



中国铁建

中國鐵建股份有限公司

China Railway Construction Corporation Limited

(A joint stock limited company incorporated in People's Republic of China with limited liability)

Stock Code: 1186

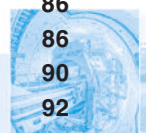
2024

Annual Sustainability Report



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I. Reporting Standards

China Railway Construction Corporation (CRCC) has integrated social responsibility and ESG reports in accordance with regulatory requirements to compile the Sustainability Report. This report is the 17th specialized release by CRCC concerning social responsibility and ESG, reflecting the company's pursuit of sustainable development, practice of ESG principles, and fulfillment of social responsibilities.

REPORTING FREQUENCY

This is an annual report.

BASIS OF PREPARATION

Guidance on High Standards of Social Responsibilities by Central Enterprises in the New Era issued by the State-owned Assets Supervision and Administration Commission (SASAC) of the State Council

Guidelines on Self-Regulatory Supervision of Listed Companies No. 4 – Sustainability Report Preparation issued by the Shanghai Stock Exchange

Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited

Sustainability Reporting Standards (2021) issued by the Global Sustainability Standards Board (GSSB)

ISO 26000:2010 Guidance on Social Responsibility issued by the International Organization for Standardization

Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG5.0) issued by Chinese Academy of Social Sciences

REPORTING PRINCIPLES

Materiality Principle: This report focuses on topics that, based on the ESG materiality assessment results approved by the company's board of directors, could significantly impact stakeholders and the company.

Quantification Principle: The data in this report is sourced from the company's official documents, statistical reports, financial statements, and ESG information that has been collected, aggregated, and audited by the company.

Balance Principle: This report reflects objective facts and discloses both positive and negative information.

Consistency Principle: This report employs consistent statistical methods, providing a three-year comparison of key quantitative indicators to illustrate trends in performance levels.



I. Reporting Standards (continued)

REPORTING SCOPE

This report covers the period from January 1, 2024, to December 31, 2024, although some content extends beyond this timeframe. The scope of the report encompasses China Railway Construction Corporation Limited and its subsidiaries. By analyzing corporate activities, business relationships, external environments, and stakeholders, and by assessing against domestic and international disclosure standards, we identify critical issues. Consequently, the report includes multiple sectors such as engineering contracting, planning and design consulting, and environmental protection. Unless otherwise noted, the scope of this report remains substantially unchanged from that of previous years.

DATA CLARIFICATION

Any financial data in this report that differs from the annual report should refer to the annual report for accuracy. Other data originates from internal company statistics. Monetary amounts mentioned in this report are in Renminbi unless otherwise specified. To facilitate your reading, China Railway Construction Corporation Limited may also be referred to as “CRCC”, “the company”, or “we”.

QUALITY ASSURANCE

We strive to ensure the accuracy, completeness, and balance of the report content, and we aim for innovation and readability. The content of this report contains no false records, misleading statements, or significant omissions.

REPORT ACCESS

This report is available in both print and electronic versions. To obtain the electronic version of this report, please visit the CRCC website: www.crcc.cn.

For a print version or to provide suggestions and feedback on this report, please contact the Party Committee Work Department.

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II. Statement of the Board of Directors

The Board of Directors places high importance on ESG management, deeply integrating it into the company's development strategy, key decision-making processes, and the entire production and operation workflow. This integration has established a clear, well-defined governance structure, enabled effective control of ESG-related risks and promoted continual enhancements in corporate governance. The Board, serving as the highest decision-making body for ESG matters, bears ultimate responsibility. The Audit and Risk Management Committee, a body within the Board, is tasked with identifying environmental, social, and governance risks and opportunities, setting strategic goals, and overseeing their implementation. The company prioritizes ESG governance; through internal and external analyses, it identifies key issues and management priorities, and establishes target management mechanisms. The Board annually reviews progress towards these goals, devises control measures, delegates responsibilities, incorporates ESG metrics into performance evaluations, and rigorously manages ESG risks to enhance prevention capabilities and ensure the company's stable, sustainable development.



III. About Us

3.1 COMPANY PROFILE

China Railway Construction Corporation Limited (abbreviated in Chinese as 中国铁建 and in English as CRCC) was established by the China Railway Construction Group Limited, a mega-scale construction enterprise managed by the State-owned Assets Supervision and Administration Commission of the State Council, originally known as the People's Liberation Army Railway Troops. In 2024, the company ranked 43rd on the Global 500 list of *Fortune*.

The company is globally recognized as a contractor in construction engineering, an operator of infrastructure, a manufacturer of high-end equipment, and a developer of strategic new industries. Our operations encompass engineering contracting, planning and consulting, investment operations, real estate development, industrial manufacturing, materials logistics, environmental sustainability, industrial finance, and other emerging sectors, spanning 148 countries and regions worldwide. The company maintains a complete industrial chain that includes scientific research, planning, survey, design, construction, supervision, operation, maintenance, and investment financing, capable of providing one-stop comprehensive services to our clients. We have established a leading position in the industry in the design and construction of plateau railways, high-speed railways, expressways, bridges, tunnels, and urban rail transit.

The company continuously enhances its core functions and strengthens its competitive edge. It is pioneering new avenues in infrastructure, equipment, materials, energy, and services—collectively known as the “Five New Tracks”. By accelerating the transformation towards high-end, intelligent, green, precision, digital, and international standards, we are steadily advancing towards our vision of becoming a world-class modern enterprise.

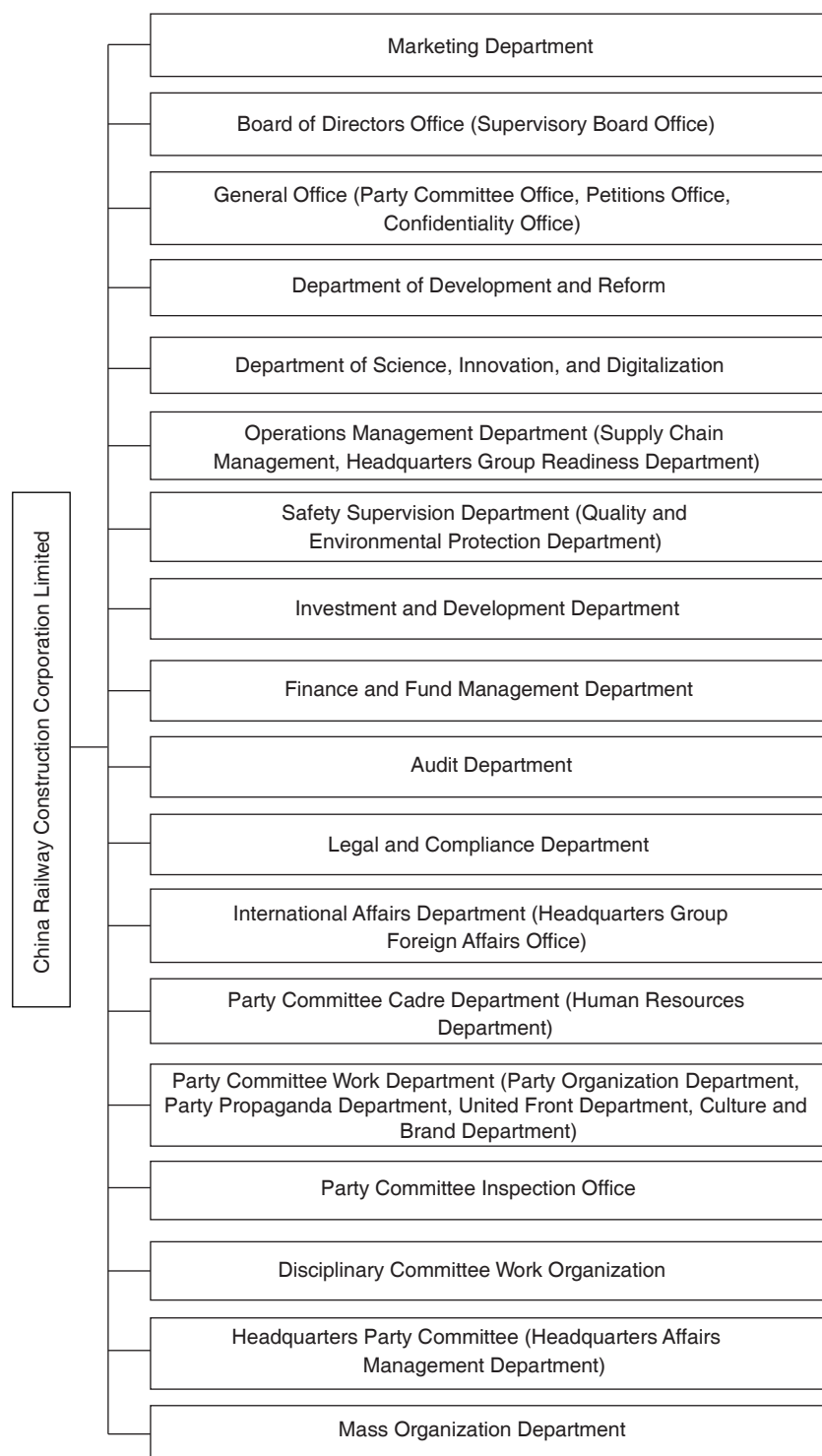
Operating Performance in 2024

- New contract value: RMB3,036.9678 billion
- Operating Revenue: RMB1,067.1713 billion
- Net profit: RMB27.0784 billion
- Taxes paid: RMB31.0277 billion
- Total assets: RMB1,862.8425 billion

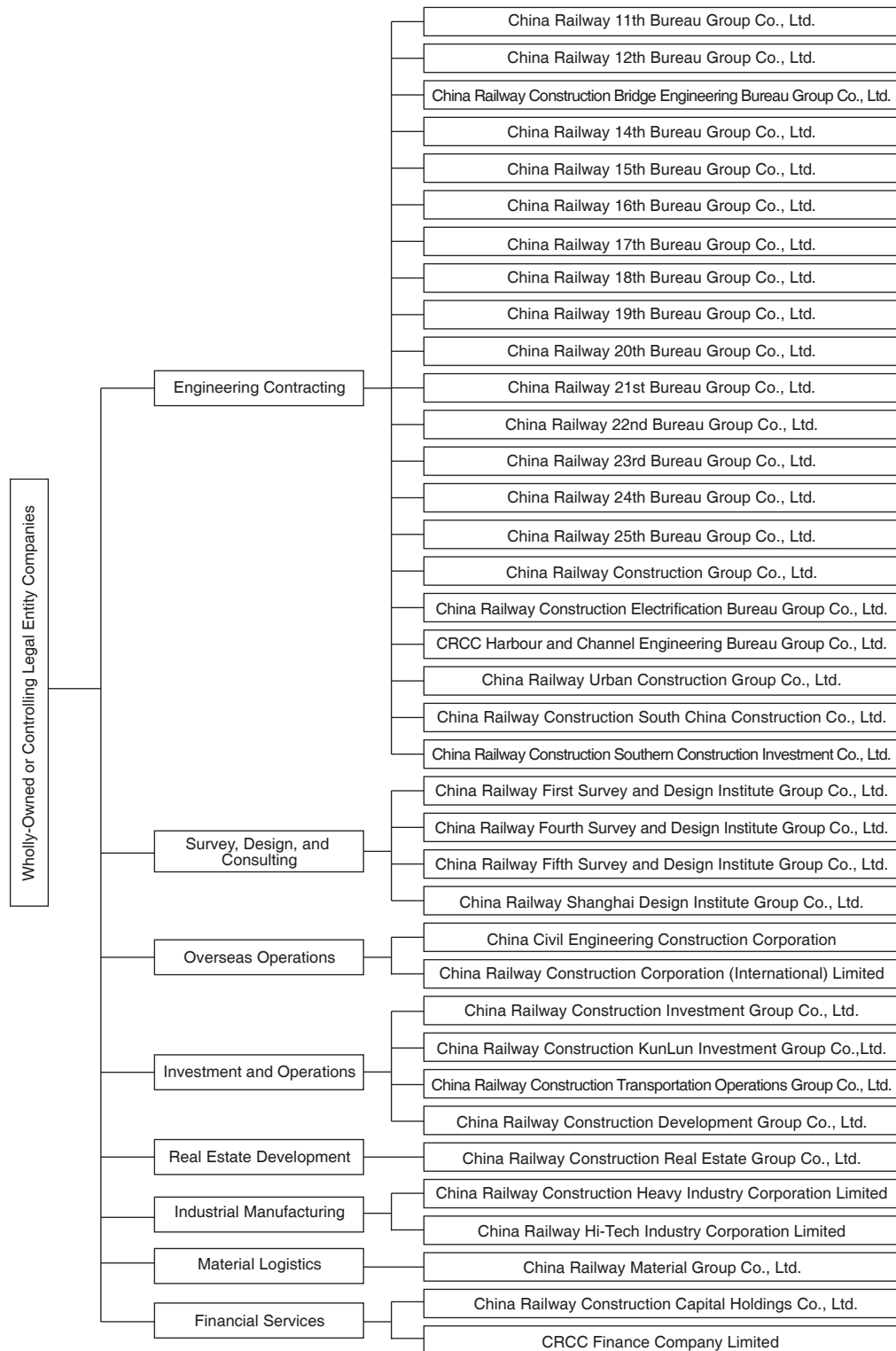


III. About Us (continued)

3.2 ORGANIZATIONAL STRUCTURE



III. About Us (continued)



III. About Us (continued)

3.3 CORPORATE CULTURE

Concept Chapter

- Corporate Mission: Building infrastructure to achieve a better future
- Corporate Vision: To be a world-class modern enterprise.
- Corporate Values: Honesty and innovation forever, quality and morality together
- Corporate Spirit: Surmount all obstacles

Conduct Chapter

- Code of Conduct: Accountable, pragmatic, progressive, win-win

Management Chapter

- Safety: Life and safety first, precaution is crucial
- Quality: Keep improving and make good performance
- Operation: Quality based, Customer first
- Environmental protection: Green development, harmonious coexistence
- Talents: People oriented, with ability and virtue
- Political integrity: Do what is right with self-discipline

“1256” Medium to Long-Term Development Strategy:

- Anchoring the “One Vision”: To develop into a world-class modern enterprise;
- Focusing on “Two Directions”: Consolidate and upgrade the traditional construction industry, nurture and expand strategic emerging industries;
- Opening “Five New Tracks”: New infrastructure, new equipment, new materials, new energy, new services;
- Accelerating “Six Transformations”: High-end, intelligent, green, precise, digital, and international.



III. About Us (continued)

3.4 CORPORATE HONORS

- Ranked 43rd in the Global 500 companies of *Fortune*, marking 19 consecutive years among the global 500.
- Ranked 3rd among the “Global Top 250 International Contractors” and 10th among the “Top 250 International Contractors” of the Engineering *News-Record (ENR)*
- Ranked 19th among the “Top 150 Global Design Firms”
- Ranked 10th among “China’s Top 500 Enterprises”
- Information disclosure has been rated ‘A’ by the Shanghai Stock Exchange for 11 consecutive years



IV. Sustainable Development Management

4.1 RESPONSIBILITY CONCEPTS

CRCC is committed to becoming a world-class modern enterprise. It integrates the concept of responsibility into its strategic system and daily management, enhancing the construction of social responsibility organizations and refining its social responsibility management mechanisms. By facilitating communication channels for social responsibility tasks, CRCC ensures a comprehensive integration of social responsibility with all aspects of the company's operations, transforming social responsibility into an intrinsic growth driver for the enterprise.

4.2 RESPONSIBILITY ORGANIZATION

CRCC continually refines its social responsibility management system, incorporating ESG into its comprehensive management of social responsibilities. A hierarchical organizational system has been established, which fortifies the capacity building for social responsibility, enhances risk management in this area, and deepens the evaluation of social responsibility tasks. These measures institutionalize and standardize social responsibility practices, thereby promoting high-quality implementation of social responsibility management and practices within the company.

Organizational Support The Board of Directors serves as the decision-making body for social responsibility management. An office composed of heads from various departments, with the Party Committee's Work Department acting as the daily communication liaison for social responsibility tasks, has been established. Social responsibility contacts are appointed in all departments and subsidiaries, clarifying the responsibilities of the headquarters and its subsidiaries and providing organizational support for fulfilling social responsibilities.

Capacity Building By organizing or participating in responsibility research, training, and studies, the awareness and capability of staff involved in social responsibility are enhanced, effectively elevating the company's level of social responsibility performance.

Risk Prevention and Control The Audit and Risk Management Committee oversees the social responsibility tasks, with the risk management department coordinating the company's overall risk management efforts. Each functional department at headquarters and subsidiary companies are responsible for implementing risk management, integrating social responsibility risk management into every aspect of the company's business processes.

Assessment and Evaluation The Board of Directors has established a social responsibility goal management mechanism that covers key indicators such as carbon emissions, pollutant emissions, energy consumption, water resource management, safety and health, employee development and training, and anti-corruption compliance. It reviews the progress of these goals annually, assessing challenges, strengths, and weaknesses, and formulates targeted control measures. Responsibilities for managing these indicators are clearly assigned, integrating them into the annual performance evaluation system for management and subsidiaries.



IV. Sustainable Development Management (continued)

4.3 RESPONSIBILITY TOPICS

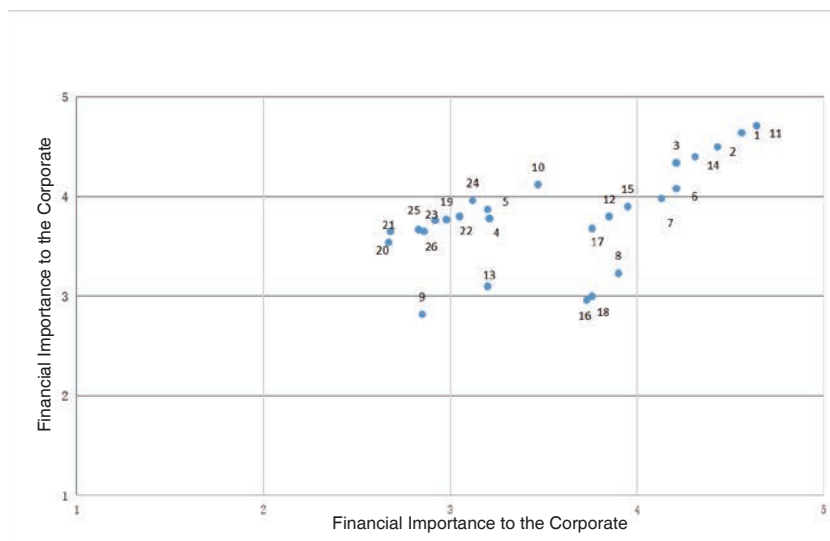
CRCC bases its approach on the corporate development strategy and operational realities. It analyzes the guidance of national macro policies and both domestic and international social responsibility standards. Referencing various global and local disclosure standards such as the *Self-regulatory Guidelines No. 14–Sustainable Development Report (Trial Implementation)* issued by Shanghai Stock Exchange, *GRI 3: Significant Themes*, the *European Sustainability Reporting Standards (ESRS)*, and the *International Financial Reporting Standards for Sustainable Disclosure No. 1–General Requirements for Disclosure of Sustainability-related Financial Information (IFRS S1)*, CRCC adopts analytical perspectives of impact significance and financial importance. We identify and evaluate significant topics and maps them in a matrix of importance. The implementation steps are as follows:

Step One: Gain Insights into the Company's Activities and Business Relationships	<ul style="list-style-type: none"> Gaining insights into the company's activities and business relationships. Understanding the external objective environment. Identifying the key affected stakeholders.
Step Two: Establish a Topic List	Using the 21 topics outlined in the <i>Self-regulatory Guidelines No. 14–Sustainable Development Report (Trial Implementation)</i> issued by Shanghai Stock Exchange as a basis, identify additional significant topics through due diligence, risk management, and review of related regulatory policies, rules, industry standards, and development trends, as well as peer analysis, thereby refining the list of topics.
Step Three: Assessment and Confirmation of Topic Significance	<ul style="list-style-type: none"> Assessment of Impact Significance Evaluating each issue's potential or actual positive and negative impacts on the external environment, society, and economy through surveys and expert judgment. Assessment of Financial Significance Analyzing impacts, dependencies, and other factors, combining this with surveys and expert judgment to identify and assess risks and opportunities under related topics, thereby evaluating topics of financial significance.
Step Four: Topic Reporting	<ul style="list-style-type: none"> Compiling the process, methods, and conclusions of the dual significance analysis of the topics. Disclosing relevant content as required by the <i>Self-regulatory Guidelines No. 14–Sustainable Development Report (Trial Implementation)</i> issued by Shanghai Stock Exchange.



