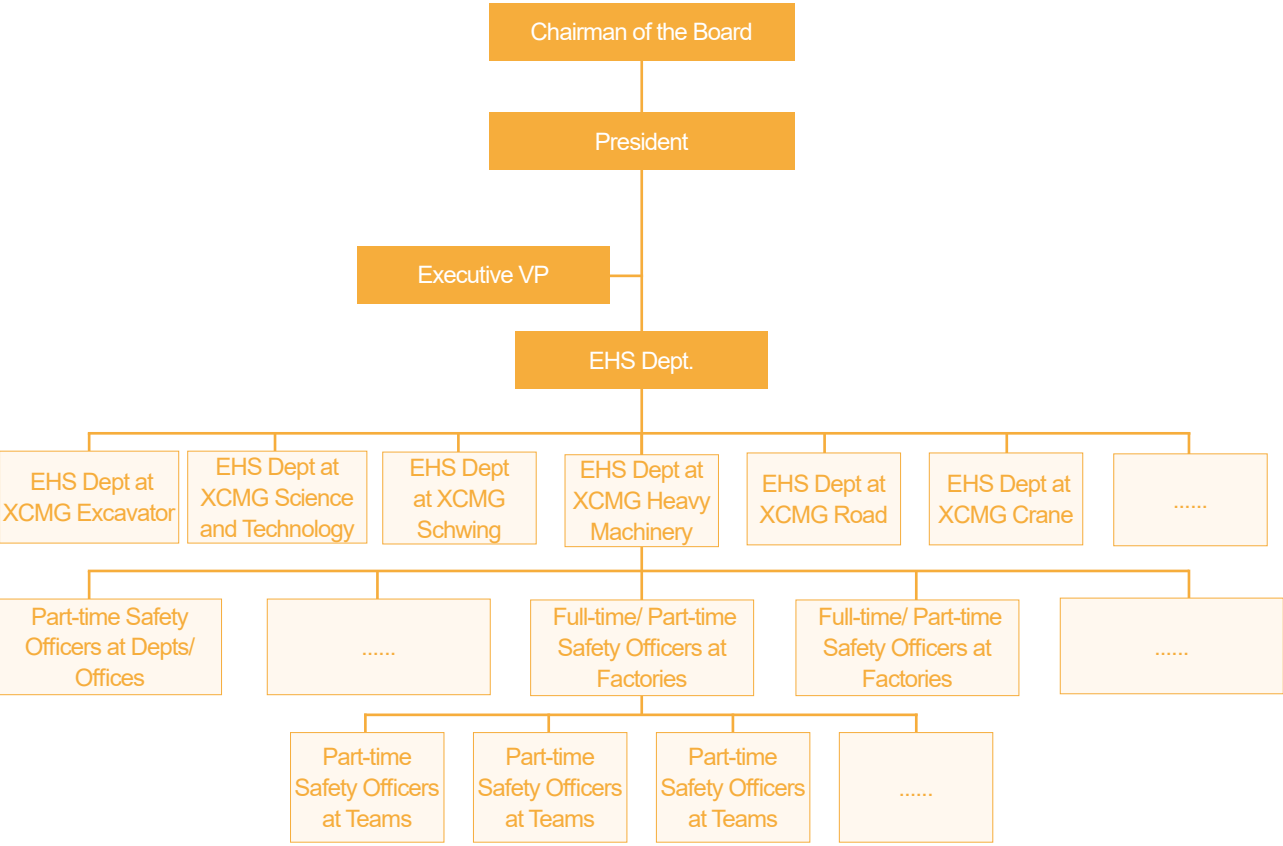
Occupational Safety and Health

XCMG Machinery prioritizes occupational safety by consistently enhancing its health and safety management system. The Company establishes comprehensive health and safety objectives, delineates effective management strategies, and enforces specific responsibilities. As a result of these rigorous measures, 2024 witnessed a commendable record, with no health and safety disputes reported within the Company.

