

2024 Environmental, Social and Governance (ESG) Report

CRRC Corporation Limited

About the Report

Information about the Report	The Report is the 2024 Envir (hereafter referred to as "CR of CRRC and is released on a discloses CRRC's efforts in t partners, employees, and o	RC", "w the prin he ESG f
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ntal, Social and Governance (ESG) Report released by CRRC Corporation Limited we" or "the Company") to the public. The Report is intended for all stakeholders nciples of importance, quantifiability, balance, and consistency. It truthfully field in 2024, aiming to respond to the expectations of shareholders, customers, akeholders, and to better fulfill social responsibilities in the future.

less otherwise specified, the reporting period is from January 1, 2024 to e comparability and completeness of the Report, some data and content are bus years.

port covers the practice of CRRC and its wholly-owned and holding subsidiaries oundary is consistent with that of the Company's Annual Report.

nce to the relevant requirements of the Shanghai Stock Exchange's Guidelines ted Companies – Sustainable Development Report (Trial), Guidelines No. 4 mpanies – Sustainable Development Report Compilation, and Guidelines for sure by Listed Companies; the Stock Exchange of Hong Kong Limited's Appendix ernance Reporting Guide; the Ministry of Finance's Corporate Sustainability dards (Trial); the International Sustainability Standards Board (ISSB)'s *IFRS S1: irre of Sustainability-related Financial Information* and *IFRS S2: Climate-related* nitiative's Sustainability Reporting Standards (GRI Standards); and the United *Goals (UN SDGs).*

ormation and data used in the Report were all from the Company's statistical well as ESG information collected and audited by the Company. Unless al data herein is stated in RMB.

inese and English. The English version is a translation of the Chinese version. In nese version shall prevail.

rs and the public in paper version and PDF electronic version. For further ons or suggestions regarding the Report and the Company's ESG efforts, please *v*ays.

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Message from the Chairman

The year 2024 marks the 75th anniversary of the founding of the People's Republic of China and is a crucial year for achieving the goals of the "14th Five-Year Plan." CRRC has thoroughly studied and implemented General Secretary Xi Jinping's important speeches, instructions, and directives, as well as the key guidance from his three visits to CRRC, firmly carrying out the decisions of the Party Central Committee and the State Council, and comprehensively implementing the work requirements of the State-owned Assets Supervision and Administration Commission of the State Council (SASAC). Adhering to the general principle of seeking progress while maintaining stability, we have focused on the theme of "leading innovation" in Party building and the "13679" business strategy, consolidating consensus through the "five theories" and advancing the "seven establishments" to drive the "seven new breakthroughs, "making solid strides toward high-quality development.



We have comprehensively improved quality and efficiency, further optimizing development quality. Anchoring our goals of "stable profit growth and continuous optimization of five key financial indicators," we have actively pursued the "12367" quality and efficiency enhancement initiative, with the theme of "value-driven innovation and first-class performance through reform." We have also deepened benchmarking efforts and improved overall performance. In 2024, CRRC achieved an operating revenue of ¥246.457 billion and a net profit attributable to shareholders of ¥12.388 billion, reflecting a year-on-year increase of 5.21% and 5.77% respectively. This signifies both qualitative improvements and reasonable quantitative growth, strengthening our corporate image in capital markets and enhancing our value creation capabilities for shareholders.

We have expanded our business markets, ensuring sustainable growth. Adhering to our strategic positioning of "One Core, Two Business Sectors, One First-Class Goal," we have accelerated our transformation into a system solutions provider. Seven series of new energy locomotives were launched globally; the highspeed sleeper trains of the Fuxing series were delivered for the first time; and various freight wagons designed for multimodal transport and cold chain logistics were delivered in scale. The scale of our urban transit "Product+" and "System+" businesses has grown for four consecutive years, with orders surpassing newly manufactured vehicles for the first time. We have accelerated the construction of integrated energy solutions, advancing wind, solar, and hydrogen projects, further optimizing our market structure and expanding the industrial chain. Our participation in major "Belt and Road" projects has yielded significant progress—our operational services for the Jakarta-Bandung High-Speed Railway and the Laos-China Railway received widespread acknowledgment, and CRRC's high-speed trainsets for the Hungary-Serbia Railway were successfully unveiled in Serbia. Additionally, we established the Digital Intelligence Business Unit, Digital Technology Company, and Cultural Technology Company, actively expanding into the digital intelligence industry, cultural and creative industry, and carbon industry.

We have deepened technological innovation, strengthening development momentum. By integrating technological and industrial innovation, we are accelerating the growth of new productive forces. The release of the CR450 high-speed train prototype has garnered widespread attention, and our high-power hydrogen-powered switcher successfully completed a 10,000-ton traction test. The world's first heavy-duty rail freight wagon made of carbon fiber composite materials has rolled off the production line. Our hydrogen-powered intercity trains underwent successful test runs, and the world's first commercialized carbon fiber subway train has started operation. The "Oihang" 20MW floating offshore wind turbine was officially launched, and the 25MW ultra-high power semi-direct generator for deep-sea applications made its debut at the Hamburg exhibition. Meanwhile, our independently developed 118-meter onshore wind turbine blade set a new industry record. CRRC's Fuxing high-speed trains received the Grand Prize of National Science and Technology Progress Award, earning high praise from General Secretary Xi Jinping, who recognized China's high-speed rail technology as an international benchmark.