IV. Sustainable Development Management (continued)

Environment	Social	Governance
1. Addressing Climate Change 2. Pollutant Emissions 3. Waste Management 4. Ecosystem and Biodiversity Conservation 5. Environmental Compliance Management 6. Energy Utilization 7. Water Resource Utilization 8. Circular Economy 9. Green Construction	10. Responding to National Strategies 11. Quality and Safety of Engineering 12. Rural Revitalization 13. Social Contribution 14. Technological Innovation 15. Supply Chain Security 16. Equitable Treatment of SMEs 17. Product and Service Safety and Quality 18. Data Security and Customer Privacy Protection 19. Employee Rights 20. Employee Development 21. Employee Care	22. Anti-Commercial Bribery and Anti-Corruption 23. Party Leadership 24. Corporate Governance Improvement 25. Lawful and Compliant Operations 26. Standardizing Business Ethics



CRCC Dual Importance Issue Matrix

IV. Sustainable Development Management (continued)

4.4 RESPONSIBILITY COMMUNICATION

CRCC continuously innovates its communication mechanisms and enriches the forms of communication, actively engaging with key stakeholders and various sectors of society. By establishing official WeChat and video accounts, setting up a "Social Responsibility" section on its official website, and through various online and offline communication methods, CRCC allows stakeholders to understand the group's fulfillment of responsibilities. By attentively listening to the voices from all walks of society, CRCC communicates its commitment to responsibility, thereby shaping its responsible image.

Stakeholders	Expectations and Requirements	Communication Mechanisms and Methods
Government (Chinese central government and local governments where operations are based)	<ul style="list-style-type: none"> • Adherence to relevant laws and regulations • Increase in tax contributions • Employment generation • Technological innovation • Building of national brands 	<ul style="list-style-type: none"> • Participation in relevant conferences • Special reports, statistical statements, and information submissions
State-owned Assets Supervision and Administration Commission of the State Council	<ul style="list-style-type: none"> • Continuous enhancement of profitability and core competitiveness • Comprehensive risk management • Ensuring the preservation and appreciation of state-owned assets 	<ul style="list-style-type: none"> • Implementation of document requirements • Attending meetings and implementing the spirit of the meetings • Regular reporting • Regular communication and report submission by the business management department
Investors and Financial Institutions	<ul style="list-style-type: none"> • Increasing value and market valuation • Reducing corporate risks • Guarantee of sustainable development • Integrity in fulfilling contracts 	<ul style="list-style-type: none"> • Regular and ad hoc reporting • General shareholders' meetings and investor meetings • Contract execution • Regular visits • Daily interactions among business personnel
Clients and Customers	<ul style="list-style-type: none"> • Providing high-quality, reasonably priced products and services, with continuous improvement 	<ul style="list-style-type: none"> • Contract execution • High-level meetings • Correspondence and document exchanges • Client evaluations and management • Tender and bid management • Daily communication



IV. Sustainable Development Management (continued)

Stakeholders	Expectations and Requirements	Communication Mechanisms and Methods
Suppliers and Subcontractors	<ul style="list-style-type: none"> • Maintenance of stable cooperative relationships • Reasonable pricing • Mutual benefit and assistance 	<ul style="list-style-type: none"> • Tendering and business negotiations • Contract execution and business correspondence • Periodic communication
Partners	<ul style="list-style-type: none"> • Resource sharing • Cooperative win-win situations • Long-term stable communication 	<ul style="list-style-type: none"> • Execution of agreements and contracts • High-level reciprocal visits • Regular meetings • Multi-channel collaborative research • Negotiations and exchanges
Employees	<ul style="list-style-type: none"> • Providing competitive compensation and benefits • Providing training and growth opportunities • Providing a positive working environment 	<ul style="list-style-type: none"> • Employee supervision • Soliciting suggestions for rationalization • Daily work communication
Trade Unions	<ul style="list-style-type: none"> • Compliance with trade union demands • Respect for labor rights • Protection of employees' legal rights 	<ul style="list-style-type: none"> • Workers' representative assemblies • Participation in major company decision-making • Regular communication between trade union representatives and contacts
Environment	<ul style="list-style-type: none"> • Support for achieving carbon peak and carbon neutrality • Reduction of waste and resource conservation • Ecological protection • Environmental philanthropy 	<ul style="list-style-type: none"> • Public disclosure of information • Project environmental and social risk assessments • Green design • Green construction • Green office practices • Green development
Community	<ul style="list-style-type: none"> • Civilized production practices • Building harmonious and prosperous communities 	<ul style="list-style-type: none"> • Civilized co-construction • Participation in community welfare activities
Individuals, Groups, and Media with an Interest in the Company	<ul style="list-style-type: none"> • Being a responsible enterprise committed to sustainable development 	<ul style="list-style-type: none"> • Legal disclosure of information • Press conferences • News reporting and publicity

V. Special Topic on Responsibility

SPECIAL TOPIC ONE: STRENGTHENING AND TRANSFORMING, DEEPENING REFORMS TO RESHAPE THE DEVELOPMENT CORE

Standing at a new historical starting point, the Third Plenary Session of the 20th Central Committee of the Communist Party of China has made further comprehensive deepening of reforms the fundamental driving force for advancing Chinese-style modernization. This defines a new direction and outlines a roadmap for the deepening of state-owned enterprise reforms. In the face of the economic trend of transitioning from old to new drivers and pursuing high-quality development, CRCC has positioned itself as a pioneering reformer on this new journey. The company strategizes over major trends, follows major principles, adjusts structures, optimizes layouts, promotes transformation, and mitigates risks. In this critical year of implementing actions for deepening state-owned enterprise reforms, CRCC has cultivated a spirit of struggle and safeguarded the high-quality development of the enterprise with high-standard reforms.

(I) High-level Promotion, Courageously Taking the Lead in Self-Review

The grander the blueprint for reform, the more it requires the courage and responsibility of the reformers. CRCC has thoroughly implemented the demands for “efficiency, streamlining, and precision” to foster a genuine market-oriented operation mechanism. The Party Secretary and Chairman of the company personally deployed, arranged, and organized actions to deepen and enhance reforms. He clearly stated that “deepening reform is the key move to promote high-quality development of the enterprise” and played a crucial role with “leaders leading by example, headquarters taking the initiative, and driving progress throughout the organization”. The headquarters took the lead in initiating organizational adjustments and optimization, competitive positions for staff, “one role per person”, 360-degree assessments for all staff, adjustments of management personnel rankings, and the exit of those who are not competent, setting an example in establishing a true market-oriented operation mechanism.

Data Insights • 2024

- We organized five comprehensive deepening reform leadership group meetings, issued documents such as the *Assessment Plan* and the *Supervisory Rectification Plan for the Implementation of Key Tasks*, optimizing and adjusting the implementation plan for actions to deepen and enhance reforms along with corresponding accounts for five key tasks.

1. Advancing Organizational Reform

The company vigorously reduces staff and levels, pushing for a leaner structure from top to bottom, focusing on headquarters department adjustments, secondary and tertiary unit reforms, legal entity reductions, and the construction of a “Five-Type Headquarters”, actively driving deep and comprehensive organizational reforms. A series of reform measures have been launched and achievements have emerged, reflecting the effectiveness of these reforms and adding new momentum to the building of a world-class modern enterprise.



V. Special Topic on Responsibility (continued)

- The number of departments at the company headquarters was reduced from 24 to 18, internal offices consolidated from 97 to 55, and staffing levels adjusted from 397 to 308 employees.
- Throughout the year, 35 legal entities were reduced. China Railway Investment and Urban Development Company, two secondary units, were downgraded to tertiary management levels, and China Railway Equipment was restored to direct management by the shareholding company, exploring effective mechanisms; optimizing and integrating China Railway Commerce, Emerging Business Headquarters, and eight regional headquarters, incorporating 12 regional investment platforms into secondary units. Following the public selection, 10 candidates for secondary unit leadership positions have been identified.
- CRCC has launched the “Five-Type Headquarters” initiative, rejuvenated the spirit and significantly enhancing the capabilities and qualifications of its headquarters staff.

2. Deepening Employee Assessment

CRCC fully implements competitive employment, establishing a comprehensive and scientific performance assessment system, reforming and restructuring the compensation system, and launching actions to improve the quality of listed companies, truly creating a positive environment where “income matches contribution, employment depends on competition, and promotions are based on performance”. This environment motivates employees to engage willingly and proactively, continuously fostering a good atmosphere for working and entrepreneurship, providing powerful momentum for high-quality development of the company.

- **Personnel Hiring:** Fully implemented competitive appointments, with all staff positions at or below the deputy department level at the corporate headquarters would undergo a public competitive process, which was concurrently carried out at all secondary and tertiary units. During this period, 40 outstanding grassroots employees were transferred to the headquarters, and 18 were exchanged with affiliated companies.
- **Performance Assessment:** A comprehensive assessment system has been established that extends laterally to the edges and vertically to the base, covering all staff with a 360-degree evaluation. The results of the assessments are mandatorily distributed. We also strengthened assessments across all levels of management, specifying special rewards and penalties for key tasks such as developing new industries, effectively stimulating motivation.
- **Compensation System:** Following the principle of “income based on contribution”, the entire compensation system was comprehensively reformed and restructured to appropriately widen the salary gaps between the same levels but different positions, enhancing the motivational impact of compensation.

V. Special Topic on Responsibility (continued)

(II) Solid Measures, Forging Ahead with Vigor

CRCC adheres to the principle of “establish before breaking” and “systematic establishment”, prioritizing institutional construction. It introduced 63 important institutional measures, playing a “combination punch” of deepening reforms, guiding units to tackle hard challenges in reform deepening and pragmatic solutions in transformation development, continuously driving the company’s reform from “formal similarity” to “comprehensive substance”.

At the same time, during the process of advancing actions to deepen and enhance reforms, it inherits good practices from the three-year state-owned enterprise reform action, innovating working methods according to new situations and circumstances, effectively implementing the State-owned Assets Supervision and Administration Commission of the State Council’s “six mechanisms” for reform implementation, ensuring that reform tasks are thoroughly, meticulously, and completely handled, and driving significant achievements in deepening reform actions.

Achievements • 2024

- The completion rate of 119 tasks in the reform enhancement action ledger reached 83%, fully exceeding the State-owned Assets Supervision and Administration Commission’s target of “completing 70% of tasks”.

Refining and Deepening “Science and Technology Reform Action” and “Dual Hundred Action”

We conducted on-site supervision of *Science and Technology Reform Enterprises* and *Dual 100 Enterprises*, promoting these companies to unleash the power of technological innovation and striving to create original technology sources. According to the assessment notification by the State-owned Assets Supervision and Administration Commission, among the affiliated companies, 7 “science and technology reform enterprises” and “dual hundred enterprises” were rated as “1 benchmark, 3 excellent, and 3 good”.

SPECIAL TOPIC TWO: PIONEERING AHEAD, STIMULATING DEVELOPMENTAL DYNAMICS THROUGH TECHNOLOGICAL INNOVATION

General Secretary Xi Jinping pointed out that “scientific technological innovation can generate new industries, new models, and new momentum, and is the core element for developing new productive forces”. CRCC fully embraces this modern national system of innovation, steadfastly positioning technological innovation as the breakthrough point for cultivating new productive forces. It is rapidly advancing the construction of an innovation system, optimizing the allocation of innovation resources, tackling key core technologies, applying scientific and technological innovations to specific industrial chains promptly, enhancing the modern industrial system, and fostering the emergence of original and disruptive technological innovations, thereby cultivating new dynamics for the development of new productive forces.



V. Special Topic on Responsibility (continued)

(I) Climbing New Heights, Constructing a System for Technological Innovation

CRCC has consistently regarded technological innovation as the primary driving force for development, having formulated a mid-to-long term strategy for technological innovation. It has issued the *Guidelines on Strengthening the Construction of CRCC's Technological Innovation System* and *Opinions on Strengthening the Incentive and Security Mechanisms for Technological Innovation at CRCC*, proposing the construction of a "1+9+N" technological innovation system to enhance incentives and further stimulate innovative vitality. In conjunction, the high-end think tank role of universities, research institutes, enterprises, and industry experts has been fully leveraged. The unveiling of CRCC's Science and Technology Research Institute marks a significant development; institutes focusing on green low-carbon technologies, underground spaces, new materials, high-end equipment, new energy, and bamboo-based industry have been established in succession. In partnership with higher education institutions and research institutes, 3 national-level innovation platforms, 34 provincial and industrial innovation platforms, and 11 CRCC engineering laboratories have been established, laying the foundational "pillars" for the development of new productive forces.

Six industrial technology research institutes have been officially established
Green Low-Carbon Industry Technology Research Institute: Focusing on zero-carbon buildings and parks, equipment energy conservation upgrades, and emergency dual-use wastewater and waste treatment among other new green industrial directions.
Underground Space Industry Technology Research Institute: Engaging in technology research, product innovation, and industry cultivation related to underground space, accelerating the formation of new productive forces in this field.
New Materials Industry Technology Research Institute: Concentrating on special fiber materials, composite materials, heavy-duty anti-corrosion materials, special waterproof materials, and new energy building materials, focusing on structural and functional materials.
High-End Equipment Industry Technology Research Institute: Targeting the development of tunnel boring machines, special equipment, mining equipment, high-end agricultural machinery, urban rail and high-speed train intelligent production lines, electrical and intelligent controls, hydraulics, intelligent manufacturing, critical components, comprehensive intelligent monitoring of switches, ultra-high-speed fastening systems, and intelligent production lines for rail system equipment, focusing on cutting-edge and key technologies.
New Energy Industry Technology Research Institute: Primarily focusing on the research of energy storage technologies, renewable energy technologies, hydrogen energy technologies, and carbon management technologies.
Bamboo-Based Industry Technology Research Institute: Committed to becoming a catalyst for industrial development in the bamboo sector, a leader in technological innovation, a bridge deeply integrating production, education, research, and application, and a hub for talent cultivation and convergence.

V. Special Topic on Responsibility (continued)

(II) **Advancing towards New Horizons, Cultivating Development of New Productive Forces**

Currently, a new round of scientific and technological revolution and industrial transformation is deepening. Scientific research is expanding towards the macroscopic extremes, delving into the microscopic depths, advancing under extreme conditions, and strengthening in comprehensive interdisciplinary fields, continuously breaking the boundaries of human understanding. “Marching into the depths of the Earth”, leveraging small bamboo to propel major industries, and launching the nation’s first near-zero carbon building. Over the past year, as traditional industries have transformed and upgraded, new and future industries have been rapidly developed, and industry chains have been continuously extended. CRCC has achieved leadership with “new” approaches and excelled through enhanced “chain” integration.

Traditional Industry Transformation and Enhancement
<p>The World’s First Modular Excavation Mode Railway Switch Cleaning Vehicle</p> <p>The first globally self-developed CQS-350 side-cutting cleaning machine, featuring a modular excavation mode, has been successfully delivered. This vehicle is equipped with a “waterwheel-style” slope excavation and “blade-style” sleeper bottom excavation system, achieving seamless integration of switch cleaning with regular track cleaning. The machine operates at an efficiency of 350 cubic meters per hour, providing superior quality and leading performance in the industry.</p>
<p>The “Kunlun”, the Largest Tire-Type Gantry Crane in Domestic Lifting Capacity</p> <p>The domestically developed 2500-ton beam lifting machine, the largest of its kind in China, was successfully launched. This tire-type beam lifter features high lifting capacity, precision, and stability. It utilizes IoT (Internet of Things) for online monitoring and digital tools to enhance safety control while significantly improving work efficiency.</p>
<p>Key Technologies and Applications for the Extra-Long Deep Qinling Tunnel of the Han River to Wei River Project</p> <p>This project overcame more than 4,000 instances of rock bursts, over 600 sudden water inrush events, a 888-meter floor heave, and three TBM machine recoveries. It set world records with a 16.5-kilometer ventilation distance for TBM construction, a 7.2-kilometer ventilation distance for drilling and blasting, and a 27.3-kilometer tunnel meet-up. The achievements reached an international leading level, filled multiple technological gaps, and accrued an economic benefit of RMB1.644 billion.</p>



V. Special Topic on Responsibility (continued)

Emerging Industry Cultivation and Growth
<p>Bamboo-Based Composite Material Pipe Production Project</p> <p>The bamboo winding pipe, using bamboo as the base material and produced through winding processes and automated manufacturing, is a new type of bio-based pipeline. Compared to conventional materials like concrete, it offers advantages such as lighter weight, higher tensile strength, corrosion resistance, strong compression resistance, easy installation, low overall costs, and longer lifespan, and is already widely used in transportation and construction sectors.</p>
<p>Next-Generation Intelligent Traffic Infrastructure Monitoring and Control System</p> <p>This independently developed next-generation intelligent monitoring and control system for traffic infrastructure merges visual and auditory technologies. Utilizing machine vision cameras, array displacement meters, multi-parameter BeiDou receivers, high-precision inclinometers, and DAS fiber optic listening devices, it provides a comprehensive intelligent monitoring and control solution for bridges, tunnels, stations, and roadbeds. Already implemented in monitoring and control projects across more than ten provinces and cities, this system paves a new path for intelligent monitoring and control services in traffic infrastructure.</p>
<p>Dual Block Sleepers and Small Prefabricated Components Co-line Intelligent Production Line</p> <p>The first domestic high-speed rail dual block sleepers and small prefabricated components co-line intelligent production line was launched at the Chongqing-Kunming high-speed rail construction site. Integrating digital simulation, intelligent robots, IoT, and big data, the line undertakes the production of over 500,000 dual block sleepers and 600,000 small components. Centered around “IoT+”, it achieves deep interconnection of human, machine, material, method, and environment, significantly enhancing production efficiency while reducing costs and energy consumption.</p>
Future Industrial Layout and Construction
<p>The World’s Largest Vertical Shaft Boring Machine “Dream”</p> <p>The “Dream” stands approximately 10 meters high with a cutting diameter of 23.02 meters, integrating functions such as excavation, muck removal, support, and guidance. It is suitable for ultra-large diameter vertical shaft construction in soft soil and soft rock formations. Its technology is internationally advanced, making it the largest diameter boring machine in the world to date. It fills a global gap in the product spectrum of boring machines and signifies a new step forward in China’s underground engineering equipment technology.</p>
<p>The World’s First Variable Diameter Incline Shaft Boring Machine “Tianyue”</p> <p>“Tianyue” is the world’s first variable diameter rock tunnel incline shaft boring machine. With a total length of 87 meters and a weight of about 900 tons, it was launched in the CRCC Heavy Industry’s first industrial park in Changsha. This marks another breakthrough in China’s underground engineering equipment, filling a domestic gap in the mechanized construction equipment for super-large gradient two-stage incline shafts, and further enriches the global spectrum of boring machines.</p>
<p>China’s Largest Diameter Shield Tunneling Machine “Jianghai”</p> <p>In Changsha, the “Jianghai”, with the largest excavation diameter of 16.64 meters, was launched. It innovates in nine major systems including the cutter disc tools, main drive, propulsion, synchronous grouting, and more, maximizing the “measurable, visible, maintainable, and replaceable” aspects of each component of the tunneling machine. It aims to achieve millimeter-level precision control of shield tunnel settlements, ensuring intelligent, safe, and efficient tunneling.</p>

V. Special Topic on Responsibility (continued)

(III) Soaring Achievements, Technology Achievements Create New Records

Honors • 2024 (partial)

- Won 3 second prizes of National Science and Technology Progress Second Class Awards;
- Won 17 Tien-yow Jeme Civil Engineering Prizes in the 20th batch, the best historical performance;
- Won 4 Engineering Construction Standard Science and Technology Innovation Awards, including 1 Standard Innovation Achievement Award, the best in history; won 1 National Excellent Science Popularization Micro Video Work for the first time;
- Won 5 Grand Prizes in the Engineering Construction Industry High Promotional Value Patent Competition, accounting for 50% of the grand prizes;
- “Ultra-Large Diameter Vertical Shaft Boring Machine and Its Series Products” were selected as one of the top ten typical cases of national patent industrialization by the National Intellectual Property Administration;
- Selected as a pilot demonstration factory for intelligent manufacturing by the State-owned Assets Supervision and Administration Commission of the State Council;
- Selected as the one typical application case of artificial intelligence empowering new industrialization by the Ministry of Industry and Information Technology.