Management System

Governance

XCMG Machinery adheres rigorously to 15 internal occupational health and safety protocols including XCMG Ten Safety Red Lines. In 2024, the Company made significant enhancements to its occupational health and safety management system, revising key documents such as the Occupational Health and Safety Training and Education Policy, and the Administrative Measures for the Withdrawal and Use of Work Safety Expenses. A robust organizational structure has been established, with the chairman serving as the primary accountability figure for safety supervision and occupational health monitoring across the Company. We consistently implement standardized safety protocols and establish measurable development targets for occupational health and safety. We ensure the continued validity of our occupational health and safety management system certificate and develop comprehensive policies and measures to guarantee the health and safety of our contractors. Regular internal and external audits are conducted to assess health and safety practices, identify management deficiencies, and implement corrective actions. This proactive approach ensures continuous improvement in health and safety performance and guarantees the effective functioning of the system.



XCMG Machinery’ s Organizational Structure for Safety Management

Occupational Health and Safety Performance of XCMG Machinery

Indicator	Unit	2024 value
Employee and contractor deaths	/	0
Number of deaths and injuries	/	0
Casualty rate	%	0
Lost work hours due to safety incidents	Hours	17,464
Percentage of severely injured employees	%	0
Percentage of mildly injured employees	%	0.0739
Percentage of injured contractors	%	0
Expense for work injury insurance	RMB 10,000	2,781
Percentage of employees covered by work injury insurance	%	100
Incidence rate of occupational diseases	%	0

Strategies

The Company effectively identifies and manages risks associated with occupational health and safety. By proactively formulating preventive strategies, it significantly mitigates both the likelihood and impact of potential risks while actively seizing opportunities to enhance workplace safety and well-being.

Type	Risk/opportunity description		Probability	Impact time-frame	Expected impact	Responses
Risk	Production and operations disruptions	In the event of an occupational health or safety incident, operations may experience disruption or complete suspension. Furthermore, substantial resources will be necessary to manage the incident, rehabilitate the site, and implement subsequent enhancements effectively.	Medium	Medium to long term	Cost increase	We will steadfastly enhance our occupational health and safety management practices by implementing comprehensive training programs, thereby elevating all employees' competencies and awareness regarding occupational health, safety, and protection.
Opportunity	Digitalized management	The integration of advanced digital technologies, including big data analytics, artificial intelligence (AI), and the Internet of Things (IoT), facilitates real-time monitoring and sophisticated analysis of safety data. This approach enhances the accurate identification of potential risks and accelerates response times. Additionally, it promotes effective information sharing and collaboration, thereby significantly improving decision-making efficiency and execution effectiveness.	High	Medium to long term	Cost decline	We will implement advanced management tools to elevate safety standards and optimize production efficiency. Additionally, we will establish a digital training platform to enhance the effectiveness of occupational health and safety training.

Management of Impacts, Risks and Opportunities

The Company consistently identifies and manages occupational health and safety (OHS) risks through proactive prevention strategies. This approach effectively minimizes both the probability and severity of incidents while leveraging opportunities to enhance overall safety performance.

Graded Control

XCMG Machinery adheres rigorously to all pertinent national and local laws, regulations, and guidelines concerning workplace safety and occupational health. The Company is committed to the continuous enhancement of its systematic approach to the classification and control of safety risks. By the end of 2024, the Company experienced no major safety risk.



Safety Risk Warning Sign for Charging Room (Area) in XCMG Machinery

Occupational Health and Safety Risk Management Measures

Multi-level safety inspection

The Company implements a multi-tiered safety inspection framework for the timely detection and mitigation of hazards associated with production equipment and workplace environments. Annual involvement of all employees in risk identification and professional assessments ensures a thorough evaluation of all potential risks. The Company has developed and implemented the Production Safety Accident Emergency Response Plan, each branch and subsidiary has created comprehensive plans, specialized plans, and on-site disposal protocols to minimize the potential impact of risks.

Identification of risks associated with occupational disease hazards

The Company systematically engages qualified third-party firms to conduct comprehensive assessments of occupational disease hazards. This includes the identification and evaluation of relevant risk factors. Throughout the production process, the Company ensures that its occupational disease prevention facilities are fully operational, with regular inspections to monitor their efficacy. Furthermore, we prioritize robust training programs for employees, equipping them with essential knowledge regarding occupational disease prevention. The Company provides standardized personal protective equipment and enforces stringent supervision mechanisms to guarantee that compliance in wearing these articles consistently reaches 100%.