We have deepened reforms, enhancing our development vitality. By focusing on "optimization, simplification, and activation" and the "Three Incentives, Three Effects, and Three Capabilities" framework, we have ensured that the latest enterprise reforms achieves tangible results. We have comprehensively implemented "four key actions" to accelerate the construction of a world-class enterprise, leading to CRRC's inclusion in the first batch of the World-Class Industry Leading Enterprise Incubation Program. Our brand value continues to rank first in China's machinery manufacturing sector. The "Double Hundred" and "Technology Reform" initiatives have yielded remarkable results—our Zhuzhou Institute ranked first among central state-owned enterprises in the "Double Hundred Enterprise" assessment, becoming a benchmark for reforms. The initiative to improve the quality of our listed subsidiaries has been highly effective, earning us four major awards, including the Most Valuable Investment Award and the Golden Information Disclosure Award.

We have advanced digital transformation, making our development more robust. By deeply integrating digital technology with business innovation, we have simultaneously promoted industrial digitization and the digital industry. Our six major digital transformation projects and the "19+16" system engineering initiatives have successfully achieved all annual key milestones. We have steadily progressed in building our intelligent manufacturing system, establishing four digitalized workshops and 27 smart production lines throughout the year. CRRC Tangshan, CRRC Changchun, and Sifang Co., Ltd. were recognized as the first group of exemplary intelligent factories by China's Ministry of Industry and Information Technology. Additionally, we actively implemented the "AI+" initiative, launching CRRC's artificial intelligence development roadmap and the "Zhuolun" industry large model, while advancing 13 key AI-driven manufacturing applications.

We have coordinated management improvements, enhancing development resilience. By benchmarking against world-class standards, we continuously enhance our management systems, laying a solid foundation for high-quality development. We have deepened the implementation of the "Three Complete and Three Rights" process methodology and the COS management framework, achieving breakthroughs in project management. We launched the "1+10+N" dual-carbon action framework, initiated the integration of carbon and R&D systems, and conducted carbon accounting for key products, publishing our first carbon footprint report for pure-electric locomotives. Our ESG governance and management enhancement three-year action plan has been deepened, earning us a place on Fortune China's ESG Impact List for three consecutive years. Through comprehensive quality and safety initiatives-such as the "Three Complete, Four Rights, and Two Enhancements" quality benchmarking, the three-year quality and safety improvement campaign, and the new energy equipment quality enhancement program—we have maintained product quality and safety at stable levels. Additionally, we have further promoted production safety improvements three-year plan and key area safety management, improving safety and deepening the development of a healthy enterprise, to achieve the 'three-zero' goal of zero production safety liability accidents, zero new occupational diseases, and zero environmental emergencies.

We have reinforced Party building, ensuring strong development support. Centered on the theme of "leading innovation" in Party building, we have guided high-quality development through high-quality Party leadership. We have deepened the "First Agenda" system, consistently using Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era to unite and strengthen our organization. Through rigorous Party discipline education, we have guided Party members and cadres to study, understand, and uphold discipline. We have also carried out special rectification efforts to address violations of the central government's Eight-Point Regulations and implemented measures to reduce bureaucratic burdens at the grassroots level. We have actively promoted compliance in "Two Regulations, One Opinion", reinforcing a culture of honesty and integrity within CRRC. Meanwhile, we have continued to enhance grassroots organizational effectiveness through the "Seven Priorities" initiative, strengthening leadership teams to encouraging Party organizations at all levels to focus on the core mission, serve the overall strategy, drive innovation and development, and continuously enhance Party building.

The achievements of 2024 would not have been possible without the care, support, and assistance of our shareholders, customers, partners, and all stakeholders. On behalf of the CRRC Board of Directors, I extend my heartfelt gratitude and highest respect to all friends from various sectors of society! The year 2025 marks the 10th anniversary of General Secretary Xi Jinping's first visit to CRRC, the 10th anniversary of the establishment of the new CRRC, and the final year of the "14th Five-Year Plan" as well as the first year of planning for the "15th Five-Year Plan." Guided by Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, CRRC will fully implement the decisions of the 20th National Congress of the Communist Party of China, as well as the Second and Third Plenary Sessions of the 20th Central Committee, and the Central Economic Work Conference. We will adhere to the Party's overall leadership and the general principle of seeking progress while maintaining stability. We remain committed to our mission, unity, and hard work. We will uphold integrity while driving innovation and ensure the effective implementation of this year's objectives. By successfully concluding the "14th Five-Year Plan", we will accelerate the development of a world-class CRRC and high-quality growth, making greater contributions to China's modernization and

national rejuvenation.

Company Overview

Company Profile

CRRC is an A+H-share listed Company established and merged by China CNR Corporation Limited and China South Locomotive & Rolling Stock Corporation Limited according to the principle of equality. (Shanghai Stock Exchange code: 601766 and HKEX Stock code: 1766). It has since developed into a leading global manufacturer of high-end equipment and system solutions provider, as well as a key enterprise in clean energy equipment.