VI. Excellent Governance, Expanding Development and Composing a New Chapter

CRCC resolutely implements the important instructions of General Secretary Xi Jinping and the major deployments of the Central Committee of the Party and the State Council. Upholding the principle of “consistency in two aspects”, CRCC integrates strengthening the Party’s leadership with perfecting corporate governance, continuously refining the modern enterprise system with Chinese characteristics. Focusing on enhancing core functions and competitive capabilities, CRCC aims to enhance “five values” and strives to be at the forefront in three areas, effectively leveraging technological innovation, industrial control, and safety support to lay a solid foundation for an excellent start to the “14th Five-Year Plan”.

“To properly handle the relationship between development and governance, ensuring high-quality development through high-efficiency governance and promoting high-efficiency governance through high-quality development”.

–From the Third Plenary Session of the 20th Central Committee
of the Communist Party of China

6.1 NEW ACHIEVEMENTS IN LEAN GOVERNANCE

- **Governance**

We have established a stringent and efficient governance system. The Party Committee strengthens the leadership of the party and promotes comprehensive strict governance to guide the political direction of the enterprise. The Board of Directors, in accordance with laws and regulations, is responsible for formulating strategies, making decisions, and managing risks, with assistance from specialized committees. Under the leadership of both the Party Committee and the Board, various departments implement governance measures, with the legal and audit departments ensuring lawful and compliant operations. Additionally, we have enhanced our institutional framework, covering party construction, corporate governance, and legal compliance. Furthermore, we have set up a comprehensive supervision mechanism that integrates various oversight forces to ensure the enforcement of systems, swiftly address violations, and guarantee the healthy and orderly development of the company.

- **Strategy**

We consistently adhere to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, focusing on ideological education, strict governance of the Party, and enhancing Party building quality. We conduct a series of activities to strengthen supervision and Party organization building; regulate the operation of the Board of Directors, enhance investor relations management, and comply with legal and regulatory requirements, thereby comprehensively elevating our corporate governance.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

- **Risk and Opportunity**

- **Risk Management Process** : The establishment of the Legal Compliance and Risk Management Committee consolidates the three lines of defense and four firewalls, solidifying individual responsibilities, enhancing risk control, and overall elevating awareness and capabilities in risk prevention.
- **Risk Identification and Early Warning**: We conduct annual major risk assessments relying on the cloud-based risk control monitoring center, adhering to the “all-employee, comprehensive, whole-process” requirement. We supervise all levels to collect and analyze risk information, enhancing the capability for advanced risk control and maintaining a baseline against systemic risks.
- **Risk Control and Tracking** : For significant risks identified in 2024, we determine the main factors and sources of risk, develop control implementation plans, and assign responsibilities to business departments. They monitor, warn, and track controls, submitting relevant reports quarterly.
- **Risk Reporting and Management**: Based on regulations set by the State-owned Assets Supervision and Administration Commission of the State Council, we strengthen the reporting of significant risk events. Notifications are issued to clarify requirements, and under the “broad supervision” mechanism, units and responsible persons failing to report as required are subjected to interviews, notifications, or accountability.

- **Indicator and Objective**

Key Indicators	Unit	2022	2023	2024
Debt-to-Asset Ratio	%	74.67	74.92	77.31
Legal Compliance Training Participation	Person	11,819	941	5,436
Legal Dispute Case Resolution Rate	%	58.8	68.6	63.7



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.1.1. Upholding Party-Led Governance

(1) *Strengthening Party Leadership*

CRCC adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, thoroughly implements the spirit of the 20th National Congress of the Communist Party of China and the Second and the Third Plenary Session of the 20th Central Committee of the Communist Party of China. CRCC prioritizes Party political construction in all aspects of Party building, enhances the high-quality implementation of the “first agenda item” system, conducts a “Year of Quality Improvement in Party Committee Theoretical Learning Center Group” activity, and promptly studies and implements the important speeches and directives of General Secretary Xi Jinping. Solid efforts are made in Party discipline education. Party leadership is consistently integrated into the governance system construction, practicing the principle of “two upholds” and continually improving the “major issues and key decisions” mechanism and system, truly embedding Party propositions in internal system construction and business management operations, thus promoting the establishment of a more standardized and scientific framework for modern enterprises with Chinese characteristics.

(2) *Consolidating the Foundation of Party Building*

CRCC deeply implements the requirements of the *Central Construction Enterprises Party Building Quality and Efficiency Improvement Plan*, coordinates the promotion of Party building work in line with the “Seven Initiatives” project, develops “two lists for Party committee secretaries and Party committee members to fulfill Party building responsibilities”, and conducts activities such as “Two Excellences and One Priority” selections and Party building brand promotions. By establishing a benchmark for the “Four Good” leadership teams and the fourth batch of model Party branches annually, it pushes all levels of Party organizations within the system to play a leading and safeguarding role. It emphasizes accountability in Party building work at lower levels and strengthens the use of results. Special inspections are conducted on Party building in mixed-ownership enterprises and Party member development, as well as special investigations into Party building in financial units and spot checks on Party fund management. Supervision and mutual learning include the contact point activities of leadership team members, Party organization setups and Party member education management, and the conduct of “Three Meetings and One Lesson”, achieving penetrative management of Party building work.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

(3) Comprehensive Strict Governance of the Party

CRCC has fully grasped the significant statements and directives of General Secretary Xi Jinping on comprehensively and strictly governing the Party. The company is committed to implementing the primary responsibility for strict Party governance, enhancing supervision over the “top leaders” and leadership teams, and intensively conducting “broad supervision” that leverages internal Party oversight to drive business monitoring. This approach aims to promote the stable development of the company and ensure the preservation and appreciation of state-owned assets.

Optimizing the Comprehensive Supervision System	<ul style="list-style-type: none"> Issuing <i>Opinions on Establishing a Comprehensive Supervision Work Mechanism</i>, creating a supervision system coordinated by the party committee's leadership, specialized supervision by the disciplinary committee, functional supervision by departments, and democratic supervision by employees. This highlights political supervision, strengthens peer supervision, and carries out inspections and oversight, coordinating centralized supervision efforts, and implementing “Four No's and Two Directs” inspections to ensure effectiveness.
Strengthening Inspection Supervision	<ul style="list-style-type: none"> Coordinating two inspection leadership team meetings and five special inspection meetings, pulling 61 key staff from across the system to form four inspection teams, conducting two rounds of routine inspections on nine units, and carrying out a “look-back” inspection on four units. Merging eight guiding and 20 practical system documents into <i>Party Committee Inspection Work Regulations</i>, <i>Inspection Work Process Management Measures</i>, and <i>Party Committee Inspection Team Assessment Methods</i>, addressing key contradictions and issues in inspection leadership structure, mechanisms, and organization, providing institutional support for high-quality inspection activities.
Enhancing Integrity and Anti-Corruption Efforts	<ul style="list-style-type: none"> Handling clues to issues according to discipline and regulations, rigorously investigating cases to enhance deterrent effects. Revising five disciplinary inspection-related system documents, enhancing supervision, disciplinary actions, and accountability; strictly implementing the <i>Briber Blacklist Management Measures (Trial Implementation)</i>, promoting a fair competitive environment.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

Deepening Integrity Education	<ul style="list-style-type: none">• Conducting an anti-corruption and pro-integrity publicity and education month, with units system-wide organizing over 20,000 sessions of integrity knowledge competitions and other educational activities.• Launching the “Clean Wind Railway Construction” column on the official website, carefully reviewing and selectively publishing over 200 articles, fostering a strong culture of integrity and reverence for probity.
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VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.1.2. Standardizing Corporate Governance

(1) **Board Governance**

The company strictly adheres to the *Company Law of the People's Republic of China*, *Securities Law of the People's Republic of China*, the *Code of Corporate Governance for Listed Companies* issued by the China Securities Regulatory Commission, as well as relevant regulations of the Shanghai Stock Exchange and the Hong Kong Stock Exchange. Following the requirements of the State-owned Assets Supervision and Administration Commission of the State Council, we are committed to standardizing corporate governance operations, promoting the development of a scientific, rational, and efficient board of directors, ensuring the continuous and healthy development of the enterprise, and protecting the interests of all shareholders. The company was recognized as the best practice example of a listed company's board of directors for the year 2024 by the China Listed Companies Association.

Strengthening Board Construction	<ul style="list-style-type: none">• Effectiveness: We adhere to strategic guidance, formulating the “1256” medium to long-term development strategy; standardize decision-making procedures, optimize pre-meeting communications, specialized research, and other decision-making mechanisms, fully leverage the roles of external directors and specialized board committees for scientifically efficient decision-making that drives high-quality development; improve operational quality towards practicality, revert to value investment, focus on meticulous management and improving quality while reducing costs and increasing efficiency, and comprehensively enhance the “broad risk control” and “broad supervision” systems.• Independence: <i>The Independent Director Operation System and Independent Directors’ Special Meeting Rules</i> among other systems are formulated, clarifying the performance methods and protection mechanisms for independent directors. The four independent directors of the company, each with backgrounds in finance, banking, and corporate management and extensive professional experience, provide professional advice for the stable operation and continuous development of the company, safeguarding the overall interests and protecting the legal rights of minority shareholders.• Diversity: The board’s structure, age, regional, cultural and educational backgrounds, and professional experiences all meet the diversity policy requirements. In March 2025, the board added one female employee director, achieving gender diversity among the board members.
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VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

<p>Standardizing Board Operations</p>	<ul style="list-style-type: none">• Improving corporate governance systems: Having executorial implementation of the “consistently applied” principles, dynamically optimizing the party committee’s preliminary research list. Having executorial implementation of the new <i>Company Law of the People’s Republic of China</i>, studying and revising the corporate governance system. Revising the board of directors’ authorization management system, adjusting and optimizing the scope and decision-making process of board authorization. Standardizing and efficiently conducting board and shareholders’ meetings, timely supplementing executive directors, electing chairpersons, adding shareholder supervisors, and appointing senior management personnel to ensure that the corporate governance structure operates legally and compliantly.• Strengthening the construction of subsidiary boards: Issuing <i>Guidelines for Deepening the Construction of Subsidiary Boards</i> and revising the assessment system for subsidiary boards and external directors. Enhancing the standardized operations of subsidiary boards, promoting the implementation of subsidiary board powers, and standardizing the authorization management of subsidiary boards. Strengthening the management of external directors in subsidiaries, valuing their opinions and suggestions, and fully utilizing their early warning function for significant risks.
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VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

(2) *Investor Relations Management*

The company strictly complies with the *Company Law of the People's Republic of China*, *Securities Law of the People's Republic of China*, and the latest regulatory requirements of the new "National Nine Articles", consistently adhering to standardized operations, optimizing disclosure content, and enhancing the quality of information disclosure. We place high importance on communication with investors, establishing a multi-level investor interaction mechanism, regularly organizing performance briefings, annual roadshows, and reverse roadshows, and strengthening full communication with investors and the capital market. We improve organizational guarantees, strengthen market value management, draft "Market Value Management Regulations" and "Valuation Enhancement Plans", and regularly organize market value management leadership group meetings to study the dynamics of the capital market and hot issues of concern to investors; we enhance media publicity through in-depth reports, expert interpretations, and other forms, continuously improving the corporate image and social influence.

Data Insights • 2024

- Held 70 investor meetings, hosting 491 participants.
- Participated in 122 brokerage strategy meetings, hosting 871 investors.
- Conducted 5 earnings release meetings and conference calls, hosting 197 participants.
- Held 3 online earnings briefings, attracting 2,591 visitors.

Honors • 2024

- Won the highest A-level rating for information disclosure by the Shanghai Stock Exchange for 2023-2024.
- Won the "Golden Round Table Award" and "Outstanding Board of Directors" from the China Listed Companies Association.
- Won the "Top 100 Chinese Listed Companies ESG" by Securities Times.
- Won the "A-share Value Award" and "H-share Value Award" at the China Listed Company Yinghua Awards.
- Won the "Best IR Hong Kong Stock Company" by New Fortune.
- Won the "Best Investor Relations Award" at the China Financing Awards.
- Won the Crystal Ball Award for "Best Investor Relations Management Listed Company".



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.1.3. Legal and Regulatory Compliance

(1) Legal Management

CRCC is committed to setting benchmarks and advancing as a pilot for world-class rule-of-law enterprises. The corporation has issued the *Implementation Plan for the Construction of World-Class Rule-of-Law Enterprises*, outlining the “Ten World-Class” main tasks. It steadfastly establishes and implements the “Four Noes and One Without” legal concept, solidifying the foundation of legal governance and strengthening mechanisms for legal risk prevention and control.

(2) Compliance Management

CRCC is enhancing its compliance management towards more refined and high-quality directions, gradually establishing a compliance management system with clearer responsibilities, more efficient mechanisms, deeper compliance awareness, and more robust risk control, providing a solid guarantee for the company’s steady progress.

<p>Infrastructure</p>	<ul style="list-style-type: none"> • Issued the <i>2024 Compliance Management Key Points</i>, clarifying the “3 major items” and “10 minor items” for this year’s key tasks. • Conducted compliance risk assessments across the system, forming a compliance risk list with 22 major categories and 371 minor items. • Released compliance risk alerts involving 11 categories, including the <i>Company Law of the People’s Republic of China</i>, subcontractor withdrawal, and crimes involving crossing national borders. • Compiled and summarized foreign legal theories and practices, producing reports like <i>Overseas Risk Inspection Report</i>, <i>Due Diligence Key Points for Overseas Investments</i>, and <i>Legal Guidelines for 127 Countries</i>, along with <i>Compliance Guidelines for International Financial Organizations</i>.
<p>System Management</p>	<ul style="list-style-type: none"> • Drafted <i>Compliance Guidelines for International Financial Organizations</i>, detailing the requirements of six major international financial bodies, disseminated for system-wide learning. • Differentiated the due diligence processes for domestic and international tenders and partners, optimizing the implementation details such as the <i>Detailed Rules for Compliance Review of Bidding</i>, and issued the <i>Notice on the Implementation of Compliance Systems and Compliance System Operation Guidelines</i>.

VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

Contract Management	<ul style="list-style-type: none">• Explored establishing an “integration of business and law” contract management system covering the entire process from project tracking to negotiation, contract signing, execution, termination, and dispute resolution. Revised the <i>Contract Management Methods</i> and formulated <i>Contract Numbering Rules</i>.• Formulated 19 internal industry contract templates for construction projects, corporate governance, and overseas operations, standardizing internal cooperative actions.
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(3) Due Diligence

CRCC, in response to changes in both domestic and international environments and the company's development needs, has optimized the *Implementation Rules for Third-Party Compliance Due Diligence Investigations* and differentiated the due diligence procedures for partners. Simultaneously, the company has compiled the *Key Points for Legal Due Diligence in Overseas Infrastructure Investments* to ensure a comprehensive understanding of the legal risks associated with projects before investment, solidifying the investment due diligence process.

(4) Audit Oversight

CRCC has established a comprehensive, authoritative, and efficient audit oversight system, optimized the audit management system and revised audit quality control methods. Focusing on the company's core responsibilities and key areas like capital operations, projects, overseas operations, and technological innovations, CRCC conducts internal audits to reinforce audit rectification supervision, intensify the transfer of audit findings and accountability, and promote high-quality auditing that accelerates the realization of audit value.

Data Insights • 2024

- Formulated five audit oversight regulations
- Held nine meetings of the Audit and Risk Management Committee
- The Audit and Risk Management Committee approved 35 resolutions



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.1.4. Upholding Business Ethics

CRCC strictly adheres to the *Supervision Law of the People's Republic of China*, *Anti-Money Laundering Law of the People's Republic of China*, *Criminal Law of the People's Republic of China*, *Anti-Unfair Competition Law of the People's Republic of China*, and other relevant laws and regulations,, maintaining a no-go-zone, full-coverage, zero-tolerance approach against any form of commercial bribery, monopolistic practices, or unfair competition. The corporation continuously improves its system and supervisory mechanisms, enhancing the effectiveness of integrity risk control and ensuring compliance. Additionally, the company has established a reporting hotline to facilitate complaints via phone calls, letters, and visits, handling reports according to regulations, clarifying responsibilities of handling personnel, strengthening supervision, controlling information access, and maintaining confidentiality for whistleblowers.

In 2024, during the reporting period, CRCC concluded four lawsuits related to employee corruption, with three individuals convicted of embezzlement, sentenced to three to five years of imprisonment and fined between RMB200,000 to RMB500,000; one individual was convicted of both embezzlement and bribery, sentenced to four and a half years in prison and fined RMB400,000. The company terminated contracts with these individuals, with the litigation outcomes aligning with corporate interests.

Name of Indicator	Unit of Indicator	2024
Total Number of Directors Trained in Anti-Commercial Bribery and Anti-Corruption (Refers to the directors of the CRCC listed company)	Person	6
Percentage of Directors Trained in Anti-Commercial Bribery and Anti-Corruption	%	100
Total Number of Management Personnel Trained in Anti-Commercial Bribery and Anti-Corruption	Person	137
Percentage of Management Personnel Trained in Anti-Commercial Bribery and Anti-Corruption	%	100
Total Number of Employees Trained in Anti-Commercial Bribery and Anti-Corruption	Person	265,025
Percentage of Employees Trained in Anti-Commercial Bribery and Anti-Corruption	%	100

6.2 NEW DRIVERS IN INNOVATION

• Governance

We have issued a series of documents on the construction of a technology innovation system and talent management, providing institutional support for innovative management, talent development, and motivational safeguards from a systemic level. A “1+9+N” technological innovation system has been established, creating a multi-disciplinary innovation framework that integrates both internal and external innovation resources to promote collaborative innovation.

VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

• Strategy

We have formulated the *CRCC Science and Technology Innovation Medium and Long-term Development Strategy*, adopting a comprehensive “1235” strategy for medium and long-term development in science and technology:

- **Anchoring a Singular Goal:** Achieve high-level technological independence and strength and establish a leading tech enterprise.
- **Rooted in Two Modes:** Enhance “0-1” original innovation and deepen “1-N” application innovation.
- **Achieving Three Leads:** Build innovation chains around industrial chains, drive high-level technological innovation to lead the transformation and upgrading of traditional industries, strengthen emerging industries, and cultivate future industries.
- **Enhancing Five Capacities:** Innovation drive, strategic technology sourcing, results transformation, industry incubation, and talent aggregation.
- By 2035: Our goal is to become a leading technology enterprise with strong innovative capabilities, significant influence, and global competitiveness.
- By the middle of this century: We aim to fully develop into a world-leading technology enterprise driven by innovation, enhanced by green and smart technologies.