Graded control of risks

The Company formulates detailed and targeted risk control measures, and has them updated on a regular basis. In pursuit of improved emergency response efficiency, the Company has installed risk warning signs and emergency response cards at critical locations. These resources clearly delineate simplified emergency procedures, essential contact numbers, and the precise locations of emergency supplies. In 2024, a comprehensive investigation was conducted to evaluate the safety, principal risks, and charging control measures associated with lead-acid batteries and lithium iron phosphate batteries. The charging area was identified as a vital component of risk management, leading to the standardization of Warning Signs for Important Safety Risks in the Charging Area throughout the facility.

Identification of Safety Hazards

The subsidiaries of XCMG Machinery routinely conducts hazard identification and mitigation efforts, including comprehensive inspections, specialized examinations, safety checks during holidays, middle and night shift inspections, and daily patrols, and urges the prompt correction.

Performance on Safety Hazard Identification

Campaigns to spot safety hazards

3,992

Correction rate of safety risks identified

100 %



Case

XCMG Machinery Completes a Comprehensive Safety Risk Remediation Campaign for the Painting System

In 2024, drawing from the critical lessons learned from fire incidents both within the industry and beyond, XCMG Machinery investigated fire risks across 165 painting booths across various units. Following a thorough risk assessment, XCMG Machinery implemented significant enhancements to its safety infrastructure, including the installation of automatic fire extinguishing systems in 33 painting booths and the incorporation of fire dampers or automatic extinguishing systems in 169 exhaust ducts. These strategic improvements unequivocally bolster the intrinsic safety of the painting system.



Safety Emergency Drills

XCMG Machinery's branches and subsidiaries carry out emergency drills as per the annual emergency drill plan. These drills encompass scenarios like mechanical injuries, vehicle accidents, confined spaces, and fires. They serve to evaluate the response time, refine emergency protocols, replenish emergency supplies, and enhance the overall emergency handling capabilities through rigorous training of emergency teams.

Indicators and Objectives

The Company actively establishes robust occupational health and safety management indicators and objectives, thereby continuously enhancing its management standards in this critical area.

2024 Occupational health and safety indicators

In 2024, the Company allocated a substantial investment of RMB 102.9221 million towards health and safety initiatives. This funding was strategically directed towards key areas, including the construction of a digital system, the smart transformation and digital networking of safety facilities, the identification and rectification of potential hazards, comprehensive occupational health and safety training, and the provision of personal protective equipment. The outcomes of these efforts were remarkable: the Company achieved zero fatal accidents among employees and contractors, as well as zero casualties, underscoring its unwavering commitment to workplace safety.

2025 Occupational health and safety targets

Guided by the principles of “full funding allocation” and “maximized utilization of resources”, the Company successfully implemented several initiatives: upgrades to safety protection for conventional equipment, risk control measures for automated systems, maintenance of aging machinery, enhancement of emergency response capabilities, and employee reward programs for hazard reporting.

Safety Culture

XCMG Machinery issues its annual Company No. 1 document at the start of each year to guide the year-round safety and environmental protection initiatives, and refine safety objectives and indicators, ensuring targeted and actionable tasks. The Chairman of the Board and General Managers of branches and subsidiaries sign Business Responsibility Commitment and HSE Responsibility Commitment, ensuring that safety responsibilities are thoroughly implemented at all levels, down to average employees.

XCMG Machinery has strategically implemented an Occupational Health and Safety Training Policy. The Company invests substantial resources in this initiative to elevate the safety awareness and emergency response capabilities of both employees and contractors. This endeavor aims to standardize workplace behaviors and substantively improve the overall safety literacy within the Company. In 2024, XCMG Machinery organized the Workplace Safety Month during which, a raft of safety training, drills, and promotional events including safety knowledge lectures, safety knowledge competition, emergency evacuation drills, simulated accident handling were held to foster a strong culture of intrinsic safety.