Headquartered in Beijing, with over 150,000 employees, the Company has established more than 100 overseas subsidiaries or offices, providing products and services to 116 countries and regions worldwide. CRRC's core business segments include locomotives, high-speed trains (including intercity trains) and passenger coaches, freight, railway engineering, urban rail vehicles, urban transportation planning and design, urban transportation electromechanical system integration; electromechanical business, emerging industries; financial services; logistics and trade-related services, other modern services; and international business.

With the mission of "Connecting the World and Benefiting Mankind", CRRC adheres to the core values of "Abiding by Integrity and Responsibility, Insisting on Hard Work and Striving for Excellence". The Company integrates sustainable development into its operations and governance, creating a distinctive ESG management model that aligns economic and social benefits. Focused on a dual-track strategy of developing both rail transit equipment and clean energy equipment, CRRC is building a modern industrial system characterized by digitalization, high-end development, green transformation, internationalization, synergy, and strong branding. By 2030, CRRC aims to establish itself as a worldclass enterprise recognized for its excellence in products, renowned brand, leadership in innovation, and modern governance, earning global respect.







overseas subsidiaries or branches globally

It provides products and services to

116 countries and regions worldwide Brand Leadership

No.1 in Brand Value in China's Machinery Manufacturing Sector

Outstanding Achievement in the First Group of the Central SOEs' Brand Leadership Initiative



Fuxing High-Speed Train awarded the National Science and Technology Progress Award (Special Prize)

Key Utilization Technology and Application for Ultra-Large Capacity Wind Energy Conversion System awarded the National Science and Technology Progress Award (Second Prize)

Key Technologies and Applications of Large-Scale Lithium Battery Energy Storage for New Power Systems awarded the National Science and Technology Progress Award (Second Prize)

Key Technology for High-Voltage Large-Capacity DC Breaking Semiconductor Devices and Series DC Circuit Breakers awarded the National Technological Invention Award (Second Prize)

Company Overview

Awarding Institution

SASAC Social Responsibility Bureau of the State Council

China Media Group Financial Channel

Fortune Magazine

Shanghai Stock Exchange

China Securities Journal

League of American Communications Professionals (LACP)

Xinhua News Agency, Zhejiang Provincial Government, China Brand Building Promotion Association, China Appraisal Society

SASAC of the State Council

Central Committee of the Communist Party of China State Council of the People's Republic of China

ESG Governance

Board Statement

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As a leading enterprise in China's rail transit equipment manufacturing industry, CRRC closely follows industry trends and market dynamics. With a stable and forward-looking business strategy, we continuously strengthen the safety and reliability of our products and services, supporting the secure development of the industry while firmly advancing our sustainability goals. Upholding the principles of green and low-carbon development, we are accelerating business upgrades and technological innovations to enhance core competitiveness, expand integrated new energy rail transit solutions, and foster a new paradigm of high-quality development. By fulfilling our social responsibilities and demonstrating corporate commitment, we aim to meet society's expectations for efficient and environmentally friendly transportation. Driven by innovation, we leverage technological advancements to upgrade rail transit equipment, meet public travel demands, and support the modernization of logistics systems. We also embrace an open development approach, actively implementing the Global Development Initiative and participating in the Belt and Road Initiative. Guided by our mission-"Connecting the World and Benefiting Mankind"-we are committed to driving global transportation development.

CRRC has established and improved an effective sustainability governance mechanism, enhancing the quality of ESG governance. By regularly analyzing and assessing material ESG issues and risks based on internal and external environments and stakeholder engagement, we see it as key work for management and supervision, integrating ESG principles into corporate strategy and operational management to ensure sustainable economic, social, and environmental development.

This Report comprehensively details CRRC's ESG practices and achievements in 2024 and has been reviewed and approved by the Board of Directors. All board members affirm that this report contains no false statements, misleading representations, or material omissions and take full responsibility for the authenticity, accuracy, and completeness of its contents.





ESG Governance System

The Board of Directors serves as the highest authority on ESG matters. It has established the Strategy and Sustainability Committee, which is responsible for formulating sustainable development plans and reviewing, evaluating, and supervising major ESG issues such as environment, health, and safety.





The ESG Management Committee oversees ESG operations and is in charge of refining the ESG strategy model, setting medium- and long-term ESG development plans and goals, organizing stakeholder engagement and data analysis, and establishing a comprehensive ESG indicator framework. ESGrelated indicators are incorporated into performance evaluations, with continuous monitoring and optimization of ESG practices.



Various headquarters departments and primary subsidiaries serve as the execution bodies for ESG initiatives. They are responsible for maintaining and reporting ESG data, as well as implementing and executing ESG-related tasks.

CRRC has integrated the concept of sustainable development into its strategic management, focusing on a three-year action plan for ESG system development and management enhancement. With continuous efforts in three key areas—strengthening system development, standardizing information disclosure, and enhancing brand influence-the Company is progressively building an ESG

Strategy

Aiming to be a practitioner and innovator of sustainable development value, CRRC actively integrates ESG principles into its corporate strategy, management, and risk control. Upholding the mission of "Connecting the World and Benefiting Mankind" and the core value of "Abiding by Integrity and Responsibility, Insisting on Hard Work and Striving for Excellence", the Company has established the "33416" ESG Strategy Framework to guide its sustainable development efforts.