• Risks and Opportunities

In the context of intense innovation competition and rapid technological evolution in the construction industry, we face multiple risks. In technology R&D, complex field studies can lead to extended development cycles or failures due to technological bottlenecks; in the market, the commercial value of innovations is vulnerable to demand shifts and imitation by competitors; in talent, the scarcity and mobility of innovative talents can impede the progress of key projects. To address these, we have increased R&D investment, collaborated with external scientific research forces to accelerate technological breakthroughs, and strengthened market research to enhance the competitiveness of our achievements.

• Indicators and Objectives

Indicator	Unit	2022	2023	2024
Science and Technology Investment	RMB100 million	250.039	267.255	256.397
Patents Granted	Item	7,931	6,831	7,740
Cumulative Patents Granted	Item	31,419	35,832	40,638



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.2.1 Innovation Management and Construction

CRCC systematically advances its science and technology innovation work, implementing the “1235” strategy and advancing the “1+9+N” technology innovation system. We have issued opinions on talent work, broadening the development channels for innovative talents and formulating motivational safeguard mechanisms, enhancing the overall efficacy of scientific and technological innovation.

6.2.2 Innovation Outcomes Research and Development

CRCC consistently prioritizes scientific and technological innovation as the foremost driving force for development. The company maintains a firm grip on key core technologies, advancing high-quality tasks mandated by the State-owned Assets Supervision and Administration Commission of the State Council. It actively engages in high-level scientific research projects, striving to establish origins for original technologies. By strategically planning, tackling challenges, and developing batches of innovative outcomes, national key devices, and patent standards, it ensures these gradually take shape on the ground. This relentless focus transforms scientific and technological innovation into the “core variable”, increasingly becoming the “greatest increment” in driving the high-quality development of the enterprise.

Carry Out Core Technology Initiatives	<ul style="list-style-type: none"> • We independently developed a 27kW high-end large-power hydraulic rock drill, with the first unit passing industrial validation tests lasting 2661 hours and 404 kilometers. • We developed a full lifecycle BIM digital intelligence software system, increasing alignment efficiency by over 35%, with pilot professional BIM proactive design completion rates increasing by over 15%. • Railway survey and design informatization and intelligence platform, improving mapping, surveying, and full process design efficiencies by 42.90%, 57.55%, and 48.99% respectively.
Establishing Original Technology Sources	<ul style="list-style-type: none"> • We successfully approved by the State Council's State-owned Assets Supervision and Administration Commission as the second batch of central enterprise original technology sources for underground space utilization, holding an internal advancement meeting • We established three CRCC original technology sources in extreme environment tunnel construction and maintenance.
Shaping Industry Standard Models	<ul style="list-style-type: none"> • We jointly led the publication of 3 international standards, 111 national standards, and 49 industry standards. • We co-drafted the first international standard for the International Union of Railways (UIC) and led the initiative for 4 ISO standard proposals, including the <i>Guidelines for Operating Rules in Autonomous Driving Mode</i>, which was the only ISO international standard led by China's railway sector that year, and the world's first railway autonomous driving ISO international standard.

VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.2.3. Innovation Achievements Transformation

CRCC actively implements the State-owned Assets Supervision and Administration Commission of the State Council's scientific and technological policies, perfecting the system for the transformation of scientific and technological achievements. It enhances incentives, specifying four "15%" incentive mechanisms to boost the enthusiasm for transformation among research personnel; actively promotes the transformation of achievements, accelerating the application of scientific and technological results. It has established a dedicated work team for large-scale applications of the Beidou Navigation System, and solidly advances special projects related to Beidou. Moreover, two achievements from China Railway First Survey and Design Institute Group and China Railway Fourth Survey and Design Institute Group were selected for the first batch of the SASAC's pilot projects for the empowerment reform of scientific and technological achievements, with the implementation plans approved, supporting high-quality corporate development.

6.2.4. Innovation and Digital Empowerment

(1) *Digital Transformation*

CRCC places high importance on the application of information technologies such as big data, the Internet of Things, cloud platforms, and artificial intelligence. Aiming for "Digital CRCC, Smart CRCC" as the overall goal, the corporation continually strengthens the foundation for digital transformation. It has established a dedicated team for digital construction, advancing a clear top-level digital design, enhancing digital investment control, and orderly promoting the construction of various digital projects, fostering the enterprise's digital technology innovation momentum

- **Management Information System Construction:** Implement the digital oversight of state assets, collaboratively advancing the construction of treasury and payroll management systems along with a smart supply chain platform.
- **Data Governance System Construction:** Establish a comprehensive data governance framework that includes data management and standard setting, kick-start the construction of data platforms, conduct surveys on the usage by shareholder companies and secondary units, and define the functional requirements and performance indicators for each module.
- **Software Asset Management:** Through a system-wide software usage audit, enhance the awareness of using legitimate software within the enterprise, maintain iterative upgrades to the software asset management system, and provide routine procurement services to prevent disputes or litigation caused by unauthorized software usage.

(2) *Artificial Intelligence*

CRCC is following a "1+2+4" framework to construct high-standard artificial intelligence infrastructure. It actively pushes forward the establishment of technical standards and capacity assessments for smart construction, focusing on forming teams, fostering innovation, strengthening operations, and enhancing promotion. These key measures drive high-level development in intelligent construction.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.3. NEW CONSTRUCTS FOR SAFETY LINES

- Governance**

We have developed the *Three-Year Action Plan for Fundamental Safety Production (2024–2026)* and revised a series of systems and standardized guidance manuals, including the *Safety Production Supervision and Management Measures* and the *Enterprise Safety Production Supervision Inspection Checklist (2024 Edition)*. These efforts continue to solidify the foundation of safety production work and resolutely prevent and contain various types of accidents. We are continually deepening the supervision and assessment mechanisms, conducting evaluations of safety practices at all organizational levels and among personnel to ensure the effective implementation of safety regulations.

- Strategy**

Adhering to the principle of “life paramount, prevention first”, we integrate the concept of intrinsic safety throughout the development of the enterprise. On one hand, we continuously improve the safety system, issuing and detailing various safety management methods and standards, creating a “comprehensive safety” framework. On the other hand, we focus on hidden danger inspection, emergency capabilities, and cybersecurity construction, enhancing the overall safety level, striving to become a benchmark in safety management within the construction industry, and building a solid foundation of safety for the high-quality development of the enterprise.

- Risks and Opportunities**

With the expansion of project scales and complex construction environments in the construction industry, high-altitude and underground operations are prone to safety accidents. Influenced significantly by harsh weather and geological conditions, cybersecurity threats cannot be ignored. Therefore, we comprehensively strengthen the dynamic closed-loop control of safety risks: reviewing baseline risks related to construction, natural environments, and networks, and following up monthly; adhering to “prevention first”, optimizing processes for different risks, preempting preventive measures, and perfecting protection systems through specialized inspections and tiered management.

- Indicators and Objectives**

Indicator	Unit	2022	2023	2024
Investment in Safety Production	RMB100 million	174.714	193.016	193.859
Safety Training Participation	Person-time	29,260	212,600	227,900
Work-related Fatalities	Person	12	10	9
Work-related Fatality Rate	%	0.0045	0.0037	0.0034
Workdays Lost to Work-related Injuries	Day	72,000	60,000	54,000

Note: Statistics are based on the number of fatalities from work-related safety incidents, with each fatality equating to 6,000 lost workdays.

VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.3.1. Strengthening Intrinsic Safety

CRCC deeply implements the concept of intrinsic safety, enhancing governance of the safety production system. It has revised and introduced a series of systems, methods, and standardized safety production manuals, strengthening the refined and penetrating management of safety production. This approach constructs a “comprehensive safety” framework, ensuring the continuous, standardized, and effective operation of the production system.

6.3.2. Hidden Danger Inspection and Management

CRCC has intensified its efforts to identify and address major accident risks. The company has organized the compilation of the *Major Accident Risk Assessment Standards Atlas* for railway, highway, and housing and municipal engineering projects. It has established a reward and incentive mechanism for reporting significant risks, implementing a policy of “small reward for small risks, large reward for significant risks”. Additionally, a retrospective accountability mechanism for major accident risks has been set up to trace responsibilities along the chain of command, conducting thorough investigations and enforcing strict accountability. This approach aims to promote proactive engagement from all employees in identifying and mitigating significant accident risks.

6.3.3. Enhancing Emergency Response Capabilities

CRCC continually strengthens the construction of emergency response capabilities. It has selected 126 projects involving over 8,000 personnel and nearly 3,000 sets of equipment to form part of the central enterprise’s emergency response force. It coordinates with local government departments to ensure a smooth emergency mechanism. Following the arrangements of the Emergency Management Department and the National Safety Production Emergency Rescue Center, it actively conducts safety accident prevention and comprehensive emergency drills in response to severe typhoons and major flood disasters, significantly enhancing the company’s emergency response speed and handling capabilities.

6.3.4. Boosting Cybersecurity

In compliance with laws such as the *Cybersecurity Law of the People’s Republic of China*, CRCC actively carries out cybersecurity construction. By continuously improving work systems and optimizing management processes, employing firewalls, intrusion detection systems, antivirus software, and other cybersecurity equipment, the company conducts real-time monitoring and protection of its networks, building a robust cybersecurity barrier. Additionally, the company has developed differentiated security protection strategies, access control rules, and storage requirements for various data levels, ensuring resources are precisely allocated to protect critical data. In 2024, the company experienced no significant cybersecurity incidents.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.3.5. Creating a Safe Environment

CRCC consistently adheres to the safety philosophy of “life paramount, prevention first”, holding a safety production training session and system method dissemination meeting in 2024, transmitting safety responsibility awareness at all levels. It forms a regular cybersecurity safeguard team, conducts cybersecurity inspections and reinforces information systems, successfully completing this year’s drills and cybersecurity safeguards during key periods such as the 75th Anniversary of the founding of the People’s Republic of China, guiding employees to firmly establish a sense of red lines and baseline thinking, enhancing safety prevention awareness.

6.4 NEW BREAKTHROUGHS IN QUALITY MANAGEMENT

- **Governance**

We consistently adhere strictly to laws and regulations such as the *Product Quality Law of the People’s Republic of China*, the *Metrology Law of the People’s Republic of China*, and the *Standardization Law of the People’s Republic of China*. In 2024, we compiled a *Quality Standardization Management Manual* covering major business areas such as railways and urban rail. This initiative aims to normalize quality management efforts and strive to enhance the quality of products and service levels.

- **Strategy**

We uphold the philosophy of “excellence in execution” in response to the *National Quality Improvement Program Outline*. By establishing a system and standards framework, we leverage the “National Quality Month” events to tackle quality issues, strengthen our standardization efforts, and earn authoritative certifications to enhance our quality management level. We closely align with national strategies to create high-quality projects and set benchmarks in the industry; we continue to optimize service processes to protect customer rights and strive to become leaders in quality management within the construction industry.

- **Risks and Opportunities**

In the context of fierce competition in the construction market and increasingly stringent customer demands, our quality management faces multiple challenges. Regarding engineering quality, complex construction processes and fluctuations in raw material quality may lead to quality defects, affecting project quality; on the service level, rising customer expectations, cumbersome service processes, and untimely responses may reduce customer satisfaction. In response, we strengthen process control, strictly monitor raw material quality, optimize service processes, and accurately balance costs and quality to break through quality management bottlenecks.



VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

• Indicators and Objectives

Indicator	Unit	2022	2023	2024
First-time Pass Rate	%	100	100	100
Customer Complaint Resolution Rate	%	100	100	100
Economic Contract Fulfillment Rate	%	100	100	100
Customer Satisfaction	%	100	100	100

6.4.1. Strengthening Quality Management

CRCC vigorously implements a strategy to enhance the company's strength through quality. The company has improved the construction of its system and standards, categorically advancing project quality verification to elevate the level of engineering quality management. Actively adhering to international standards and industry norms, the company has gained authoritative certification for its quality management system, which has significantly enhanced its corporate brand image. Additionally, our company specializes in the production of construction-related products. The characteristics of our products and industry practices indicate that there is no need for a product recycling program. In 2024, CRCC recorded no major safety or quality incidents related to its products and services.

- **Quality Awareness Cultivation:** Organizing the "National Quality Month" activities, engaging frontline workers in various quality activities and participating in the state-owned enterprise total quality management knowledge competition, ranking fourth among central enterprises and first among construction central enterprises.
- **Quality Focused Activities:** Advancing the development of QC groups and the creation of reliable quality teams, guiding workers to start with the details and improve engineering quality from their positions.
- **Engineering Excellence Initiatives:** Adhering to the policy of "constructing high-quality projects", directing units to meticulously organize, manage strictly, and apply refined techniques in construction to achieve process excellence.
- **Quality Standardization Construction:** Implementing the *Outline for a Building a Powerful Quality Nation*, compiling *Quality Standardization Management Manuals* for major business areas such as railways and urban rail, standardizing quality behavior, and enhancing overall quality.
- **Authoritative Quality Management Certification:** CRCC has passed ISO 9001 and other authoritative certifications, and in June 2024, the company successfully completed the recertification of the "Integrated Management System", ensuring strict quality control in all operational aspects of the enterprise.
- **Railway Construction:** Strict adherence to railway engineering construction quality acceptance standards and certification requirements is maintained, from the rigorous selection and inspection of raw materials to the precise control of processes during construction. Every step is well-documented and regulated.
- **Building Projects:** Following architectural industry quality management certification norms, from the rationality review of design planning to accurate testing of structural safety, and considering the comfort of occupancy, comprehensive measures are taken to ensure product quality.
- **Overseas Projects:** Adhering to local and international quality standards and integrating quality concepts from diverse cultural backgrounds, we provide high-quality construction and services to global clients. With a stringent quality control system, we fulfill social responsibilities and establish an outstanding international brand image.

VI. Excellent Governance, Expanding Development and Composing a New Chapter (continued)

6.4.2. Constructing High-Quality Projects

CRCC embraces the responsibility of national interests, aligns closely with the country's development strategies, and leads with high-quality standards. Adhering to the quality philosophy of "excellence in execution", CRCC is dedicated to constructing a series of high-quality projects, continually fortifying the foundation of "Quality CRCC".

6.4.3 Intellectual Property Protection

CRCC rigorously adheres to the *Patent Law of the People's Republic of China* and other relevant legal regulations, placing a high emphasis on the protection of intellectual property. As the company actively explores market opportunities and advances project construction, intellectual property protection is considered a critical element of corporate development. From patent application to the commercialization of results, the company provides comprehensive support, thereby motivating innovative vitality, consolidating its leading position in the industry, and solidifying a strong foundation for sustainable development.

Data Insights • 2024

- Granted Patents: 7,740
Specifically, 2,696 are invention patents, and 72 are under the Paris Convention and PCT patents.
- Cumulative Granted Patents: 40,638
Specifically, 9,376 are invention patents, 221 are under the Paris Convention and PCT patents, 8 are recognized as National Intellectual Property Exemplary Enterprises, and 31 as National Intellectual Property Advantageous Enterprises.

6.4.4. Providing Quality Services

CRCC consistently adheres to a "customer-oriented" service philosophy, fully leveraging its strengths to provide the highest standard and most stringent solutions, products, and services. This approach helps clients achieve their construction goals safely and smoothly. By optimizing service processes, establishing a comprehensive and effective privacy protection system, forming professional after-sales service teams, strengthening post-sale support, tracking and analyzing customer feedback, focusing on complaint content, and promptly resolving a series of customer issues, the company has earned the trust and support of its clients. In 2024, the company did not experience any incidents of customer privacy breaches, and the number of customer complaints was zero.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection

CRCC firmly remembers General Secretary Xi Jinping's earnest instructions on ecological and environmental protection. It implements directives on ecological environmental protection and the dual goals of peaking carbon emissions and achieving carbon neutrality, actively responding to the call from the CPC Central Committee and the State Council to win the battles for blue skies, clear waters, and clean lands. The company adheres to the principles of "maintaining bottom lines, not crossing red lines, and creating highlights", steadily promoting the corporation's green, low-carbon, high-quality development, acting as a practitioner and promoter of ecological civilization, and enhancing the environment to ensure bluer skies, greener lands, and clearer waters, making the landscapes more vibrant and colorful.

"We must perfect the ecological civilization system, synergistically advance carbon reduction, pollution reduction, green expansion, and growth, actively respond to climate change, and quickly improve and implement systems and mechanisms that equate lucid waters and lush mountains with invaluable assets".

—From the Third Plenary Session of the 20th Central Committee of the Chinese Communist Party

7.1 RESPONDING TO NEW CLIMATE CHANGES

- **Governance**

We have integrated climate change response into our corporate strategy, risk control, and daily management by establishing a leadership group for peak carbon neutrality. This group is responsible for planning action programs, setting carbon reduction targets, and guiding subsidiary units. In addition, we have implemented reform measures and established related institutions. In 2024, the CRCC Green Low-Carbon Industry Technology Research Institute was officially established.

- **Strategy**

In the compilation of the *CRCC Medium and Long-term Development Strategy*, we adhere to strategic guidance and strengthen our mission commitment. We actively respond to the national "dual carbon" strategy, fully consider the risks and opportunities of climate change, and promote green transformation and sustainable development of the company by practicing green concepts, implementing relevant actions, and creating green products. However, our climate data monitoring system and scenario analysis model are still in the optimization stage, and the strategies involving climate resilience assessment, such as strategy adjustment and scenario simulation, have not yet been fully solidified, making it currently difficult to provide this analytical content.