Occupational Safety and Health Training Performance

Total training sessions

2,489

Percentage of employees covered by training

100 %

Total participation

41,589

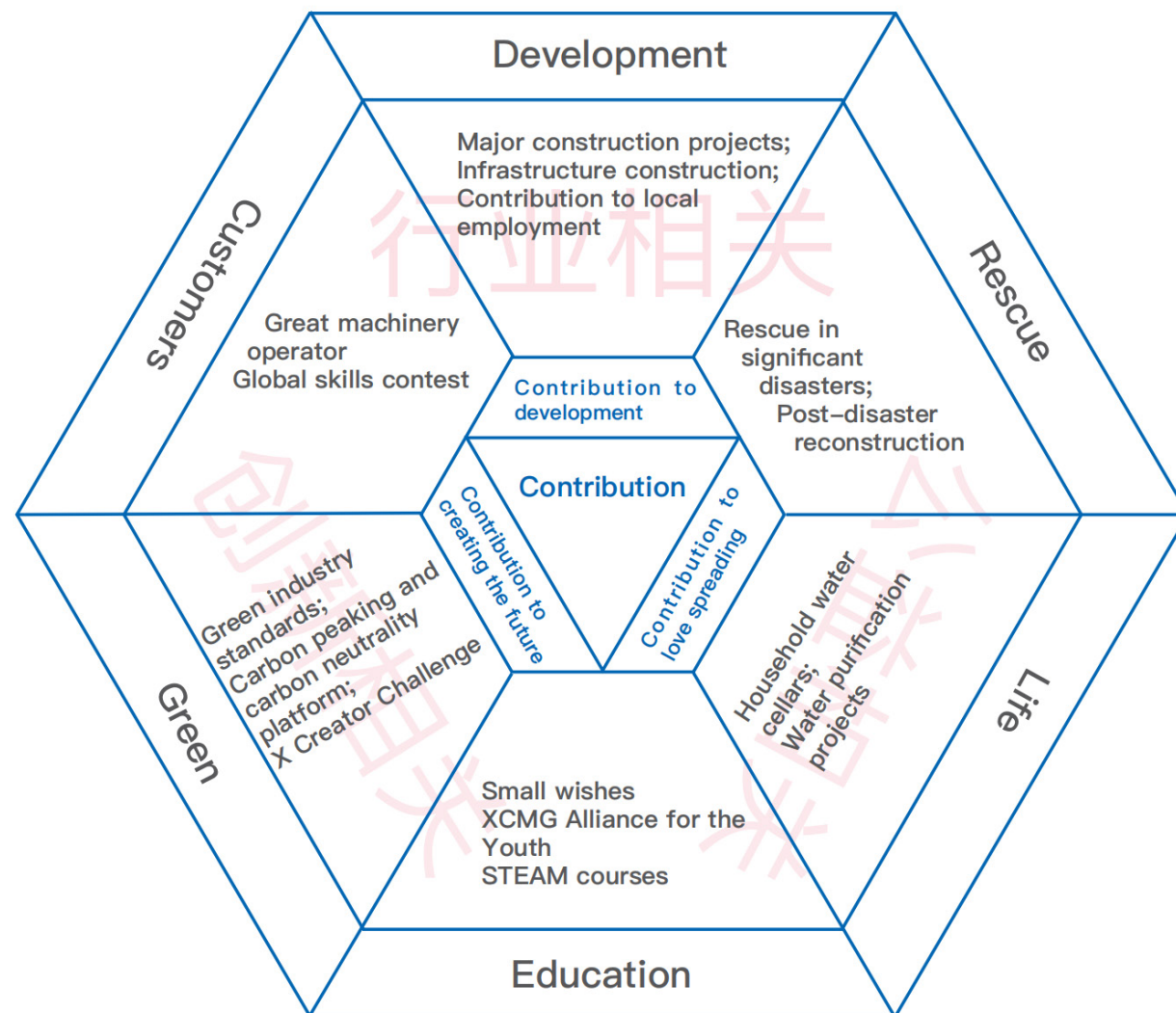
Percentage of contractors covered by training

100 %



Community Relations

XCMG Machinery is committed to cultivating a responsible brand identity that aligns with its core value of Help with Love. The Company emphasizes three foundational pillars: contributing to development, creating a sustainable future, and fostering growth through compassion. Its initiatives encompass six critical areas: rescue operations, health promotion, educational support, environmental sustainability, customer service excellence, and overall development. Through actively engaging in global social welfare activities, XCMG Machinery not only shapes a robust and responsible brand image but also extends its care and commitment to communities worldwide. This strategic engagement significantly enhances the brand's reputation.



XCMG Machinery's Global Responsible Brand System

Charity

XCMG Machinery has developed a robust and sustainable system for global public welfare operations, effectively promoting the ethos of XCMG's Great Love. The Company engages in worldwide public welfare initiatives, demonstrating its commitment to social responsibility through active participation in volunteer services, charitable giving, and educational support programs. Notably, in 2024, XCMG Machinery conducted over 200 volunteer activities.