The first "3'

Three overarching goals aligned with the United Nations' 17 Sustainable Development Goals (UN SDGs), namely: protecting a more harmonious ecology, reflecting the Company's determination to become a guardian of the concept of harmonious coexistence between humans and nature; leading a better life, reflecting the Company's concern for stakeholders' aspirations for a better life; and creating higher-end products, corresponding to the Company's enterprise attribute of high-end equipment manufacturing, focusing on rail transit equipment and clean energy equipment, with quality and sustainability defining the "high-end" foundation.

The second "3"

Three driving forces: innovation-led technological intelligent manufacturing, responsible industrial ecological chain, and a warm partner synergy circle, corresponding respectively to the hard strength of co-creating technological and quality; soft strength of sharing management and cultural; and value strength of mutually beneficial responsibility. These three focus areas use the "three strengths" already in the Company's brand system as driving forces, reflecting how ESG work is rooted in CRRC culture. Based on our own products, we lead the sustainable value exploration and innovation of the industrial chain and partners.

"4'

Four work themes, namely, innovative products connecting the world: driven by technological innovation, ensuring continuous improvement in safety and quality, leading the industrial chain and connecting with the world; green operations benefiting humanity: with low-carbon sustainability as the foundation, throughout the lifecycle of products and services, striving for carbon neutrality and benefiting all humanity; righteous corporate governance: using deepening reforms as a handle, promoting the double-edged challenge of opportunities and risks, striving for excellence and giving back to investors; benevolent social cobenefits: pursuing mutually beneficial outcomes, focusing on stakeholder social responsibility, upholding righteousness, and valuing people-centered goodness.

"16"

16 ESG topics, which are the core elements of concern and a high-level overview of the ESG indicator system decoded from the Company's ESG strategy. Each topic is supported and constrained by institutional and indicator systems, guiding the Company at all levels to improve ESG performance.

The Company's next step is to conduct further identification and management of risks and opportunities for ESG issues with financial materiality, including but not limited to: identifying short-term, medium-term, and long-term risks and opportunities related to ESG; formulating ESG strategic goals and action plans; optimizing resource allocation; and developing ESG risk and opportunity management processes.

Risk Management

The Company has continuously strengthened ESG risk management, systematically advanced ESG risk assessments, and promptly implemented response measures. We have considered both opportunities and challenges brought by the external environment and industry developments, conducted comprehensive periodic risk reviews, and promptly captured trend changes. We also have established a scientific and quantitative evaluation indicator system, referencing domestic and international standards, and selected key indicators aligned with business operations in key areas such as resource utilization, green operations, technological innovation, employee rights, sustainable supply chains, and corporate governance. The Company has standardized data collection and analysis to accurately assess risks, while strengthening internal and external communication and collaboration to enhance information-sharing efficiency and employees' ESG risk awareness. We have maintained communication with external stakeholders and actively gathered feedback to continuously optimize ESG risk management and drive high-quality sustainable corporate development.

Case

Participation in the Beijing International Sustainability Conference

In October 2024, the Company's Chairman, Sun Yongcai, attended the "ESG China • Innovation Annual Conference (2024)" and delivered a keynote speech titled "Innovation-Driven, Reform-Empowered, Value Creation: Advancing New Productive Forces Through ESG Excellence." During his speech, he shared the company's practices and insights in the ESG domain.



Case

Hosting the Beijing International Sustainability Conference

In November 2024, the Company hosted the Beijing International Sustainability Conference under the theme "Integration and Convergence, Innovation and Development, Advancing Towards Global Benchmarking." Nearly 300 guest representatives attended the event, with 5.982 million online viewers worldwide.



Indicators and Targets

Following the principles of "starting with the easy, progressing gradually, and striving for excellence," and considering regulatory, rating, and corporate management requirements, the Company has built an ESG indicator system and is implementing it step by step. Based on the four major themes of the ESG strategic model, the system further refines 16 topics from both qualitative and quantitative dimensions, forming primary and secondary indicators. Through a "planning-execution-evaluation-improvement" workflow, the indicator database is regularly updated in alignment with key material topics.



Chairman Sun Yongcai Delivering a Keynote Address at the Innovation Annual Conference



Company President Ma Yunshuang Delivered Keynote Speech at the Beijing International Sustainability Conference

Stakeholder Communication

CRRC actively engages with stakeholders through various channels, including open days and roadshows, facilitating regular and ad-hoc interactions with government regulators, shareholders and investors, customers, suppliers, partners, communities, employees, and the media. By gathering feedback and insights from all parties, CRRC collaborates with relevant departments to assess and manage key topics, enhancing ESG management effectiveness. The Company also ensures timely disclosure of ESG-related progress, responding to stakeholder expectations and promptly, effectively, and widely conveying CRRC's values.