- **Risks and Opportunities**

Under the "dual carbon" framework, climate change presents risks such as adverse weather leading to construction delays and cost increases, with non-compliance in carbon emissions resulting in penalties. However, opportunities coexist as the company can enhance its competitiveness by intensifying research and development in green building technologies; participating in low-carbon infrastructure projects aligns with national strategies, expands business, and fosters new growth points for sustainable development.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

- **Physical risks:** These are directly related to the tangible impacts of climate change, primarily arising from acute climate events (such as heavy rain, floods, typhoons, droughts, and other extreme weather conditions) and long-term climate pattern changes (such as global temperature rise and sea level rise), posing direct threats to the safety of our employees and the assets of the company.
- **Identification process:** This involves collecting global climate data, analyzing historical project cases (such as the impact of heavy rain and typhoons on railway bridge construction), and establishing extreme weather monitoring and early warning mechanisms.
- **Transition risks:** These refer to a series of challenges faced by enterprises in the process of transitioning to a low-carbon economy, including risks related to low-carbon transformation policies and regulations, low-carbon technologies, and changes in market demand, which could potentially lead to financial and reputational risks for the business.
- **Identification process:** We closely monitor “dual carbon” related policies and regulations, research market demand changes, evaluate customers’ trends towards green buildings and sustainable infrastructure; organize internal cross-departmental discussions, and analyze industry transformation cases in combination.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

Risk/Opportunity Category			Risk/Opportunity Description	Response Strategy
Risk	Physical Risk	Short-term Risk	<ul style="list-style-type: none"> Production operations may be disrupted, or safety incidents may occur due to extreme weather (high temperatures, typhoons, heavy rain, blizzards) or natural disasters. Directly reduces project revenue, impacting the company's current profits and cash flow. 	<ul style="list-style-type: none"> Develop emergency response plans for extreme weather (high temperatures, typhoons, heavy rain, blizzards) or natural disasters. Connect with urban management information platforms to enhance timeliness in information gathering, allowing for advanced prediction and effective management, risk avoidance, and relocation of personnel and materials.
		Long-term Risk	<ul style="list-style-type: none"> Global warming may lead to sustained high temperatures, droughts, and fires, increasing the frequency of natural disasters and causing water shortages; this could affect the normal operation of company facilities and production efficiency. Increase water usage costs, with production operations affected leading to project delays and reduced income. 	<ul style="list-style-type: none"> Consider the impact of sea-level rise in the site selection, planning, and design of new projects. Continuously monitor trends in sea-level rise.
	Transition Risk	Policy and Legal	<ul style="list-style-type: none"> Regulatory bodies and capital market indices are increasingly demanding corporate environmental disclosure. Non-compliance could expose the company to compliance risks. Compress profit margins, affecting the efficiency of capital operations. 	<ul style="list-style-type: none"> Regularly track relevant regulatory policies to timely optimize internal regulations and workflows to meet or even exceed supervisory requirements.
		Technology	<ul style="list-style-type: none"> Under the "dual carbon" goals, significant investment in green low-carbon technology innovation is essential but may also bring economic pressures due to new R&D investments, outcome transformations, and technology promotion. Short-term high investment in research and development intensifies cash flow pressures, with profits declining due to rising costs. 	<ul style="list-style-type: none"> Increase R&D investments and continuously conduct research on green low-carbon industries, product innovation, and industry cultivation to form new production capacities in the green low-carbon field, explore new development areas and paths, and shape new development dynamics and advantages to deeply participate in green low-carbon economic development.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

Risk/Opportunity Category			Risk/Opportunity Description	Response Strategy
		Market	<ul style="list-style-type: none"> The "dual carbon" goals have spurred demand in the energy-saving, environmental protection, and green construction markets. As the number of practitioners increases, the company faces intensified competition. Should the company engage in poor environmental or climate-responsive actions or fail to respond promptly, it may harm the company's reputation, leading to the loss of investors and clients and subsequently affecting the company's operations. 	<ul style="list-style-type: none"> Use a strategy of "dual carbon" plus various sectors like "clean energy", "construction upgrades", "technology applications", "product creation", and "green cities" to drive the industry's green low-carbon transformation and enhance market competitiveness. Stay informed about the company's environmental and climate change-related public sentiments, actively communicate with stakeholders, and strengthen information disclosure.
		Reputation	<ul style="list-style-type: none"> As the topics of climate and sustainable development gain more traction, stakeholders' interest in green production and climate change continues to increase. If the company fails to respond promptly to stakeholders' expectations, it could face reputational risks. Likely to lead to customer attrition and reduced project orders, directly affecting business revenue. 	<ul style="list-style-type: none"> Accelerate the company's green and low-carbon transformation to make production and operational activities more conducive to mitigating climate change. Develop emergency plans for sudden environmental incidents to enhance the capability for emergency handling of environmental risks.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

Risk/Opportunity Category			Risk/Opportunity Description	Response Strategy
Opportunities	Resource Efficiency		<ul style="list-style-type: none"> By improving energy and resource efficiency, the company can promote energy conservation and consumption reduction, which benefits by reducing operating costs. 	<ul style="list-style-type: none"> Actively undertake management and technological upgrades to achieve energy savings and efficient use in green design, construction, operation, and manufacturing. Advocate for green office practices, create environmentally friendly office spaces, and use clean and renewable energy. Actively engage in the recycling and reuse of wastewater, waste residue, and other waste materials, vigorously develop a circular economy, and reduce the consumption of natural resources.
	Energy Sources		<ul style="list-style-type: none"> Increase the use of clean energy, including the development and utilization of solar and biomass energy, which can effectively reduce the company's long-term operational costs and enhance corporate benefits. Implement green procurement practices, giving priority to low-carbon and renewable building materials such as eco-friendly insulation materials and renewable timber, which can directly reduce carbon emissions throughout a building's lifecycle. 	<ul style="list-style-type: none"> Increase the proportion of renewable energy used in manufacturing and office segments, reduce operational greenhouse gas emissions, and enhance the carbon competitiveness of the company's products and services.
	Products/ Services		<ul style="list-style-type: none"> Given government advocacy and commitments to carbon neutrality, consumer choices are increasingly influenced by considerations related to green and environmental protection. The company's energy-efficient and environmentally friendly products and innovative solutions meet emerging market demands, providing opportunities for growth in performance. 	<ul style="list-style-type: none"> Increase investments in energy conservation, environmental protection, and green low-carbon sectors, advance technological innovations and upgrades, and provide diverse, reliable, and efficient clean energy, green buildings, and new energy equipment as part of green low-carbon products and services.
	Market		<ul style="list-style-type: none"> Market preferences are shifting towards companies that emit fewer greenhouse gases, driven by policy trends. 	<ul style="list-style-type: none"> Implementing the national "dual carbon" goals, leveraging professional strengths to actively explore paths for low-carbon operations, green development, and environmental friendliness, and actively supporting the industry's efforts in energy conservation and emissions reduction, as well as urban low-carbon development.

VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

Risk/Opportunity Category		Risk/Opportunity Description	Response Strategy
	Adaptability	<ul style="list-style-type: none"> Engaging in climate change-related business research and industry exchanges can enhance the company's capability to manage climate change risks and seize climate opportunities, while also shaping the brand image of fulfilling social responsibilities. 	<ul style="list-style-type: none"> Actively researching and exploring new technologies and models in the green and low-carbon sector, vigorously promoting the development of green buildings and zero-carbon transformations among other green and low-carbon industries, thereby enhancing the company's capacity to adapt to climate change.

• Indicators and Objectives

By the end of 2025, CRCC has set specific targets: the comprehensive energy consumption per RMB10,000 of business revenue will decrease by 14%, and carbon dioxide emissions will reduce by 18%. These efforts are aimed at advancing energy conservation and carbon reduction to support green development.

Name of Indicator	Unit of Indicator	2022	2023	2024
Total Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	1,549.87	1,580.59	1,381.21
Specifically, classified by scope				
Scope 1 Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	465.57	323.79	228.19
Scope 2 Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	1,084.30	1,256.80	1,153.02

Currently, CRCC's quantification system and assessment standards for climate-related asset risks and opportunities are not yet fully developed, making it impossible to accurately account for the assets affected by physical/transitional risks and the amount and percentage of business opportunities related to climate.

VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.1.1 Practicing Green Concepts

CRCC comprehensively implements the overall deployment for peaking carbon emissions and achieving carbon neutrality, embracing the concept that “lucid waters and lush mountains are invaluable assets”. The company advances ecological optimization, intensive conservation, and green, low-carbon development, vigorously expanding green and low-carbon businesses. It strives to construct a scientifically sound, green, and efficient industrial pattern, leading the green transformation and upgrading of infrastructure.

7.1.2 Implementing Green Actions

CRCC employs a multi-pronged approach to create distinctive green ecologies. The company actively engages in the research and development of green technologies, updates equipment, reengineers process flows, upgrades construction equipment, promotes the EOD (Engineer, Operate, Deliver) model, advocates for low-carbon transport, establishes green warehousing, builds green supply chains, develops green finance, and pushes for the substitution of clean energy, thus enhancing its carbon sequestration capabilities. Simultaneously, the company ensures accurate, consistent, and comparable emission data by calculating greenhouse gas emissions based on industry-standard methods like the *Central Enterprises Energy Conservation and Ecological Environmental Protection Statistical Report*, aiding in carbon emission monitoring and management.

Indicator	Baseline year 2021 <i>(tons of CO₂ equivalent per RMB10,000):</i>	Relative value <i>(%)</i>	Absolute value <i>(tons of CO₂ equivalent per RMB10,000)</i>	Target value for 2022–2024			Completion in 2024 <i>(%)</i>
				Specifically:			
				Increase or decrease in 2022 compared to 2021 <i>(%)</i>	Increase or decrease in 2023 compared to 2022 <i>(%)</i>	Increase or decrease in 2024 compared to 2023 <i>(%)</i>	
Carbon dioxide emissions per RMB10,000 of operating revenue (comparable price)	0.1483	-10.0	0.1334	-4.0	-3.0	-3.0	-4.57



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

(1) *Promoting Industrial Upgrades*

The company has developed a large number of new energy equipment, providing a continuous supply of green power and promoting industrial upgrades. China Railway Chang'an Heavy Industry Co., Ltd. has independently developed and manufactured the new energy (pure electric) high-altitude tunnel construction equipment—"Tianlu" series—which features zero emissions, low noise, and no pollution. These have operated over 100,000 hours in environments above 4,000 meters altitude, cumulatively reducing emissions by 5,760 tons of CO₂. Additionally, the development of new energy pure electric high-altitude tunnel loaders reduces emissions by 9.4 tons of CO₂ per unit annually.

(2) *Optimizing Industrial Structure*

The company is empowering China's steady journey on the "carbon reduction" path by implementing strategies such as "dual carbon + clean energy", "dual carbon + construction upgrades", "dual carbon + technology applications", "dual carbon + product creation", "dual carbon + green cities", and "dual carbon + iron construction solutions", continuously enhancing development quality and efficiency.

- China Railway 18th Bureau has undertaken the Liaocheng Chiping water supply project, utilizing bamboo-wrapped composite pipes developed in-house. The 120 kilometers of bamboo-wrapped composite pipes used in this project reduce consumption by 19,600 tons of standard coal and cut CO₂ emissions by 4,900 tons, while the selective harvesting of bamboo over natural decay additionally stores 830,000 tons of CO₂.
- CRCC Maritime and Port Bureau's construction of the Dalian Zhuanghe IV2 project, Huaneng Daishan project, and Shenneng Hainan project, which are set to be grid-connected by the end of 2024, will, upon completion, achieve an average annual power generation of about 8.2 billion kilowatt-hours and reduce CO₂ emissions by 65.6 million tons.
- The Guangzhou Baiyun Station near-zero carbon station renovation project, designed by China Railway Fourth Survey and Design Institute Group, includes the installation of 9.8 megawatts of photovoltaic power and a 3 megawatt/3 megawatt-hour energy storage system. Post-renovation, the project will reduce mains electricity usage by 11.15 million kWh per year, achieve a total carbon reduction rate of 31.1%, and reduce CO₂ emissions by 5,380 tons annually, realizing the near-zero carbon operation goal for Baiyun Station.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.1.3 Creating Green Products

CRCC fully implements green design and construction standards, extensively uses green building materials and environmentally friendly materials, accelerates the green upgrade of traditional infrastructure and energy-saving and carbon-reducing transformations of buildings, vigorously develops prefabricated buildings, orderly expands into green healthcare and green cultural tourism, and creates a series of industry-influential low-carbon and zero-carbon buildings and distinctive green products.

Case Study: Green Buildings, Creating a “New Card” for Green Low-Carbon Development

In May 2024, the Xiong'an Railway Construction Center project of China Railway Construction Real Estate Group Co., Ltd. display experience area received the Xiong'an New Area “Green Building+” demonstration project award, the only project to pass the review under the highest energy-saving category of “green building + zero energy consumption building”. Adhering to the principles of “green, ecological, brand, open, and innovative”, the center’s pioneer zone “zero carbon” demonstration building integrates ventilation corridors, ground source heat pumps, and other passive and active technologies to form a “green core”. The project adopts a “zero carbon demonstration building + low-carbon large park” model, not only achieving zero carbon emissions for the exhibition building but also following a low-carbon development concept overall, creating an integrated, harmonious, and symbiotic new pattern of green development.

7.2 NEW PATHWAYS IN GREEN MANAGEMENT

- **Governance**

We have established energy conservation and environmental protection leadership groups and carbon peaking and neutrality leadership groups, led by executive leaders. These groups guide the company’s ecological and environmental protection and energy-saving and carbon reduction efforts. We have issued the *CRCC Energy Conservation and Ecological Environmental Protection Supervision and Management Measures*, fully cooperating with central environmental inspections and focusing on strengthening the assessment of energy conservation and environmental protection indicators. These indicators are incorporated as “binding indicators” in the performance evaluations of leaders at all levels.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

- **Strategy**

Our approach is consistently guided by Xi Jinping's thoughts on ecological civilization and framed by our medium-to-long-term development plans. We work under the operational goals of "maintaining baselines, not crossing red lines, and creating highlights", steadily advancing the company's ecological, environmental protection, and green low-carbon initiatives.

- **Risks and Opportunities**

During construction processes, we face potential risks of environmental pollution. If emergency management is inadequate and pollution incidents occur, the company may face substantial fines and reputation damage. Traditional construction practices are deeply ingrained, potentially resisting the advancement of green cultural development and affecting the green transformation process. However, as environmental policies become stricter, they compel the company to improve its environmental emergency management levels. By significantly building a green culture, we can attract talent with strong environmental awareness, enhance corporate cohesion, meet current societal demands for green development, secure more green projects, and achieve sustainable development.

- **Indicators and Objectives**

Name of Indicator	Unit of Indicator	2022	2023	2024
Environmental Investment as a Percentage of Operating Revenue	%	0.22	0.32	0.35

VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.2.1 Preventing Environmental Risks

CRCC strictly adheres to environmental regulations and actively fulfills its environmental responsibilities. For new projects, we conduct identification and evaluation in all regions, three states, temporal aspects, and eight environmental dimensions, creating a list of significant environmental factors and emergency response plans. We provide environmental management disclosures and training, properly handle environmental emergencies according to the contingency plans, establish accountability systems, and require contractors to reserve emergency equipment and materials, conducting regular emergency drills. In 2024, the company had no environmental law violations leading to criminal charges.

Honors • 2024

- Won 36 national awards and 95 provincial and ministerial awards in energy conservation, environmental protection, and green low-carbon fields.

7.2.2 Cultivating Green Culture

CRCC actively organizes various environmental training and educational activities around National Energy Conservation Promotion Week, National Low Carbon Day, and World Environment Day, guiding employees and the public to focus on environmental protection and ecological preservation, and to jointly build an ecological civilization. In 2024, the company centered around the themes of “Green Transformation, Energy Conservation Challenge” and “Green Low Carbon, Beautiful China”, during National Energy Conservation Promotion Week and National Low Carbon Day, with approximately 5,576 projects and over 200,000 people participating in these activities.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.3 NEW PARADIGMS IN GREEN OPERATIONS

- Governance**

We have revised the *China Railway Construction Corporation Limited Energy Conservation and Ecological Environmental Protection Supervision and Management Measures*, specifying that all units establish an energy conservation and environmental protection leadership system, set up dedicated departments for these efforts, and appoint full-time or part-time managers. We strongly enforce the “Engineering Project Energy Conservation and Environmental Protection Supervision Checklist”, distribute targets, strengthen assessments, summarize experiences, promote advanced practices, and improve the statistical reporting and monitoring systems for energy conservation and emission reduction at construction sites to enhance monitoring methods.

- Strategy**

We are committed to becoming a “resource-conserving, environmentally friendly” enterprise. Guided by the overall policy of “top-level design, coordinated development, prioritizing conservation, and orderly progression”, we accelerate the adoption of greener, more digitized, and smarter construction practices. We actively promote new technologies and processes to build a resource-conserving enterprise.

- Risks and Opportunities**

Currently, fluctuations in energy and water resource prices pose risks; traditional construction methods, which consume a lot of energy and water, could increase costs if energy and water prices fluctuate. Technical upgrades that lag behind could lead to regulatory penalties for non-compliance; meeting stringent environmental standards may lead to increased compliance costs; and poor management of pollution emissions and waste during construction could result in environmental incidents, regulatory penalties, and damage to the company's reputation. However, opportunities arise as national policies strongly support green buildings, the demand for green building markets grows, helping the company to expand into the green technology and services market.

- Indicators and Objectives**

Name of Indicator	Unit of Indicator	2022	2023	2024
Solid Waste Disposal	10,000 tons	4,476.35	4,205.78	4,023.65
Waste Recycling	10,000 tons	4,073.47	3,701.09	3,701.76

Note: Due to industry characteristics, the company does not generate hazardous waste, so related key performance indicators do not apply.

VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.3.1 Conserving Energy Resources

CRCC always keeps the nation's interests at heart, adheres to the new development concepts in a complete, accurate, and comprehensive manner, driven by new productive forces, leverages professional strengths across the entire design, construction, and operation chain to vigorously promote green and low-carbon transformation, continuously enhances the “green content” of operations, and contributes wisdom and strength to the harmonious coexistence of humans and nature in the modernization process, aiding the construction of a beautiful and vibrant China.

(1) *Conserving Water Resources*

The company aims to become a water-saving enterprise, intensifying the protection and management of water resources. The water used primarily comes from municipal supplies and a small amount from rivers, mainly for dust suppression and some cement mixing. Currently, there are no risks associated with water sourcing. During construction, we rigorously enhance the protection of water sources and strengthen water conservation measures. We install and use water-saving devices, temporary rainwater collection systems, construction water and wastewater treatment systems. We collect and utilize surface water and groundwater from pits, promote the recycling of water, and equip water facilities with infrared sensors to prevent leaks, drips, and continuous flow. As the quantification system for the company's water efficiency goals is still being optimized and perfected, specific data targets have not yet been established.

The company aims to become a water-saving enterprise, enhancing the protection and management of water resources. The water used is mainly municipal water and a small amount of river water, primarily for dust suppression sprinkling and some concrete mixing. During construction, we effectively protect water sources, implement water-saving measures, install water-saving devices and temporary rainwater collection, construction water, and sewage treatment systems, collect and utilize surface and pit groundwater, advocate for water recycling, and install infrared sensors on water facilities to prevent leaks and continuous flow.

Data Insights • 2024

- Total water consumption: 280,730,500 tons
- Water resource consumption intensity: 2.63 tons per RMB10,000



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

(2) Energy Conservation

The company strictly adheres to the *Energy Conservation Law of the People's Republic of China*, *Regulations on Energy Conservation in Public Institutions*, and other relevant laws, regulations, policies, and standards. We actively promote a clean and low-carbon energy consumption structure, phase out obsolete equipment and construction processes, enhance labor productivity, and reduce resource consumption.

Name of Indicator	Unit of Indicator	2024
Total energy consumption	10,000 tons of standard coal	631.96
Specifically, classified by energy consumption:		
Coal	10,000 tons	30.17
Gasoline	10,000 tons	22.31
Diesel	10,000 tons	180.7
Fuel Oil	10,000 tons	3.01
Natural Gas	10,000 standard cubic meters	1.92
Electricity	10,000 kWh	2,073,781
Direct Energy Consumption	Tons of standard coal	2,548,676.849
Indirect Energy Consumption ¹	Tons of standard coal	3,770,423.151
Comprehensive energy consumption per RMB10,000 of operating revenue	Tons of standard coal	0.0592

¹ Direct energy sources include coal, gasoline, diesel, natural gas, and liquefied petroleum gas.

VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

Indicator	Target recommended values for 2022–2024						
	Specifically:						Completion in 2024
	Baseline Year 2021 <i>(tons of standard coal per 10,000 RMB)</i>	Relative Value <i>(%)</i>	Absolute Value <i>(tons of standard coal per RMB 10,000)</i>	Increase or decrease in 2022 compared to 2021 <i>(%)</i>	Increase or decrease in 2023 compared to 2022 <i>(%)</i>	Increase or decrease in 2024 compared to 2023 <i>(%)</i>	
Comprehensive energy consumption per RMB10,000 of business revenue (comparable price)	0.0631	-6.0	0.0593	-2.0	-2.0	-2.0	-2.14

Improving Energy-Saving Technologies	<ul style="list-style-type: none"> China Railway Construction Highway Operation Co., Ltd. is dedicated to creating a “Low-Carbon Expressway” project. In collaboration with South China University of Technology, research is being conducted on tunnel operation safety and energy-saving coordinated control technologies. This aims to achieve energy-saving objectives for the lighting systems, with an overall reduction and emission decrease of 3%. Kunlun Group’s operation company has initiated a pilot construction of an “Adaptive Vehicle-Brightening” smart lighting system in the Heixigou Tunnel on the Shi-Qian Expressway, anticipating energy and consumption savings of over 10% per tunnel.
Promoting Green Office Practices	<ul style="list-style-type: none"> Adhering to “green office” practices, a sustainable mechanism has been established to thoroughly advance resource conservation and recycling. This includes encouraging the conservation of water, electricity, paper, and reducing the consumption of office supplies. Energy-saving LED light sources are employed, and the operation times for air conditioning cooling units are strictly controlled. The company advocates for a green and low-carbon lifestyle by promoting paperless offices, video conferencing, and reducing employee business travel.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

(3) Strengthening Pollution Control

CRCC strictly adheres to laws and regulations such as the *Atmospheric Pollution Prevention and Control Law of the People's Republic of China*, the *Law of the People's Republic of China on Prevention and Control of Water Pollution*, and the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Wastes*. The company implements the "Three Simultaneous" system, which mandates that environmental protection facilities and the main project be designed, constructed, and commissioned concurrently. We resolutely implement the environmental impact prevention and control measures proposed in the environmental impact assessment reports of construction projects to ensure that pollutants are discharged within standard limits. Additionally, we prioritize the use of fire-resistant, antibacterial, and recyclable eco-friendly building materials. We are continuously advancing the implementation of new industries, intensifying research on new materials that have high relevance to the construction industry and multiple application scenarios, as well as projects that involve automation and smart operations.

In 2024, the company continues to strengthen control measures on ecological pollution sources at construction and operational sites by monitoring local ecological elements such as air, noise, surface water, soil, and vegetation. The local ecological functions remain unaffected by the company's activities. As the quantification system for the company's emissions targets is still being optimized, no specific data targets have yet been established. Due to the nature of the industry, the company's operations generally do not produce hazardous waste, making related key performance indicators inapplicable to the company.

Data Insights • 2024

- No severe environmental pollution incidents occurred
- No ecological destruction incidents occurred

Blue Sky Defense Campaign	<ul style="list-style-type: none">• The Electrification Bureau of CRCC utilizes electric-powered, emission-free electric scissor lifts, articulated aerial work platforms, and electric track vehicles to fundamentally address air pollution caused by fuel emissions.• CRCC High-Tech Equipment Corporation Limited promotes the upgrade and transformation of diesel engine emissions by enhancing diesel engines and adding exhaust treatment systems, significantly reducing harmful diesel exhaust emissions.
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VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

<p>Clear Water Defense Campaign</p>	<ul style="list-style-type: none"> • China Railway 11th Bureau organizes special planning for project environmental management, assessing environmental management risks and formulating response strategies. Integrated wastewater treatment facilities are purchased for construction and domestic wastewater, ensuring zero-emission wastewater disposal. • During the construction of the Guanghua Intercity project by Huanan Construction Group, a three-tier wastewater treatment facility processes and recycles construction wastewater.
<p>Clean Land Defense Campaign</p>	<ul style="list-style-type: none"> • The company has set a goal of harmless, reduced, and resourceful waste disposal, achieving a comprehensive utilization rate of non-hazardous waste of over 90%. • The company conducts risk assessments for both non-hazardous and hazardous waste, focusing on controlling the production, storage, transfer, utilization, and disposal of solid and hazardous wastes throughout these five stages. In 2024, the disposal of solid and hazardous waste will strictly adhere to national standards and local government regulations. • The company has issued a <i>Notice on Further Strengthening the Management of Construction Waste at Construction Sites</i>, standardizing the disposal of non-hazardous waste either by using designated waste dumps according to national standards, outsourcing to locally qualified companies, or reusing waste after crushing and screening.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.3.2 Developing a Circular Economy

CRCC actively implements new development concepts, exploring ways to recycle solid waste resources. By prioritizing ecological considerations, the company promotes green and low-carbon development, contributing to the national goals of peaking carbon emissions and achieving carbon neutrality. In 2024, the Institute of New Material Industry Technology is actively tracking projects related to the green recovery and recycling of waste oils and fats. During the construction of Shenzhen Metro Line 3, CRCC Southern has implemented a shield tunneling muck disposal system that effectively separates slurry from tunneling muck and sorts the gravel and sand for reuse. Additionally, the slurry is processed through a filter press, transforming it into mud cakes with reduced water content and producing clear water that can be recycled. Due to the nature of the industry, the company does not involve the use of packaging materials, and thus related key performance indicators are not applicable.

Revitalizing Idle Equipment	<ul style="list-style-type: none">• Based on a thorough inventory, focusing on idle shield machines and aligning with the spirit of the shield machine revitalization seminar, the company has issued implementation plans for revitalizing idle shield machines and vehicles, adopting a “one machine, one strategy” approach for asset revitalization.• Utilizing the CRCC Cloud Rental platform, a comprehensive database of idle equipment across the system has been established, with regulations such as <i>Equipment Adjustment Management Regulations</i> being issued. Equipment needed for new projects must first be reassigned before being rented or purchased.• Through measures such as introducing incentives for revitalizing idle equipment, strengthening inspections and supervision, and conducting auctions on the “Cloud Rental” platform, the utilization rate of equipment is enhanced and costs are reduced.
Recycling of Turnover Materials	<ul style="list-style-type: none">• Using information technology to establish a centralized control mechanism for turnover materials, focusing on the recovery and maintenance of various materials and equipment from sites to achieve revitalization goals.
Rational Disposal of Idle and Waste Materials	<ul style="list-style-type: none">• Introducing competitive mechanisms and leveraging the “China Railway Cloud Chain” platform to enhance disposal efficiency.



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.4 NEW VISTAS IN GREEN ECOLOGY

- Governance**

Our whole industry chain collaborates to create a “Green Environmental Protection+” comprehensive development plan. Centered on an “Ecology+” core, we link green environmental protection with land value enhancement, regional resource balancing, and ecological product value output, constructing an industrial ecological system. This continuous effort supports the integrated conservation and restoration of mountains, rivers, forests, fields, lakes, grasslands, and sands, enhancing the diversity, stability, and sustainability of ecosystems.

- Strategy**

We deeply implement the national “Dual Carbon” strategy, fully utilizing our industry chain and specialization advantages. Focusing on key areas such as national water environment management, river and lake ecological protection, coastline restoration, soil pollution control, and mine restoration, we support the realization of the national “Dual Carbon” strategy and the construction of a beautiful China, aiding the comprehensive green transformation of economic and social development.

- Risks and Opportunities**

Our construction activities can easily cause ecological damage. If not properly managed, we face risks of regulatory penalties and reputational damage; insufficient consideration of biodiversity during project planning may also lead to subsequent issues. However, the opportunities are significant; participating in ecological restoration projects and engaging in green value-added activities can enhance the company’s technical capabilities and expand its business scope. Conducting environmental public welfare activities helps gain social recognition and establish a good brand image.

- Indicators and Objectives**

Name of Indicator	Unit of Indicator	2022	2023	2024
Environmental Total Investment	RMB10,000	240,000	366,660.16	374,000



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.4.1 Ecological Restoration

General Secretary Xi Jinping emphasized the importance of adhering to green and low-carbon development as the fundamental solution to ecological and environmental issues. He advocated for accelerating the adoption of green production and lifestyle practices to lay a solid foundation for high-quality development. CRCC has actively leveraged its professional strengths to share in the dividends of “Ecology+” development while effectively improving the living environment of residents, enhancing urban environmental quality, and boosting residents’ sense of well-being and happiness.

<p>Case Study: Edge Locking for Sand Fixation, “Encircling” China’s Largest Desert</p>
<p>In November 2024, in Yutian County along the southern edge of the Taklamakan Desert, the final 10 meters of sandy land were planted with 100-meter-wide strips of poplars, saxaul trees, red willows, and rose bushes, completing a 285-kilometer-long enclosure of the desert’s blank areas. In this battle against the encroaching edges of the Taklamakan Desert, CRCC undertook a significant task of sand fixation over 35 kilometers and 130,000 acres in Minfeng County, Hetian region. The edge locking served not only to stabilize sand and prevent desertification but also to benefit and enrich the local population. To further increase the “green necklace’s” thickness and support the development of local ecological industries, CRCC strategically planned the cultivation of economically viable crops using intercropping techniques. Upper layers planted with red willows and saxaul are underplanted with Cistanche (desert broomrape), which will boost local farmers’ and herders’ incomes, truly achieving the sustainable development goals of “increasing greenery in the desert, adding value to industries, enhancing corporate efficiency, and raising people’s income”.</p>

7.4.2 Green Value-Add

CRCC firmly upholds and implements the development philosophy that “lucid waters and lush mountains are invaluable assets”, prioritizing ecological and green development. Utilizing its full industry chain advantages, CRCC has developed a comprehensive “green environmental protection+” development plan centered on “Ecology+”. This approach synergistically promotes land value enhancement, regional resource equilibrium, and ecological product value output, making green the most distinctive underpinning of high-quality development.

<p>Case Study: Greening and Enriching Greenery, Crafting an Ecological “Model Zone”</p>
<p>The Kunlun Group’s investment in the Chengdu Park City Longquan Mountain Ecological Protection and Restoration and National Reserve Forest Project, the world’s largest urban forest park project, spans an area of 566,000 acres. Through intensive afforestation and other measures, the project is expected to absorb 540,000 tons of carbon dioxide and release 390,000 tons of oxygen annually. To promote vegetation growth, the project collaborates with several research institutions to conduct innovative experiments, notably the “Polymer Bamboo Fiber Fungicide + Geosaurus Breeding” trial, which has shown remarkable results. This trial involves cultivating chicory under the forest and introducing geosaurus breeding, creating a complete traditional Chinese medicine industry chain, effectively addressing issues of low agricultural product profits, high soil improvement costs, and labor intensity, achieving both ecological and economic benefits.</p>



VII. Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection (continued)

7.4.3 Environmental Philanthropy

CRCC is fully committed to the principle of harmonious coexistence between humanity and nature. The company actively participates in tree planting, sanitation efforts, and environmental education activities, contributing to the promotion of green, low-carbon development and the building of a beautiful homeland.

7.4.4 Biodiversity Protection

CRCC strictly adheres to the *Law of the People's Republic of China on the Protection of Wildlife*, the *People's Republic of China Nature Reserve Regulations*, and other laws and regulations related to biodiversity in the areas it operates. The company rigorously implements ecological protection redline controls, aligns its business operations with these standards, and adopts various effective measures to ensure no damage to fragile ecosystems, habitats, and endangered species. CRCC refrains from project deployment within ecological protection redlines and from illegal collection, sale, and processing of biological genetic resources, thereby contributing to the global community of life with "CRCC solutions".

Case Study: Green Construction, Protecting All Life Forms

During the construction of the Luribay Road in Bolivia, CRCC International adhered to the principles of green and low-carbon environmental protection. The company took proactive steps to catalog and document rare trees along the route, affixing notices to inform local construction workers, thereby preventing damage to these trees. Detailed surveys were conducted on the habitats of local wildlife, considering the local ecology and topography. Using the terrain around the road, three under-bridge wildlife passages were designed and constructed. Additionally, the company mapped the habitat areas and distribution of wildlife, analyzed monitoring results, and compiled wildlife monitoring reports. Based on this, a protection plan was formulated to safeguard the "sprites" of the Amazon rainforest.



VIII. Benefiting the World, Gathering Drops to Nourish All

CRCC embraces a people-oriented development philosophy, focuses on cooperation and mutual benefit, and prioritizes public welfare. Committed to fulfilling the national strategy for regional coordination, CRCC seizes new opportunities in globalization, using incremental efforts to create significant impacts, moisturizing all regions, revitalizing the enterprise, and injecting continuous momentum into global development.

“Ensuring and improving people’s livelihood in the course of development is a major task of Chinese-style modernization”.

– From the Third Plenary Sessions of the 20th Central Committee
of the Communist Party of China

8.1 NEW VITALITY WITH PEOPLE-ORIENTED APPROACH

- **Governance**

We strictly adhere to the regulations of the *Labor Law of the People’s Republic of China* and other legal statutes, establishing *Employee Recruitment and Employment Management Measures*, *Employee Training Management Measures*, and *Headquarters Education and Training Management Implementation Measures* to standardize human capital management. The Party Committee’s Human Resources Department centralizes management responsibilities.

- **Strategy**

We ensure employees’ fundamental rights, adhering to principles that balance incentives and constraints, and fairness with efficiency in compensation. We establish trade unions, balance work-life aspects, and care for special groups. Our varied employee training activities and professional skills competitions empower talent development.

- **Risk and Opportunities**

In operations, non-standard employee actions or poor maintenance can lead to safety incidents; ethical lapses might result in information leaks, harming corporate reputation and interests; inadequate welfare policies could increase turnover rates. To address these, we’ve developed comprehensive training systems and proactive employee care policies, effectively mitigating risks such as operational errors, misconduct, and insufficient benefits, thus solidifying our company’s safe and stable operations.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

- Indicators and Objectives**

Name of Indicator	Unit of Indicator	2022	2023	2024
Total Number of Employees	Person	269,577	267,587	265,025
Female Employee Ratio	%	21.73	21.54	21
Ethnic Minority Employee Ratio	%	5.04	5.1	5.25
Contract Signing Rate	%	100	100	100
Social Insurance Coverage	%	100	100	100
Total Investment in Employee Training	RMB10,000	96,034	96,918	98,994
Employee Training Sessions	Person-time	1,182,195	1,263,596	1,383,045
Employee Training Coverage	%	95	95	96



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.1.1 Maintaining Legal Rights

(1) Equal Employment

CRCC strictly adheres to the *Labor Law of the People's Republic of China*, the *Labor Contract Law of the People's Republic of China*, the *Provisions on the Prohibition of Using Child Labor*, and the relevant legal requirements of foreign work locations. The company has established a flexible, market-oriented employment model. It legally signs labor contracts and treats employees of different nationalities, races, genders, religious beliefs, and cultural backgrounds fairly and justly. The company protects employee privacy, strictly prohibits and opposes any form of child labor, and stands against all forms of forced labor and harassment or abuse. It is committed to establishing harmonious and stable labor relations and fostering a positive work environment and atmosphere.

Name of Indicator	Unit of Indicator	2022	2023	2024
Total Number of Employees	Person	269,577	267,587	265,025
Specifically, classified by gender				
Male Employees	Person	210,996	209,944	209,372
Female Employees	Person	58,581	57,643	55,653
Specifically, classified by talent type				
Management Talent	Person	60,608	42,252	34,524
Professional Technical Talent	Person	142,868	184,688	193,125
Skilled Talent	Person	66,101	40,647	37,376
Specifically, classified by region				
Mainland China	Person	260,556	256,361	250,472
Overseas and Hong Kong, Macau, Taiwan Regions	Person	9,021	11,226	14,553
Specifically, classified by employment type				
Full-time	Person	269,577	267,587	265,025
Part-time	Person	0	0	0
Specifically, classified by educational level				
Graduate Degree and Above	Person	15,373	16,306	16,866
Bachelor's Degree	Person	175,227	183,913	189,649
Associate Degree and Below	Person	78,977	67,368	58,510
Specifically, classified by age				
35 and Under	Person	135,495	132,308	124,494
36-40 Years	Person	48,318	52,243	54,825
41-45 Years	Person	27,127	29,417	31,791
46-50 Years	Person	28,455	26,914	25,800
51-54 Years	Person	15,242	16,767	18,447
55 and Above	Person	14,940	9,938	9,668

VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

Name of Indicator	Unit of Indicator	2022	2023	2024
Employee Turnover Rate	%	2.29	2.98	3.24
Specifically, classified by gender				
Male	%	99	99	80.8
Female	%	1	1	19.2
Specifically, classified by region				
Mainland China	%	97.28	100	99.76
Overseas and Hong Kong, Macau, Taiwan Regions	%	2.72	0	0.24
Specifically, classified by age				
35 and Under	%	92.27	75.72	77.08
36-40 Years	%	4.36	12.78	10.77
41-45 Years	%	2.74	5.47	5.42
46-50 Years	%	0.63	2.98	3.63
51-54 Years	%	0	1.56	1.27
55 and Above	%	0	1.49	1.83

(2) Compensation Incentives

The company implements salary control measures that are determined by performance, adjusted for efficiency, and controlled through levels. Adhering to principles that balance incentives with constraints and efficiency with fairness, a compensation distribution system has been established. This system closely ties executive pay to company and individual performance outcomes and aligns with the risks and responsibilities undertaken. It significantly enhances the role of compensation management in motivating executives, continuously refining the compensation distribution system.

- Flexible workers engaged in regular labor are paid at least the local minimum wage, with protections standardized in special environments, ensuring their right to rest, vacation, and legal entitlements.
- The Compensation and Assessment Committee of the Board drafts the annual remuneration for the company's directors, supervisors, and senior executives based on relevant procedures. After obtaining approval from the Board of Directors or the General Meeting of Shareholders, the remuneration is implemented and disclosed in accordance with regulations.
- The company encourages setting a variety of allowances and subsidies focused on environmental, technical, and innovative skills at grassroots "dirty, exhausting, and dangerous" positions.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

(3) *Democratic Management*

CRCC strengthens democratic management by setting up a company mailbox, holding staff representative conferences, and other means to extensively gather employee opinions and suggestions, address disputes and complaints, and invigorate participation in corporate management. This boosts internal dynamism and management efficacy. In 2024, four units of the company were recognized as advanced entities in open and democratic factory affairs management nationwide.

Data Insights • 2024

- The company hosts 8,868 union organizations, encompassing 265,025 members across the system
- Employee union membership rate is 100%
- The company collected and registered 162 proposals from employee representatives
- Employee satisfaction rate stands at 100%

8.1.2 Promoting Comprehensive Development

(1) *Optimizing Talent Structure*

CRCC continuously refines mechanisms for talent attraction, training, and utilization, building a high-quality team of “enterprise leaders, business managers, technical specialists, integrated party and group work personnel, and highly skilled talents”. On the foundation of talent advantages in traditional sectors like construction and transportation, it further develops capabilities in overseas operations management and ecological environmental fields, progressively enhancing competitive strengths at both ends of talent development.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

(2) *Fostering Talent Growth*

CRCC enriches the nurturing ground for talent by holding skills training and competitions, thereby continually elevating employees' professional skills and supporting their growth alongside the high-quality development of the company. Adhering to market mechanisms for talent selection, it consistently enhances the quality of market-based talent appointments, actively cultivates and selects outstanding young leaders, and strengthens the construction of the young leadership team, ensuring proper alignment between personnel and positions.

Data Insights • 2024

- Total investment in employee training amounts to RMB989.94 million
- Employee training covers 1,383,645 participants
- Training rates for senior and mid-level management personnel are at 100%
- General employee training rate exceeds 95%

(3) *Streamlining Career Pathways*

CRCC has established a clear vertical hierarchy and integrated horizontal system for talent career development, creating a comprehensive system that includes evaluations for engineering, economic, accounting, and political work titles. Career pathways such as experts and project managers are set up to ensure opportunities for personal growth and professional advancement. Additionally, the company has deepened reforms in professional title and qualification systems, adhering to a leadership structure that supports “dual entry and cross-posting” and an exchange system for grassroots party organization secretaries. This promotes the rotation and exchange of party officials and management personnel, widening the channels for selecting and appointing versatile party and mass organization staff.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.1.3 Creating a Happy Home

(1) *Caring for Special Employees*

The company genuinely cares for its employees, implementing initiatives like winter warmth, summer cooling, autumn educational assistance, and year-round care through its trade union brand activities. These efforts aim to provide inclusive and regular services to all staff, offering financial aid, diverse benefits, and compassionate care, thereby fostering a warm and loving corporate atmosphere.