Blood donation activity

Volunteers from XCMG Machinery



The XCMG STEAM Courses in 2024 embed the aspirations of construction machinery within the minds of youth.





Case XCMG Machinery Begins the Fifth Phase of the African Water Cellar Project

In 2024, XCMG Machinery, in collaboration with the China Foundation for Rural Development, launched the fifth phase of the African Water Cellar Project. This initiative is set to construct 40 water cellars in the arid Oromia, Ethiopia. To date, XCMG Machinery and the China Foundation for Rural Development have successfully established a total of 201 water cellars across various underdeveloped regions in Africa.



Case XCMG Machinery Conducts the Micro-Wish Responsibility Brand Campaign

In 2024, the Company's Global Micro-Wish Responsibility Brand Activity initiative was relaunched. Branches and subsidiaries deepened collaborations with communities, charitable organizations, and NGOs, with a focus on education, environmental protection, health, and other areas. Their goal was to address social issues, promote sustainable development, and fulfill corporate social responsibility through specific project initiatives.



Rural Revitalization

XCMG Machinery is fully committed to the national rural revitalization strategy, prioritizing the procurement of agricultural products and raw materials from impoverished regions. This initiative effectively broadens farmers' sales channels and enhances their income sources. Furthermore, XCMG Machinery has invested in the training of numerous technical professionals specifically for rural areas, thereby bolstering local self-development capabilities.



Case XCMG Excavator Conducts Outreach to Households in Need

In September 2024, XCMG Excavator, in collaboration with its dealer Guizhou Hengdaxin and key clients, conducted outreach efforts to assist households in need by promoting community support. The initiative involved targeted procurement of agricultural products, specifically passion fruits, from Liaoli Village. Furthermore, XCMG Excavator formalized a public welfare rescue agreement addressing geological disaster management with the village committee. Liaoli Village has been designated as a pilot site for public welfare initiatives, set to receive financial resources and excavator equipment from XCMG. This endeavor will launch the Industrial Co-prosperity Public Welfare Plan.



Social Rescue

XCMG Machinery has consistently demonstrated its commitment to safeguarding communities through decisive action in response to natural disasters and emergencies. The Company swiftly mobilizes professional rescue teams and essential equipment to the affected areas, ensuring rapid emergency support. In the face of earthquakes, floods, and other calamities, XCMG Machinery plays a vital role in the disaster relief effort, aiding in the restoration of normalcy in both production and daily life for affected populations. This proactive engagement eloquently exemplifies XCMG Machinery's core values of Responsibility, Virtue and Fortitude, thereby establishing the Company as a formidable leader in the realm of social rescue initiatives.



Case XCMG Machinery Takes a Role in the Flood Relief Assistance in Chiang Mai, Thailand

In October 2024, Thailand faced significant challenges due to continuous and heavy rainfall, leading to widespread flooding across various regions, including Bangkok. In response to an urgent appeal from the Chinese Embassy in Thailand, XCMG Machinery demonstrated its commitment to corporate social responsibility by actively engaging in local flood relief efforts. Collaborating with its Thai dealer and the Chonburi Province Department of Commerce, XCMG Machinery successfully organized the procurement of disaster relief supplies valued at over 1 million Thai baht. A dedicated team of employees was mobilized to deliver these essential supplies to affected areas such as Chiang Rai, effectively supporting communities in their recovery during this critical time.



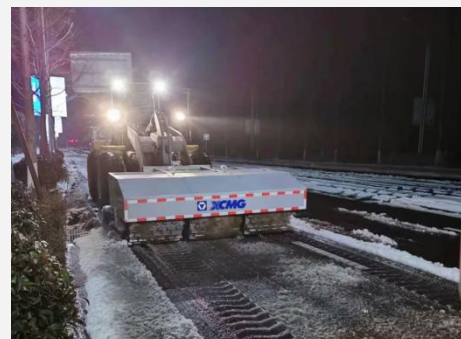


Case Emergency Rescue Equipment of XCMG Machinery Sent to Regions across the Country

In October 2024, while the People's Republic of China celebrated its 75th anniversary, XCMG Machinery made significant strides in enhancing the nation's disaster response capabilities. The Company deployed scores of sets of advanced, high-precision emergency rescue equipment to various regions across the country. This initiative not only reflects XCMG's commitment to national service but also constitutes a substantive contribution to improving China's disaster prevention, mitigation, and relief efforts. The array of equipment, including aerial ladder fire trucks, drainage emergency vehicles, multifunctional fire trucks, and demolition robots, is designed for diverse emergency scenarios, such as high-rise fires, geological disasters, and urban flooding. This endeavor underscores XCMG Machinery's technological prowess in emergency rescue and exemplifies the responsibilities embraced by a leading nation in crisis management.