Stakeholders **Expectations & Concerns** Response Measures Implement macro policies, Operate with integrity and compliance, Work reports, Government & Regulators Pay taxes lawfully, Participation in meetings and major events, Information disclosure and submission, Promote employment, Drive local economic growth, Regulatory inspections Preserve and enhance state-owned assets Corporate reports and announcements, Stable performance growth, Earnings briefings, Shareholders & Investors Compliant information disclosure. General meetings, Reduce operational risks, Investor meetings, Shareholder rights protection Responses to investor inquiries Product quality and safety, Customer satisfaction surveys, र्म्स्ट्रेस् Customers Premium service, Client visits, Technological R&D and innovation, Full lifecycle product services, Customer information protection policies Customer privacy protection Employee rights protection, Leadership dialogue, Health and safety, Employee representative meetings, Employees Career development, Employee satisfaction surveys, Competitive salary and benefits, Training and education, Work-life balance, Visits and support, Overseas employee management improvement Daily communication Open bidding, Integrity and compliance, Centralized procurement, Suppliers & Partners Responsible procurement, Supply chain management system, Growth support, Industry collaboration and exchange, Information confidentiality Executive visits Fair competition, Industry forums, CÐ) Industry Associations Mutual visits, Technological innovation, Industry advancement Strengthened cooperation and exchanges Transparent operations, Cultural exchange, Real-time communication. Public, Media & Community Community development, Community outreach, Public welfare, Public welfare initiatives

Rural revitalization

Materiality Analysis

Materiality Assessment Process

Taking into account national policies, changes in internal and external environments, and industry trends, CRRC conducts materiality assessments from two dimensions: "financial materiality" and "impact materiality." This process establishes materiality topics to address stakeholder expectations and continuously enhance ESG management.

Basic Information Analysis

Considering the Company's actual situation, national policies, key concerns of capital markets, and domestic and international ESG disclosure standards, CRRC defines the research objectives and scope.

Materiality Matrix

Establish Topic List

Based on topics emphasized by the Shanghai Stock Exchange guidelines, the Stock Exchange of Hong Kong Limited regulations, and international sustainability consensus, CRRC builds a ESG topic library aligned with its business strategy and characteristics. By integrating stakeholder input on topic importance and recommendations, a final list of 16 ESG topics is developed.

Materiality Topic Identification Process

Materiality Assessment Results

Impact materiality is assessed by considering the scale (magnitude of actual or potential impact), scope (breadth of impact), and irremediability (difficulty in offsetting or mitigating harm). Financial materiality is evaluated based on financial impact severity and likelihood of occurrence. Topics are prioritized according to their final scores.

 Social and Economic Contribution Responsible Corporate Governance Diversity and Equal Opportunities • Corporate Brand Responsibility

Environmental Issues

Validate and Review the Materiality Matrix

Internal and external perspectives are combined to conduct a reasonability analysis of the assessment results, based on two key dimensions: financial materiality and impact materiality, to form the materiality matrix.



💮 ESG Topic 1

Value Creation – Effectively Supporting the Sustainable Development of the "Dual Tracks, Dual Clusters" Strategy

Advancing Railway Business with Stability and Leading Industry Development

In the railway equipment sector, CRRC drives technological innovation, product upgrades, service optimization, and business model transformation to establish a modular and standardized technology platform. This accelerates the transition of railway equipment toward intelligent, green, and safe solutions. By deepening strategic partnerships, integrating with reforms, and leveraging manufacturing, maintenance, and service synergies, CRRC continues to enhance its full lifecycle service system and core competitiveness in the railway equipment industry.

CRRC is also shifting toward a system solutions provider to create greater value for customers. During the reporting period, seven series of new energy locomotives were launched globally, with over 200 units ordered. The first Fuxing high-speed sleeper train was delivered. A new batch of freight cars designed for multimodal transport and cold chain logistics was introduced.

Setting a New Benchmark for Smart and Green New Energy Locomotives

In June 2024, CRRC released seven series of new energy locomotives featuring three power configurations: "diesel engine + battery," "battery-only," and "hydrogen fuel cell." These locomotives represent China's solution for the green and low-carbon transformation of rail transit.





BH10 Refrigerated Car Driving Innovation in Cold Chain Logistics

In March 2024, CRRC launched the BH10 single-unit mechanical refrigerated car, integrating next-generation intelligent technology for unmanned operation. This innovation promotes the high-quality development of the cold chain logistics industry.



Urban Transit Business: Breaking Barriers and Expanding Growth Markets

In the urban rail and city infrastructure sector, CRRC is capitalizing on new opportunities arising from the development of metropolitan areas and urban clusters. The Company is developing standardized smart regional trains with the six features and integrate vehicle-to-ground electromechanical system solutions into product and technology platforms. Leveraging its full-industry-chain advantages, CRRC is expanding into system integration, smart operations, and service domains to enhance its business value chain. Efforts include optimizing PPP project management to drive coordinated growth between vehicle manufacturing and related industries, advancing digitalization, intelligence, and green transformation, and integrating resources to build a "Product+" and "System+"* ecosystem, enhancing its full life-cycle solutions capabilities, consolidating its domestic and international market presence while ensuring the high-quality, sustainable development of urban transit services.