Data Insights • 2024

- Funds allocated for employee assistance: RMB88.42 million
- Number of employees assisted: 35,670
- Funds raised for warmth distribution: RMB86.12 million

(2) *Balancing Work and Life*

The company values humanistic care for its employees, advocating for a balance between work and life, and actively organizes various employee care activities to continually enhance the sense of belonging and happiness among staff.

(3) *Ensuring Occupational Health*

CRCC strengthens the management of employee occupational health by establishing *Occupational Health Operational Control Procedures*. It advances the source control of occupational diseases, deepens the procurement, usage, and management of labor protection goods, and enhances the control of high-risk hazards such as dust, noise, and radioactivity. Regular health check-ups are conducted, occupational health knowledge is widely disseminated, healthy concepts are promoted, and employee safety awareness is continuously heightened, thereby creating a safe, healthy, and sanitary workplace and effectively safeguarding employee occupational health.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.2 NEW BLUEPRINTS FOR COOPERATIVE SUCCESS

- **Governance**

In supply chain management, we have established a leadership team and task force, clarified business channels and responsibility goals, compiled strategic plans, and issued 27 policies. A qualified supplier directory has been issued, forming a logistics carrier resource pool and standardizing operations; contract standardization is advanced along with the strengthening of financial and logistical information support, and talent empowerment is facilitated through training and competitions. In industry partner cooperation, long-term development plans are clearly defined, and decisions are adjusted timely based on market changes and competitive conditions, ensuring competitive strength in the industry.

- **Strategy**

By building an integrated smart supply chain platform “China Railway Cloud Chain”, we collaborate closely with numerous suppliers. Implementing “one product, one strategy; one region, one strategy” purchasing policies, we enhance the full lifecycle management of suppliers and improve the efficiency and stability of the supply chain. Small and medium enterprises are treated fairly, and payments are made promptly. We actively expand cooperation fields, achieve resource sharing and complement advantages, leverage the full industrial chain’s technological benefits, organize and participate in industry events, promote high-quality railway enterprise development, and jointly build a sustainable development ecosystem.

- **Risks and Opportunities**

In supply chain management, instabilities in the supply chain and legal compliance issues or social responsibilities of suppliers could impact project construction. Based on this, we initiate actions centered on “whole-chain coordination, overall optimization, and value creation”, perfect a dynamic healthy evaluation system, and employ penetrating management to track major risks, setting up an early warning and supervision center on the China Railway Cloud Chain platform, utilizing graded monitoring indicators for comprehensive oversight, thus enhancing supply chain resilience and security.

In industry partner cooperation, poor communication can lead to missed development opportunities, making product development and market strategy planning passive. Therefore, we strengthen exchanges with “government, enterprise, academia, and research”, realize complementary advantages, share resources, innovate cooperation models, participate in industry exchanges, deepen cooperation, and achieve win-win results.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

- Indicator and Objective**

Name of Indicator	Unit of Indicator	2022	2023	2024
Supplier Number	Unit	21,015	69,452	92,003
Percentage of suppliers/subcontractors certified in quality, environmental, and occupational health and safety management systems	%	100	100	100

8.2.1 Safeguarding Supply Chain Security

(1) Responsible Procurement

CRCC adheres to the principle of “strategic procurement as the main approach, framework procurement as supplementary, and other procurements as additional”. The company has developed “one product, one strategy; one region, one strategy” purchasing strategies, advancing direct sourcing from origins and exchanging volume for price, significantly enhancing the degree of centralization and efficiency in procurement. In 2024, the company established an integrated smart supply chain platform “CRCC Cloud Chain”, which now encompasses over 12,000 project departments and 160,000 suppliers, handling approximately 330,000 price information entries for materials such as steel and cement.

(2) Building a Responsible Supply Chain

CRCC has established a supplier management system, progressively perfecting a comprehensive lifecycle management mechanism for suppliers, which includes audit access, performance evaluation, and incentive cleanup. This promotes organizational model transformation and process optimization in supplier management.

VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

Data Insights • 2024

- The company organized advanced supply chain management training sessions for over 300 participants and supply chain management training courses for more than 17,000 participants.

- **Supplier Selection Stage:** Focusing on suppliers' adherence to social responsibilities, assessing their environmental and social responsibility performances, and emphasizing shared responsibilities with suppliers.
- **Supplier Admission Stage:** Rigorous scrutiny of suppliers' production processes, environmental and technical capabilities to ensure compliance, verifying no illegal activities, significant legal disputes, or environmental violations in the past three years.
- **Supplier Evaluation Stage:** The company thoroughly considers supply capability, financial status, public opinion, and environmental protection to enhance dynamic management.
- **Supplier Capability Enhancement:** Based on significant regional projects, conducts supplier symposiums, offers social responsibility training, standardizes behaviors, and enhances awareness and capacity for responsibility, aiming to develop a responsible and sustainable supply chain system.

Name of Indicator	Unit of Indicator	2024
Number of Suppliers	Unit	92,003
Specifically, classified by region		
Northeast Region	Unit	5,375
East China Region	Unit	27,230
South Central Region	Unit	21,260
Southwest Region	Unit	12,108
Northwest Region	Unit	9,115
North China Region	Unit	16,915



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.2.2 Promoting Industry Development and Cooperation

(1) Fair Treatment of SMEs

CRCC adheres to the principles of fairness and justice, fulfills the responsibilities of a central enterprise, strictly adheres to contractual obligations, and ensures timely payments to SMEs. By leveraging treasury and financial sharing technologies, the company accurately monitors contract performance and payment schedules, arranging funds in advance to ensure all obligations are met. Additionally, it actively communicates with SMEs to understand their financial needs and provides necessary support, promoting healthy industry development.

(2) Partnership Cooperation

CRCC embraces the win-win cooperation philosophy, adhering to mutual benefit and shared growth, and actively engages in deep cooperation and exchanges with governments, enterprises, and universities. The company continuously broadens cooperation fields, achieving complementary advantages and resource sharing, thereby fostering industry cooperation and building a sustainable ecosystem.

- **Government-Enterprise Cooperation:** The company engaged in in-depth discussions with the people's governments of Tianjin, Liaoning, and Heilongjiang provinces to strengthen government-enterprise cooperation, expand cooperation areas, and enhance cooperation levels, supporting high-quality regional development.
- **Enterprise-Enterprise Cooperation:** The company held high-level talks with China First Heavy Industries Co., Ltd., Shoufa Group, Aluminum Corporation of China Limited, and Tongling Nonferrous Metals Group Co., Ltd., strengthening cooperation mechanisms through regular exchanges and information sharing, building long-term stable cooperative relationships.
- **University-Enterprise Cooperation:** The company established long-term stable industry-academia-research cooperation with Southwest Jiaotong University, University of Science and Technology Beijing, and other research institutes and universities, accelerating collaborative innovation and the transformation of scientific achievements to contribute to the development of a powerful transportation nation.

(3) Industry Collaboration and Development

CRCC fully leverages its comprehensive industry chain technology advantages. Actively hosting and participating in technological innovation, technical challenges, standard setting, and industry exchanges in the railway construction sector, the corporation not only continuously enhances its competitiveness but also diligently fulfills its duties as a "national team" in building a strong transportation country, propelling high-quality development in the national railway industry.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.3 NEW CHAPTER IN PUBLIC WELFARE

- **Governance**

We are fully committed to advancing rural revitalization efforts, establishing a leadership team for this initiative, with top company leaders serving as the team leaders and deputy general managers as deputy team leaders. The team includes an office with members from relevant headquarter departments, who collectively focus on targeted assistance and key tasks in rural revitalization.

- **Strategy**

We deeply study and implement the important expositions and directives of General Secretary Xi Jinping on the “Three Rural Issues” (agriculture, rural areas, and farmers), focusing on the “Five Revitalizations” goals. These efforts are integrated into our annual key activities for creating world-class corporate value, aimed at supporting rural revitalization.

- **Risks and Opportunities**

Rural infrastructure construction often faces challenges such as funding shortages and technical difficulties, making it hard to introduce advanced agricultural technologies and production models. This results in low added value for agricultural products, slow rural economic development, and difficult income increases for farmers, thereby diminishing the economic vitality of rural areas. To address these challenges, we introduce funds and support from five aspects: industry, talent, employment, industry collaboration, and bridging the urban-rural divide, thereby energizing rural development.

Neglecting the needs and interests of local community residents where operations are based can affect the company's image. Therefore, we pay close attention to our impact on communities, actively mitigate adverse effects caused by business operations and natural disasters, and provide services that meet community needs, maintaining community harmony and stability.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

• Indicator and Objective

Name of Indicator	Unit of Indicator	2022	2023	2024
Investment in Rural Revitalization	RMB10,000	3,657.02	4,069.81	7,066.72
Number of Cadres Appointed for Assistance	Person	50	48	47
Number of Assistance Projects	Unit	40	46	21
Total Purchase of Agricultural Products from Poverty Alleviation Areas	RMB10,000	3,946.76	2,628.4	2,790.06
Number of Participants in Rural Revitalization Training	Person	5,771	1,358	5,482

8.3.1 Rural Revitalization

(1) Top-Level Design and Strong Management

CRCC adheres to a high sense of responsibility in aiding targeted rural revitalization areas. Following a “unified management and tiered responsibility” mechanism, the headquarters meticulously plans, strengthens supervision, and ensures resource allocation. Group leaders personally visit the frontline to align with needs, while responsible leaders conduct comprehensive investigations. Deployed cadres from the entire system engage in educational training to continuously improve their skills and competencies. In 2024, the company organized and deployed rural revitalization efforts 14 times, effectively promoting development in assisted areas.

Data Insights • 2024

- The company purchased RMB27,900,600 worth of agricultural products from poverty alleviation areas, aiding in the sale of RMB3,237,900 worth of agricultural products.
- The company trained 5,482 county and village cadres, rural revitalization leaders, and professional technicians.
- The company supported 16 local leading enterprises, introduced 5 assistance projects.
- The company assisted 258 impoverished individuals in transitioning to employment.
- The company trained 5,482 county and village cadres, rural revitalization leaders, and professional technicians.
- The company participated in forming 8 paired party branches, creating 6 rural revitalization demonstration sites.

VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

(2) *Effective Measures Nourish the Heartland*

CRCC works closely with local governments in targeted support and cooperation, focusing its efforts precisely. In Zhangjiakou's Wanquan District, Shangyi County, and Long'an County in Guangxi, CRCC has implemented agricultural cultivation and processing, rural tourism, and new energy projects. These initiatives expand the scope of industrial support and promote the "Five Revitalizations", contributing to the creation of the "CRCC Agricultural Revival" brand and fostering sub-brands such as "CRCC Sunshine". This has gradually helped build a brand matrix of CRCC support, pushing forward the comprehensive revitalization of rural areas with the strength and wisdom of a central enterprise.

- **Industrial Revitalization:** The company viewed the industrial revitalization as a priority, focusing on key points and addressing shortcomings by implementing projects like agricultural cultivation and processing, rural tourism, and new energy construction to drive comprehensive rural revitalization.
- **Talent Revitalization:** Enhancing the training of grassroots officials, leaders of rural revitalization, and professional and technical personnel through detailed and targeted training for different groups
- **Cultural Revitalization:** Upgrading school infrastructure and teaching conditions in primary and secondary schools, improving the quality of compulsory education, and initiating filial piety elderly care actions, providing public welfare funds to those over 65.
- **Ecological Revitalization:** Combining unique village development with beautiful rural areas and tourism-cultural villages to boost local employment and income.
- **Organizational Revitalization:** Inviting local officials from supported regions to exchange and learn at subordinate enterprises to enhance their management skills.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.3.2 Volunteer Services

CRCC actively promotes a spirit of “dedication, friendship, mutual assistance, and progress” in volunteering, advancing the standardization, branding, and project-based operation of volunteer activities. The “Youth Volunteer Service Platform of CRCC” has become a comprehensive platform for exchanging work, connecting resources, and leading culture among various youth organizations. By the end of 2024, there have been 35,888 registered volunteers and 1,592 youth volunteer organizations, with volunteer activities exceeding 70,000.

Honors • 2024

- The “Locomotive • Dream Launch” science outreach project by China Railway Fourth Survey and Design Institute Group won the silver award at the China Youth Volunteer Service Project Competition.

8.3.3 Emergency Rescue

CRCC strongly reinforces its emergency rescue system construction, advancing the Central China Regional Emergency Rescue Center project. Enhancing the capacity of rescue teams and expanding comprehensive disaster rescue capabilities, the corporation excels in emergency responses to mudslides, typhoons, and other disasters, receiving acknowledgment from the CPC Central Committee, the State Council, relevant ministries, local party committees, and governments. It has been praised by the National Safety Production Emergency Rescue Center and received thank-you letters from regions including Hainan and Liaoning.

Data Insights • 2024

- The company has 16 professional rescue teams, comprising 409 members.
- Our emergency rescue efforts have involved a total of 16,140 personnel deployments and 3,386 sets of equipment.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.4 NEW PATTERN FOR COORDINATED DEVELOPMENT

- Governance**

We have established and perfected institutional mechanisms to promote coordinated regional development, strengthening the scientific allocation and intensive use of natural resource elements. This ensures that land development, ecological protection, and infrastructure construction progress in harmony. We aim to achieve shared resources and collaborative development across infrastructure, industrial clustering, and talent mobility.

- Strategy**

We encourage our subsidiaries to tailor their strategies based on local conditions, utilizing information sharing, optimized resource allocation, and joint innovation platforms. This fosters the close integration of technology research and development, achievement transformation, and industrial application, as well as the efficient flow of technology, talent, and capital, thereby accelerating the formation of a synergistic spatial structure.

- Risks and Opportunities**

Significant disparities exist among domestic regions in terms of economic development levels, industrial structures, and innovation capabilities, leading to resource over-concentration in developed areas and limited development in less-developed regions, impacting social equity and overall economic sustainability. In response to the directives from the 2024 Central Economic Work Conference to “intensify the implementation of regional strategies and enhance regional development vitality”, we leverage each region’s resource endowments and comparative advantages to promote a rational division of labor and cooperation within industries, strengthen upstream and downstream industrial cooperation, and form a complementary industrial pattern that drives regional economic development.

- Indicator and Objective**

Name of Indicator	Unit of Indicator	2022	2023	2024
New Contract Value	RMB100 million	32,450.011	32,938.700	30,369.678



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.4.1 Coordinated Development of Beijing-Tianjin-Hebei

In the process of coordinated development between Beijing, Tianjin, Hebei, and the construction of the Xiong'an New Area, our company leverages its professional capabilities and resource advantages to fully engage in urban renewal, transportation infrastructure, and comprehensive ecological environment rectification. By providing integrated full-industry chain services covering investment, construction, and operation, we promote sustainable development in the Beijing-Tianjin-Hebei region, injecting continual momentum into its coordinated growth.

Case Study: Successful First Beam Erection at the Haixing Casting Yard of the Jin-Wei Project
On July 21, 2024, the China Railway 15th Bureau participated in the successful erection of the first box girder at the Haixing Casting Yard of the Jin-Wei Project, marking the official transition to a dual-beam output mode in this section and laying a solid foundation for subsequent bridge deck and ballast less track construction. The new Jin-Wei High-Speed Railway extends from Tianjin Binhai Station to Weifang North Station, spanning 348.3 kilometers. It forms an integral part of the national "Eight Verticals and Eight Horizontals" high-speed rail framework and serves as a supplementary channel to the Jing-Hu (Beijing-Shanghai) and coastal corridors. Upon completion, the project will enhance transportation links between Tianjin, the Shandong Peninsula, and the Yangtze River Delta region, further supporting and leading the coordinated development of Beijing-Tianjin-Hebei.

8.4.2 Comprehensive Revitalization of Northeast China

In line with the *State Council's Opinions on Several Major Policy Measures to Support the Revitalization of the Northeast in the Near Term*, our company is enhancing the modern infrastructure system of the Northeast region, increasing the safety and efficiency of trunk transportation, and injecting robust momentum into the comprehensive revitalization of the Northeast's old industrial bases.

Case Study: Connecting the Veins, Constructing New Regional Transportation Arteries
The Jing-Ha (Beijing-Harbin) Expressway, originating in Beijing and passing through Shenyang and Changchun to Harbin, is one of the seven radial highways from the capital planned in the national highway network and an important corridor in the national comprehensive three-dimensional transportation network "678" framework. It serves as a vital transportation route in the Northeast, connecting the three northeastern provinces with the interior. The construction of the Sui-Shen Expressway by China Railway 19th Bureau is a crucial segment of the Jing-Ha Expressway, acting as a convenient link between Liaoning Province and the Northeast and North China regions, and an indispensable artery in the regional expressway network.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.4.3 Integration Development of the Yangtze River Delta

The company actively participates in the development of the Yangtze River Delta region, leveraging its profound advantages accumulated in various fields such as technological innovation, infrastructure construction, industrial cultivation, and market integration. Focusing on the regional railway network layout, it fully enhances the interconnectivity of the area, providing robust support for the high-quality integrated development of the Yangtze River Delta region.

Case Study: The Final Link of the “Super High-Speed Railway Loop” in the Yangtze River Delta

On June 15, 2024, the G8388/G8389 train departed from Shanghai, spanning across Shanghai, Jiangsu, Zhejiang, and Anhui, covering a one-way distance of over 1200 kilometers in 8 hours and 9 minutes. This forms a super high-speed railway loop connecting the Yangtze River Delta. The Chi-Huang High-Speed Railway, a critical part of this loop, completes the last link of the fast railway corridor from Wuhan to Hangzhou. It enhances the flow of people and logistics between the core areas (Shanghai, Nanjing, Hangzhou) and peripheral areas (Anqing, Chizhou, Huangshan), boosts the radiating power of central cities, and significantly improves the external outreach of the Yangtze River Delta. It fosters cooperation between the eastern coastal areas and southern Anhui along with central China, plays a strategic role for Anhui, drives development along the line, and supports the formation of a new pattern in the Yangtze River Economic Belt, characterized as “one axis, two wings, three poles, multiple points”.

8.4.4 Development of the Yangtze River Economic Belt

The Yangtze River Economic Belt, spanning across the eastern, central, and western regions of China, serves as a vital support for the country’s economic development. The company fully utilizes its capabilities by enhancing transportation infrastructure and smoothing the multidimensional traffic corridor, vigorously opening up the “artery” of the railway network to inject continuous new momentum into achieving high-quality development of the Yangtze River Economic Belt.

Case Study: Bridging the Gap, Concentrating Efforts to Craft a “Silken Ribbon” Across the River

The Phase II project of the Liuheng Highway Bridge at the Ningbo-Zhoushan Port is a major infrastructure linking Liuheng, Meishan, and other crucial islands in the waters between Ningbo and Zhoushan Port. As a large-scale cross-sea bridge project, it comprises several bridges and connecting segments, making it the world’s largest single-span steel box girder suspension bridge and China’s longest cross-sea bridge. Once completed, this bridge will set a new record for the longest span of any sea-crossing bridge in China. The successful acquisition of this project has filled the gap in CRCC’s achievements in constructing large-span bridges, marking a new historical milestone in CRCC’s construction of major sea-crossing bridges.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.4.5 Ecological Protection of the Yellow River Basin

Protecting the Yellow River is a vital plan related to the great rejuvenation and sustainable development of the Chinese nation. The company implements the significant national strategy of ecological protection and high-quality development of the Yellow River Basin, deeply integrates the concept of green development into every aspect of project construction, accelerates the green transformation of development modes, and strives to construct an efficient and sustainable green development pattern for the Yellow River Basin.