When Xuzhou faced an unexpected blizzard, XCMG Machinery promptly triggered its emergency response plan, mobilizing an impressive 121 sets of equipment and deploying 300 skilled employees overnight. In the harsh temperatures, these dedicated teams effectively cleared snow and melted ice, tirelessly working for 30 consecutive hours to restore seamless traffic flow within the city.



When Meizhou experienced severe rainfall and rampant mountain torrents, XCMG Machinery quickly dispatched excavators, loaders, and other vital machinery. Their swift actions enabled the repair of collapsed roads and the stabilizing of breached dikes.



In various regions across the nation—including Guangdong, Guangxi, Hunan, Hubei, Sichuan, Shaanxi, Gansu, Anhui, and Hainan—XCMG Machinery has actively engaged in flood prevention and emergency rescue efforts, establishing critical defenses for communities affected by disasters.



For the fourth consecutive year, XCMG Machinery has participated in the Emergency Mission drills organized by the State Council. During these drills, 35 units of advanced, high-precision equipment were strategically mobilized in Jinhua, Zhejiang. This comprehensive deployment, encompassing tasks from breach containment to drainage and emergency rescue operations, underscores the formidable capabilities and reliability of XCMG Machinery.



Appendix I: Quantitative Performance Sheet

Governance

Indicator	Unit	2024 value
Number of general meetings	/	2
Number of proposals approved at general meetings	/	13
Proportion of independent directors	/	1/3
Proportion of female directors	/	2/9
Board meetings	/	13
Expected attendance	/	117
Actual attendance	/	117
Proposals considered	/	50
Supervisory Committee meetings	/	5
Actual attendance	/	35
Proposals considered	/	15
Members of senior management	/	12
Risk control and compliance training sessions	/	54
Risk control and compliance training duration	Hours	152
Risk control and compliance training participation	/	4,787
Correction rate of issues	%	100
Audits on operational performance of overseas subsidiaries	/	18
Number of subordinate company achieved recognition as star-level enterprises in the realm of industrial information security protection.	/	3
Information security training sessions	/	3
Information security training duration	Hours	6
Information security training participation	/	300
Number of data breach incidents	/	0

Indicator	Unit	2024 value
Total training sessions	/	707
Including: Manager training sessions	/	4
Employee training sessions	/	703
Total training duration	Hours	711
Including: Manager training duration	Hours	8
Employee training duration	Hours	703
Business Ethics, Anti-bribery and Anti-corruption Training	/	67,334
Including: Manager participation	/	735
Employee participation	/	66,599
Employees covered by the training	%	100
Supplier training sessions	/	6
Suppliers covered by the training	/	5,531
Supplier training duration	Hours	9
R&D cost	RMB 10,000	559,790.76
Number of R&D employees	/	7,619
IPR expenditure	RMB 10,000	2,810.59
Total patents authorized in the year	/	1,675
Standards newly formulated in the year	/	56
Standards for which the Company played a role in their formulation in the year	/	33
Industrial standards	/	13
Group standards	/	10
Innovative R&D projects	/	581
Accumulative authorized patents	/	11,981

Environmental

Indicator	Unit	2024 value
Direct greenhouse gas emissions (Scope 1)	Tons	102,363.22
Indirect greenhouse gas emissions (Scope 2)	Tons	279,299.80
Total greenhouse gas emissions	Tons	381,663.02
Environmental training sessions	/	146
Environmental training duration	Hours	110,501
Environmental training participation	/	43,795
Percentage of employees covered by environmental training	%	100
Total hazardous substance and waste generation	Tons	5,972.83
Including: Organic solvent waste and waste containing organic solvent	Tons	66.36
Mineral oil waste and waste containing mineral oil	Tons	995.34
Oil/water, hydrocarbon/water mixture or emulsion	Tons	552.63
Dye and paint waste	Tons	2,687.23
Surface treatment waste	Tons	412.05
Waste containing chromium	Tons	26.53
Waste containing lead	Tons	73.87
Waste acid	Tons	178.27
Other waste	Tons	980.55
Percentage of hazardous substances and waste disposed under laws	%	100
Total wastewater discharge	Tons	957,892.56
Industrial wastewater discharge	Tons	414,992.76
Domestic wastewater discharge	Tons	542,899.80
COD discharge	Tons	61.08
BOD discharge	Tons	8.93
Ammoniacal nitrogen	Tons	4.16
Total nitrogen	Tons	12.41
Total phosphorus	Tons	0.87
Suspended solids	Tons	11.67