Focusing on diverse transportation scenarios and key elements, CRRC provides customized digital and zero-carbon urban mobility solutions tailored to cities, enterprises, and specific scenarios, integrating platform, equipment, model, and capital. As of the reporting period, the Company has successfully implemented 17 projects across 15 cities, including Zhuzhou, Chengdu, and Turpan.

A New Choice for Green Urban Transit—Autonomous Rail Rapid Transit (ART) 2.0 "Green Peacock"

In September 2024, CRRC independently developed the ART 2.0 "Green Peacock", which features autonomous driving capabilities from L2 to L4 levels. During the construction phase, energy consumption was reduced by 86.4% compared to traditional trams, and carbon dioxide emissions were lowered by approximately 769 tons per kilometer of track.



^{* &}quot;System+" refers to "DLS" (Digital Life-cycle System Solution), which is an integrated full life-cycle system solution for design, construction, and operation, supported by digitalization and intelligence.





💮 ESG Topic 1

Case

World's First Commercial Carbon Fiber Metro Train

In June 2024, CRRC launched the world's first commercial carbon fiber metro train, CETROVO 1.0 Carbon Star Express. This train reduces operational energy consumption by 7%, leading to an annual reduction of approximately 130 tons of CO₂ emissions. The CETROVO 1.0 marks a significant milestone in the green transformation of metro rail systems.





CETROVO 1.0 Carbon Star Expres

Rapid Expansion of Emerging Industries with Coordinated Domestic and International Growth

The electromechanical business focuses on strengthening core technology breakthroughs and improving the industrial chain, extending into key systems and components for industrial, transportation, and energy sectors while accelerating specialization and scaling. Emerging industries adhere to the principles of "related diversification, high-end positioning, and industry leadership," integrating resources to build a clean energy equipment cluster. This has resulted in a new industrial ecosystem with wind power equipment and new materials as growth drivers, alongside photovoltaics, energy storage, hydrogen energy, environmental protection, industrial digitalization, and electric drive systems for automobiles and ships as additional growth areas. By deepening technology platforms and industrial chain development, new industries are progressing steadily.

The strategic renewal initiative for emerging industries is advancing through strengthened strategic cooperation, comprehensive resource deployment in key regions, and deeper coverage of core customer groups. The Company is actively exploring "source-grid-load-storage" system solutions and continuously promoting the implementation of "wind-solar-storage-hydrogen energy" projects, optimizing market structures.

Case

2,000 Nm³ Electrolyzer Rolls Off the Production Line, Another Breakthrough in Hydrogen Energy

In October 2024, the independently developed 2,000 Nm³ electrolyzer was successfully launched. This electrolyzer incorporates multiple advanced technologies, featuring industry-leading high current density design, ultra-low energy consumption, a broad operational adjustment range, and fully automated operation.





Zhuzhou Institute 2,000 Nm³ Electrolyz

Case

The World's Highest-Altitude Wind Power Project Goes into Operation

For the highest-altitude wind power project in the world, featuring the largest single-unit capacity in high-altitude regions, a 5MW D195 doubly-fed wind turbine was designed. This project generates over 223 million kWh of clean electricity annually. Compared to coal-fired power plants, it saves approximately 73,100 tons of standard coal and reduces carbon dioxide emissions by about 182,800 tons per year. It provides sufficient electricity for the annual living needs of 230,000 people, supporting the optimization of Tibet's energy structure.



International Business Coordination and Upgrading, Brand Empowerment for Global Expansion

Following the principles of light assets, high effiits internationalization strategy, strengthening of institutions, and promoting the global deployme The Company is advancing the development of management system to enhance resource coord "complete machines driving components, manu enterprises to expand its overseas presence. By eis expanding into international markets for wind businesses while optimizing its business structur business expansion model has been implement and rapid-response management model that en During the reporting period, significant progress the Middle East markets. The Company has cont the "Belt and Road Initiative". The operation and Speed Railway and the Laos-China Railway made a Company's position in the international market.

Case

First Anniversary of the Operation of Laos-China Railway International Passenger Train

In April 2024, marking the first anniversary of international passenger train operations on the Laos-China Railway, additional international trains equipped with Chinese, Lao, and English service facilities were introduced to cater to diverse passenger needs.







Following the principles of "light assets, high efficiency, and sustainability," the Company is deepening its internationalization strategy, strengthening collaboration between platform companies and overseas institutions, and promoting the global deployment of rail transit and new industries.

The Company is advancing the development of an international organizational structure and management system to enhance resource coordination and sharing. Following the strategy of "complete machines driving components, manufacturing driving services," it leverages leading enterprises to expand its overseas presence. By establishing a global marketing network, the Company is expanding into international markets for wind power equipment, new materials, and other businesses while optimizing its business structure. The "platform Company + leading enterprise" DLS business expansion model has been implemented to complete the global layout, forming an intensive and rapid-response management model that ensures brand consistency and resource synergy.

During the reporting period, significant progress was achieved in South America, Asia, Europe, and the Middle East markets. The Company has continued to promote high-standard cooperation under the "Belt and Road Initiative". The operation and maintenance services for the Jakarta-Bandung High-Speed Railway and the Laos-China Railway have received widespread acclaim. Additionally, high-speed trainsets for the Hungary-Serbia Railway made a successful debut in Serbia, further strengthening the Company's position in the international market.