Case Study: A National First! Linyi Yellow River Bridge Selected for the Green and Low-Carbon Transportation Pilot Project
On July 30, 2024, the Ministry of Transport announced the first batch of special pilot tasks for the construction of a green and low-carbon transportation power, with the Linyi Yellow River Bridge project, led by the Shanxi Province Department of Transport and invested by China Railway Construction Investment Group and constructed by China Railway Large Bridge Bureau, successfully selected. Since its commencement, the project has focused on the national strategy of “Ecological Protection and High-Quality Development of the Yellow River Basin” and the goals of “carbon peak and carbon neutrality”. By integrating innovative green and low-carbon environmental protection technologies into construction, the project achieves harmonious coexistence between engineering construction and natural ecology, ensuring the protection of the ecological environment of the Yellow River Basin during the construction and operational phases.

8.4.6 Construction of the Guangdong-Hong Kong-Macao Greater Bay Area

The company firmly grasps the developmental opportunities of the Greater Bay Area, actively explores innovative development models, and maintains high standards and strict requirements in all its endeavors. It fosters excellent teams to create a modern, international, and integrated comprehensive transportation system, contributing to the rail transport construction and overall urban development of the Guangdong-Hong Kong-Macao Greater Bay Area.

Case Study: Setting a Benchmark, Injecting New Vitality into Shenzhen's Development
On December 28, 2024, the Phase IV of Shenzhen Metro Line 3, constructed by China Railway Construction Corporation Southern and other units, commenced operations. Notably, Pingxi Station, as the “first in the nation and the only one along the line”, is a prefabricated subway station. CRCC has pioneered the application of prefabricated assembly under the internal support system in urban rail transit within China. The station's decorative design ingeniously integrates cultural heritage, environmental protection, and humanitarian concerns by refining and reconstituting traditional Hakka weaving patterns as design elements. At Liyuan Station, the only elevated station on the line, the advantageous conditions of ample sunlight, large ground space, and sufficient area were utilized to install a photovoltaic power system above the station, which provides 18.75% of the station's electricity needs, accelerating the green and low-carbon energy transformation of rail transit. The Phase IV project of Shenzhen Metro Line 3 plays a critical role in supporting the development of Shenzhen International Low Carbon City. Once operational, it enables rapid connections between the eastern urban clusters and the Futian central district, providing more efficient transportation conditions for cooperation and development among cities in the Greater Bay Area of Guangdong, Hong Kong, and Macau.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.4.7 Hainan Free Trade Port Development

The company has thoroughly implemented the important speeches and directives of General Secretary Xi Jinping regarding Hainan’s work. By fully leveraging the exemplary role of state-owned enterprises, we have actively engaged in the construction of the Hainan Free Trade Port. Focusing on Hainan’s leading industries, we are accelerating project implementation to foster high-quality economic development in Hainan.

Case Study: Innovative Techniques Forge Sanya’s “Seabed Passage”
The Sanya River Estuary Tunnel Project, constructed by China Railway 20th Bureau, is the first in the country to use the largest cross-section pipe-roof structure combined with the freezing method. This project marks Sanya’s inaugural undersea tunnel, spanning a total length of 3.118 kilometers, including one main line, three ramps, and eight tunnel entrances and exits. It employs the domestically and internationally original triple-circle jacking pipe construction technique with the pipe-roof structure using the freezing method for full undersea operations. Once completed, it will further optimize the spatial layout of Sanya city, providing favorable conditions for the development of the Hainan Free Trade Port.

8.4.8 Chengdu-Chongqing Twin City Economic Circle Development

The company fully implements the national strategic deployment for the Chengdu-Chongqing Twin City Economic Circle, actively participating in the establishment of a modernized industrial system, the construction of a science and technology innovation center, the creation of a modern energy system, the opening of new channels for land and sea routes in the west, and the advancement of rural revitalization, thereby contributing to the development of the Chengdu-Chongqing economic circle.

Case: The First Inter-City Rail Transit Line in Sichuan Province, Ziyang Line, was Completed and Opened to Traffic
On September 29, 2024, the Ziyang Line, Sichuan Province’s first inter-city rail transit line, commenced operations, constructed with contributions from China Railway 12th and 19th Bureaus. This 38.7-kilometer line features seven stations, connecting Chengdu Tianfu International Airport, Tianfu International Airport New City, and Ziyang City. It serves as a fast link between the Ziyang central urban area and the Chengdu Tianfu International Airport area, acting as an economic corridor that shortens the distance between Chengdu and Ziyang. This development significantly advances the integration of Chengdu, Deyang, Meishan, and Ziyang, playing a crucial role in the socio-economic development of the region.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.5 NEW OPPORTUNITIES IN OVERSEAS DEVELOPMENT

- Governance**

We have implemented an “Overseas Priority” strategy, optimized the “2+5+N” overseas operation development system and management structure, and issued the *Strategies and Action Plan for the Deployment of China Railway Construction Corporation's New Energy and Other Strategic Emerging Industries in Overseas Markets*. We continue to leverage our full industry chain advantages, expanding the breadth and depth of our international operations.

- Strategy**

By utilizing our comprehensive industry chain and integrated services advantages, we share China's success stories, advanced technologies, and proven business models in infrastructure with host countries. We focus on creating high-standard, sustainable projects beneficial to local communities and “small but beautiful” projects. We continue to consolidate our core pillar markets, actively expand into Africa, Central Asia, Southeast Asia, and increase our efforts in Europe and the Americas.

- Risks and Opportunities**

Cultural backgrounds, value systems, religious beliefs, and social customs vary across countries, affecting overseas market demands due to local economic conditions, legal systems, and operational risks, potentially leading to misunderstandings and conflicts. We embrace the concept of a shared human destiny, deepen our understanding of overseas laws and regulations, respect local customs and cultures, strategically plan our overseas operations, enhance our market competitiveness, implement major projects with high quality, and actively promote “hard connectivity” in infrastructure, “soft connectivity” in rules and standards, and “heart-to-heart connectivity” with the peoples of our partner countries.

- Indicator and Objective**

Name of Indicator	Unit of Indicator	2022	2023	2024
Numbers of Overseas Project	Unit	1,446	1,673	1,626
Overseas Workforce	Person	86,554	56,247	76,007
Localization Rate of Workforce	%	83	76	80.5

VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.5.1 Infrastructure “Hard Connectivity”

CRCC leverages its complete infrastructure industry chain and integrated service advantages to share its successful experiences, advanced technologies, and mature business models in infrastructure with host countries. The company actively engages in local procurement, optimizes the allocation of local resources, and focuses on creating high-standard, sustainable, and community-beneficial landmark projects. These efforts drive local employment and inject significant momentum into the economic development of the countries along the Belt and Road. On September 4, 2024, under the witness of President Xi Jinping, Tanzanian President Samia Suluhu Hassan, and Zambian President Hakainde Hichilema, CRCC signed the *Memorandum of Understanding on the Revitalization Project of the Tanzania-Zambia Railway*. A leadership team and a special task force were established to fully commit to the smooth and effective implementation of the project.

8.5.2 Standards “Soft Connectivity”

CRCC considers “soft connectivity” of rules and standards as a crucial bridge and bond to promote interconnectivity. The corporation actively joins international standardization organizations and participates in setting international rules and standards, bringing its advanced management experience and technical standards to local projects. In project construction, operation, and procurement phases, international rules are applied, fully unleashing the positive effects of connectivity. In June 2024, the International Organization for Standardization (ISO) approved the proposal led by the CRCC Fourth Institute for the *Guidelines on Operational Rules for Autonomous Driving Mode*, marking the world's first ISO international standard on railway autonomous driving and a pioneering achievement for the Fourth Institute.

Data Insights • 2024

- Jointly leads the release of 16 IEC international standards and has declared and been granted 50 overseas patents, including one that won an international patent award.



VIII. Benefiting the World, Gathering Drops to Nourish All (continued)

8.5.3 Community Co-building “Heart Connectivity”

CRCC views “heart connectivity” with the peoples of co-building countries as a foundational aspect. It proactively integrates into local communities, respects local laws, and religious beliefs, and earnestly fulfills its social responsibilities to promote local sustainable development, giving local people a greater sense of happiness and fulfillment.

Actions • 2024

- In March, CRCC International held a State-Owned Enterprise Open Day at the Santiago Metro Line 7 project in Chile, discussing tunneling equipment, safety construction, and environmental protection with locals, allowing them to truly appreciate the charm of China’s heavy equipment and recognizing the advanced nature of Chinese infrastructure capabilities and technology.
- In June, China Railway 20th Bureau’s Angola International Company organized the “Warm Hearts on Children’s Day, With Love Together” event, bringing together the families and children of local and Chinese staff to celebrate “Children’s Day”. This event enhanced the sense of belonging among local employees and further strengthened the traditional friendship between China and Angola.
- In July, the second batch of 74 students, jointly trained by China Civil Engineering and the Federal Government of Nigeria, returned home after completing their studies in China. This joint training initiative, part of the China-Nigeria infrastructure cooperation project, has enhanced Nigeria’s capacity for sustainable infrastructure development. It has received high praise from both governments and has opened new avenues for China-Nigeria cooperation in talent development.



IX. Future Prospect

Looking back at the journey that spans thousands of mountains, and looking forward to the spring that awaits across countless trees, 2025 marks the final year of the “14th Five-Year Plan” and a decisive year for the deepening and enhancement of reforms in state-owned enterprises. In the new year, guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CRCC will deeply study and implement the spirit of the 20th National Congress of the Communist Party of China and the Second and the Third plenary Session of the 20th Central Committee of the Communist Party of China, the Central Economic Work Conference, and the Central State-owned Enterprises Leaders Meeting. Grounded in the “two overall situations” and embracing the responsibility of “great national concerns”, CRCC is set to face challenges head-on, focusing on concrete actions, and accelerate its steps towards becoming a world-class modern enterprise, contributing even greater strength to the nation’s construction and the grand revival of the Chinese nation!



X. Appendix

10.1 KEY PERFORMANCE INDICATORS

Indicator	Unit	2022	2023	2024
Economic Performance				
New Contract Value	RMB100 million	32,450.011	32,938.700	30,369.678
Operating Revenue	RMB100 million	10,963.129	11,379.935	10,671.713
Net Profit	RMB100 million	317.528	323.287	270.784
Taxes Paid	RMB100 million	301.694	335.846	310.277
Total Assets	RMB100 million	15,239.511	16,630.196	18,628.425
Debt-to-Assets Ratio	%	74.67	74.92	77.31
Investment in Technology	RMB100 million	250.039	267.255	256.397
Patents Granted This Year	Item	7,931	6,831	7,740
Total Patents Granted	Item	31,419	35,832	40,638
Governance Performance				
Indicator	Unit	2022	2023	2024
Number of Participants in Compliance	Person-time	11,819	941	5,436
Rate of Legal Dispute Resolution	%	58.8	68.6	63.7

X. Appendix (continued)

Society Performance Indicator	Unit	2022	2023	2024
Total Number of Employees	Person	269,577	267,587	265,025
Percentage of Female Employees	%	21.73	21.54	21
Rate of Labor Contract Signing	%	100	100	100
Social Insurance Coverage Rate	%	100	100	100
Employee Turnover Rate	%	2.29	2.98	3.24
Total Investment in Employee Training	RMB10,000	96,034	96,918	98,994
Training Coverage Rate for Employees	%	95	95	96
Number of Training Sessions for Employees	Person-time	1,182,195	1,263,596	1,383,645
Specifically, classified by gender				
Training Sessions for Male Employees	Person-time	890,193	956,543	1,041,885
Training Sessions for Female Employees	Person-time	292,002	307,053	341,760
Specifically, classified by employee type				
Training Sessions for Corporate Leaders	Person-time	25,894	23,142	33,422
Training Hours for Male Leaders	Hour	120+	120+	120+
Training Hours for Female Leaders	Hour	120+	120+	120+
Training Sessions for Management Personnel	Person-time	206,891	134,505	196,987
Male Management Personnel Training Hours	Hour	115+	115+	115+
Female Management Personnel Training Hours	Hour	110+	110+	110+
Participants of Professional and Technical Personnel Training	Person-time	735,898	849,876	875,692
Male Professional and Technical Personnel Training Hours	Hour	95+	95+	95+
Female Professional and Technical Personnel Training Hours	Hour	90+	90+	90+
Participants of Party and Mass Management Personnel Training	Person-time	39,845	50,587	83,234
Male Party and Mass Management Personnel Training Hours	Hour	100+	100+	100+
Female Party and Mass Management Personnel Training Hours	Hour	100+	100+	100+
Participants of Skilled Personnel Training	Person-time	173,667	205,486	194,310
Male Skilled Personnel Training Hours	Hour	90+	90+	90+
Female Skilled Personnel Training Hours	Hour	85+	85+	85+
Funds Raised for Warmth Campaigns	RMB10,000	7,916	7,495	8,612
Investment in Safety Production	RMB100 million	174.714	193.016	193.859
Number of Participants in Safety Training	Person-time	29,260	212,600	227,900



X. Appendix (continued)

Society Performance Indicator	Unit	2022	2023	2024
Number of Work-Related Deaths	Person	12	10	9
Work-Related Mortality Rate	%	0.0045	0.0037	0.0034
Work Days Lost Due to Work-Related Injuries	Day	72,000	60,000	54,000
Economic Contract Fulfillment Rate	%	100	100	100
Customer Satisfaction	%	100	100	100
Resolution of Customer Complaints	%	100	100	100
Rate of Projects Passing Inspection on First Submission	%	100	100	100
Percentage of Sold or Delivered Products Recalled for Safety and Health Reasons	%	0	0	0
Number of Suppliers	Unit	21,015	69,452	92,003
Ratio of Suppliers/Subcontractors Certified in Quality, Environmental, and Occupational Health and Safety Management Systems	%	100	100	100
Investment in Rural Revitalization	RMB10,000	3,657.02	4,069.81	7,066.72
Number of Cadres Appointed to Assist in Rural Revitalization	Person	50	48	47
Number of Support Projects Conducted	Unit	40	46	21
Total Amount of Purchases of Agricultural Products from Poverty-Relief Areas	RMB10,000	3,946.76	2,628.4	2,790.06
Number of Participants in Rural Revitalization Training	Person	5,771	1,358	5,482
Amount of Charitable Donations	RMB10,000	6,837.02	6,900.13	6,826.08
Employee Participation in Volunteer Activities	Person-time	24,175	55,847	74,942



X. Appendix (continued)

Environmental Performance Indicator	Unit	2022	2023	2024
Total Environmental Investment	RMB10,000	240,000	366,660.16	374,000
Percentage of Total Environmental Investment in Operating Revenue	%	0.22	0.32	0.35
Carbon Intensity	Tons/RMB10,000	0.1423	0.1356	0.1294
Total Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	1,549.87	1,580.59	1,381.21
Specifically, classified by scope				
Scope 1 Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	465.57	323.79	228.19
Scope 2 Greenhouse Gas Emissions	10,000 tons of CO ₂ equivalent	1,084.30	1,256.80	1,153.02
Total Solid Waste Emissions	10, 000 tons	4,476.35	4,205.78	4,023.65
Waste Recycling Volume	10, 000 tons	4,073.47	3,701.09	3,701.76
Total Energy Consumption	Tons of standard coal	674.10	667.42	631.96



X. Appendix (continued)

10.2 INDICATOR INDEX

Reporting Contents		Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited	Response to the United Nations Sustainable Development Goals (SDGs)	Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG5.0)
Reporting Standards		–	–	P1.1-1.3
Statement of the Board of Directors		Part B	–	–
About Us		–	–	P4.1-4.4
Sustainable Development Management		–	–	G3.1-3.7
Special Topic on Responsibility	Special Topic One: Strengthening and Transforming, Deepening Reforms to Reshape the Development Core	–	–	V1.1-1.4
	Special Topic Two: Pioneering Ahead, Stimulating Developmental Dynamics through Technological Innovation	–	–	V2.1-2.4
Excellent Governance, Expanding Development and Composing a New Chapter	New Achievements in Lean Governance	B7.1-7.2		G1.7-1.8 · G1.3 · G1.10
	New Drivers in Innovation	–		V2.1-2.4
	New Constructs in Safety Prevention	–		S3.4-3.10
	New Breakthroughs in Quality Management	B6.1-6.3 B6.5		S4.1-4.2
Redrawing Landscapes, Immersing in Green Thoughts for Ecological Protection	Responding to New Climate Changes	D19-20 D27-29 D36-37		E5.1-5.7
	New Pathways in Green Management	–		E1.1 · E1.7
	New Paradigms in Green Operations	A1.1-1.6 A2.1-2.4		E2.2, E2.4-2.5 E2.9-2.10 · E2.14 E3.1-3.5
	New Vistas in Green Ecology	A3.1		E4.1-4.3

X. Appendix (continued)

Reporting Contents		Environmental, Social and Governance Reporting Guide issued by the Stock Exchange of Hong Kong Limited	Response to the United Nations Sustainable Development Goals (SDGs)	Guidelines on Corporate Social Responsibility Reporting for Chinese Enterprises (CASS-ESG5.0)
Benefiting the World, Gathering Drops to Nourish All	New Vitality with People-Oriented Approach	B1.1-1.2 B2.2-2.3 B3.1-3.2	1 消除貧窮 2 零貧能源 3 良好健康與福祉	S1.1-11, S2.1-2.4
	New Blueprints for Cooperative Success	B5.1-5.4	4 優質教育 5 性別平等 6 清潔水與衛生	V2.7-2.8
	New Chapter in Public Welfare	B8.1-8.2	8 經濟發展與就業 9 產業創新與基礎設施 10 減少不平等	V1.2 · V3.3-3.7 V1.2
	New Pattern for Coordinated Development	—	11 永續城市與社區 12 負責任的消費與生產 16 和平正義與強力的制度	V1.1-1.4
	New Opportunities in Overseas Development	B8.1-8.2	17 夥伴關係	
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Appendix	Key Performance Indicators	A1.1-1.3 A2.1-2.4 B1.1-1.2 B2.1-2.2 B3.1-3.2 B7.1 · B8.2	—	A2
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10.3 SUGGESTIONS AND FEEDBACK

Dear readers:

Thank you for taking the time to read the *China Railway Construction Corporation Limited Annual Sustainability Report 2024*. For the purpose of continuously improving the preparation of report, we are looking forward to listening to your opinions and suggestions. Please assist us to complete the relevant questions in the feedback form. You may choose the following options to contact us.

Mailing address: China Railway Construction Corporation Limited, No. 40, Fuxing Road, Haidian District, Beijing, China

To facilitate communication with you and respond promptly to your comments and suggestions, please provide your contact information and relevant details. We will handle this information with care and ensure its confidentiality.

Your Information

Name: _____ Company/Organization: _____

Title: _____ Tel: _____

Fax: _____ E-mail: _____

Multiple Choice Questions (Please mark “✓” in the appropriate position)

- Does this report fully and accurately disclose the systems, measures and performance of CRCC in the fields of economy, society, and environment?
☐Very good ☐Good ☐Fair ☐Poor ☐Very poor
- Does this report respond to the issues and disclose the information concerned by stakeholders?
☐Very good ☐Good ☐Fair ☐Poor ☐Very poor
- Does this report disclose clear, accurate and complete information, indicators, and data?
☐Very good ☐Good ☐Fair ☐Poor ☐Very poor
- What is your opinion on the readability of this report, i.e., the logic, content design, wording, and layout?
☐Very good ☐Good ☐Fair ☐Poor ☐Very poor

Open-Ended Questions:

- What do you think is the most satisfying part in this report?
- What kinds of information would you like to learn more about?
- What are your suggestions for our future *Sustainability* reports?



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