Indicator	Unit	2024 value
Chromium (VI)	Tons	0.23
Total chromium	Tons	0.000018
Total nickel	Tons	0.000375
Total waste gas emission	10,000 m ³	1,728,037.39
Including: Particles	Tons	102.69
Sulfur dioxide	Tons	9.98
Nitrogen oxides	Tons	40.46
NMHC VOCs	Tons	117.98
Packaging materials consumption	Tons	4,931.32
Consumption of recycled packaging materials	Tons	3,748.77
Recycling rate of packaging materials	%	76.02
Total water consumption	Tons	2,443,940
Water consumption reduction compared to 2023	Tons	414,880
Water consumption target for the next year	Tons	3,103,991
Comprehensive energy consumption per RMB 10,000 value of output	tce/ RMB 10,000	0.01508
Electricity consumption	10 MWh	48,461.9
Steam consumption	GJ	14,907.19
Natural gas	m ³	22,347,600
Gasoline	Tons	1,687.57
Diesel	Tons	7,938.81
Comprehensive energy consumption target per RMB 10,000 value of output for the next year	tce/RMB 10, 000	0.01463
New energy consumption	kWh	9,028.44
Percentage of new energy consumption	%	18.63

Social

Indicator		Unit	2024 value
Rate of product/service-related complaints		%	0.21
Rate of responses to product/service-related complaints		%	100
Product recall rate due to ESG factors (such as safety and environment)		%	0
Customer satisfaction		%	95.32
Total employees		/	27,791
Employees by gender	Male	/	23,548
	Female	/	4,243
Employees by age	30 years old or below	/	8,314
	30 - 50 years old	/	17,606
	50 years old above	/	1,871
Employees by level	Senior managers	/	12
	Middle managers	/	2,658
	Average employees	/	25,121
Employees by region	Jiangsu Province	/	15,425
	Other regions in China	/	7,661
	Overseas	/	4,705
Domestic employees by ethnic group	Ethnic minority	/	4,477
	Ethnic majority	/	18,609
Employee turnover		%	3.09
Employment contract rate		%	100
Percentage of employees with social insurances		%	100
Internally promoted employees		/	914
Training expense		RMB 10,000	1,939
Total training sessions		/	20,945
Total training duration		Hours	2,380,000

Indicator		Unit	2024 value
Total training participation		/	1,550,000
Including: participation by senior managers		/	180
participation by middle managers		/	150,375
participation by average employees		/	1,399,445
Total employee assistance expense		RMB 10,000	204.9
Employee and contractor deaths		/	0
Number of deaths and injuries		/	0
Casualty rate		%	0
Lost work hours due to safety incidents		Hours	17,464
Percentage of severely injured employees		%	0
Percentage of mildly injured employees		%	0.0739
Percentage of injured contractors		%	0
Expense for work injury insurance		RMB 10,000	2,781
Percentage of employees covered by work injury insurance		%	100
Incidence rate of occupational diseases		%	0
Campaigns to spot safety hazards		/	3,992
Correction rate of safety risks identified		%	100
Occupational Safety and Health Training	Total training sessions	/	2,489
	Total participations	/	41,589
	Percentage of employees covered by training	%	100
	Percentage of contractors covered by training	%	100
Volunteering activities		Session	200+

Appendix II: Feedback Form

Respected readers:

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

1. Your overall assessment of our ESG performance is:

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

2. Your overall assessment of this report is:

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

3. What do you think of our performance in communication with stakeholders?

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

4. What do you think of our performance in corporate governance?

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

5. What do you think of our performance in environmental management?

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

6. What do you think of our performance in social responsibility?

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

7. What do you think of our performance in ESG?

☐ Excellent ☐ good ☐ average ☐ bad ☐ very bad

8. What are your opinions and suggestions for our ESG performance and this report?



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