Laos-China Railway International Passenger Train

💮 ESG Topic 1

Case

Signing of the São Paulo Intercity Railway North Axis Project in Brazil

In May 2024, the Company signed Brazil's largest passenger rail transit concession project to date. Once completed, this project will become Brazil's fastest and most modern intercity railway, benefiting approximately 15 million residents across 11 cities, creating over 10,500 jobs, and supporting local green transportation transformation and sustainable development.





Chairman Sun Yongcai Attended Signing Ceremony for São Paulo Intercity Railway North Axis Project in Brazil

Case

China's High-Speed Multiple Units Enter Europe for the First Time

In June 2024, the high-speed MUs for the Hungary-Serbia Railway made their debut at the Zemun depot in Belgrade, Serbia. The project, expected to be operational by the end of 2025, represents the first integration of Chinese railway technology and equipment with EU railway interconnection technical standards, marking a significant milestone in China's high-end rail transit equipment entering the global market.



Hungary-Serbia Railway High-Speed MU

ESG Topic 2

Industry Leadership - Fostering Collaborative Growth Among Linked Enterprises

CRRC is committed to strengthening the foundation of industrial chain modernization, promoting the optimization and upgrading of high-end equipment manufacturing, fostering collaboration across upstream and downstream enterprises, and integrating ecosystems. By cultivating advanced manufacturing clusters, CRRC aims to build a lasting competitive advantage for the high-quality development of the rail transit equipment industry and lead industry-wide synergy.

Strengthening the Industrial Chain Foundation and Enhancing Stability

By conducting precise assessments of the industrial chain and implementing intelligent dynamic management, CRRC aims to solidify the industrial chain's foundation and ensure stable operations.

Conducting Industrial Chain Assessments



Starting with core vehicle products, the process systematically breaks down to the finest granular components, identifying key links in the industrial chain. A tiered and categorized list is established, addressing each issue step by step to create a dynamically adjustable management loop, enhancing the security and resilience of the industrial chain.





Establishing a Digitalized Management Platform

By utilizing information systems, structured frameworks, and measurable indicators, CRRC assesses the health of the industrial chain. Digital and intelligent technologies are applied to enable coordinated management and dynamic monitoring of the industrial chain. The Company independently developed a rail transit equipment industrial chain cockpit, establishing a health monitoring and evaluation system for the rail transit equipment industrial chain. It is structured around four key dimensions: safety, stability, leadership, and coordination, enabling dynamic evaluation and early warning monitoring of the industrial chain's health.

ESG Topic 2

Strengthening Technological Innovation to Fill Gaps in the Chain

CRRC prioritizes breakthroughs in key technologies, building a collaborative innovation ecosystem, overcoming technical bottlenecks, and leveraging its role as a leading system integrator to systematically address industrial chain weaknesses and improve resilience.



Leading Innovation with Whole-System Integration

CRRC adopts a "One chain with multiple cores, one chain with multiple platforms, multiple chains sharing platforms" strategy, ensuring that innovation resources are accessible across the entire industry chain, enhancing the collaborative innovation capability of the industrial chain. The "CRRC Q" quality management system is promoted among chain enterprises, forming a comprehensive and collaborative quality management capability. The Company collaborated with enterprises across the supply chain to tackle technical challenges and address weaknesses precisely, while also establishing a joint development fund with the National Natural Science Foundation, participating in innovation consortiums, and forming cross-domain, crossdisciplinary collaborative innovation teams to create replicable and scalable innovation models.

CRRC establishes a collaborative innovation framework to tackle key challenges in critical areas of the industrial chain. Enterprises within the industrial chain work together to enhance core capabilities, improving competitiveness and resilience.

By relying on complete system development,



Case

Standardized Metro Train Component Breakthroughs

CRRC collaborated with over 50 enterprises and research institutions to tackle 30 component challenges, including chips and bearings. Successful applications, such as IGBT driver boards, have been implemented in projects like the Guangzhou Metro Line 2.





Guangzhou Meuro

Enhancing Supply Chain Resilience and Strengthening Industrial Integration

Strengthening Leadership in the Supply Chain and Systematically Optimizing Industrial Ecosystems By restructuring industries and building industrial clusters, bottlenecks in the supply chain are eliminated, improving overall industry strength, risk resistance, and ecosystem resilience. Leveraging its leading role in the industrial chain, the company accelerates the development of high-quality, modernized industrial clusters. In Zhuzhou, Hunan, a trillion-yuan rail transit equipment industry cluster has been established. Meanwhile, in the Qingdao, Shandong Rail Transit Industry Demonstration Zone, over 220 core supporting enterprises have been brought together, with the industrial chain's output value exceeding one trillion yuan.

CRRC leverages centralized procurement, platform synergies, and collaborative advantages to unify systems, category management, supplier relations, digital platforms, and capability building. This strengthens supply chain operations and introduces innovative management practices, fostering world-class management systems.

ne 2 A8-type train





Green CRRC

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0	Emissions Management	33
0	Climate Change Response	



Environmental Compliance **Management**

Environmental Governance

CRRC continuously improves its environmental management system, strengthens energy-saving and ecological protection responsibilities, and regulates environmental compliance risk management. The Company actively participates in biodiversity conservation and promotes environmental and ecological protection across all employees, processes, and operations.

The Company strictly complies with relevant laws and regulations such as the Environmental Protection Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China. Major energy-saving and ecological protection matters are reviewed and decided by the General Meeting of Shareholders, the Board of Directors, and the Board of Supervisors. The Party Secretary, Chairman, and President bear overall responsibility for energy conservation and ecological protection efforts, while the Operations, Safety and Environmental Protection Department oversees management, with other departments coordinating supervision. Subsidiaries implement environmental protection goals and organize related activities accordingly. As of the end of the reporting period, 100% of the manufacturing subsidiaries have obtained ISO 14001 environmental management system certification. In accordance with the Administrative Measures for Energy Conservation and Environmental Protection Supervision of Central State-owned Enterprises, CRRC integrates energy conservation and environmental protection performance into its executive performance evaluation system. Company executives (Chairman, President, Vice President) have signed a business performance responsibility agreement for the 2022–2024 term, with results directly linked to their performance evaluations and salary. During the assessment period (2022-2024), no environmental emergencies or violations related to energy conservation and environmental protection occurred, and no penalties or demotions were imposed.

Environmental Strategy

ecological protection into its mid- and long-term development strategy and annual business plans, ensuring synchronized planning, implementation, and development. The Company continuously monitors global industry trends, evaluates external environmental and industry risks and opportunities, analyzes various environmental risks, and conducts in-depth research on the potential impact of different types and characteristics of risks on the Company. By proactively formulating response measures, CRRC enhances its resilience and ability to adapt to global environmental changes.

CRRC adheres to the "Three Synchronizations" strategy, incorporating energy conservation and

Environmental **Protection Measures**

The Company continues to implement the Ecological Environment Protection Management Guidelines, providing refined and professional guidance for subsidiaries in pollution prevention, environmental monitoring, emissions management, emergency response, and environmental information disclosure.

The Company conducts internal and external environmental management system supervision and audits annually, promptly rectifies issues identified during the audits, achieving continuous improvement and actively preventing similar problems from occurring. By strengthening environmental risk monitoring and identification, conducting regular inspections annually, and ensuring rectifications, the Company spots potential ecological risks timely and enhances its ability to respond to environmental emergencies. These efforts help mitigate the potential negative impact of business activities on ecosystems and biodiversity, effectively reducing and managing environmental risks.

Establishing Environmental Risk Monitoring and Detection Mechanisms

The Company has implemented an online environmental monitoring system, developed an annual monitoring plan, and strictly controls key pollution factors such as wastewater, air emissions, and hazardous waste. Leveraging digital intelligence and big data platforms, a 24/7 environmental risk monitoring and warning system has been built, enabling real-time monitoring, dynamic assessment, and intelligent alerts. Accredited third-party agencies conduct environmental testing at pollution sources and provide reports, with all results meeting emissions standards.

Case

Subsidiary Develops Environmental Risk Monitoring and **Early Warning Platform**

CRRC Tangshan has developed an online environmental risk monitoring and early warning platform. Utilizing remote enforcement monitoring equipment from environmental authorities and the Company's industrial data center, the system integrates "one cockpit and eight subsystems" to achieve 24/7, comprehensive, multi-facet, and transparent environmental risk management.



Case

Subsidiary Engages Third-Party for Environmental Testing

CRRC Qiqihar Group commissioned a professional third-party agency to conduct air emissions testing. Following relevant standards, the agency assessed emission flow rates, concentrations, and compliance to ensure pollutant discharge meets environmental requirements.



Strengthening **Environmental Risk** Supervision and Rectification

The Company continues to conduct environmental management through monitoring, special inspections, and audits. To mitigate risks, it formulates response plans and implements preventive measures, minimizing the likelihood of environmental emergencies. During the reporting period, a comprehensive environmental review was conducted, combining self-inspections, cross-regional joint sampling, and corporate-led oversight, ensuring full coverage, full transparency, and full-scale ecological and environmental risk identification and rectification at all levels of enterprises. The Company sorted out pollution sources of all subsidiary companies, classifying and counting pollutant discharge outlets and storage facilities. We also conducted energy and environmental protection operation monitoring evaluations, organizing expert teams to evaluate and inspect subsidiaries, and all identified issues have been rectified.

Case

Subsidiary's Environmental Risk Enhancement Plan

Sifang Co., Ltd formulated and implemented the "Support, Management, and Service" targeted improvement plan, conducted research, and revised and issued the Environmental Protection Work Guide (Subsidiary Edition).



Green CRRC



Online Environmental Risk Monitoring and Early Warning Platform Demonstration



Environmental Testing Reports and On-site Inspection



Conduct "Support, Management and Service" Research

Case

Subsidiary's Environmental Risk Investigation

CRRC Changchun conducted an environmental investigation to comprehensively identify environmental risk points and urged its subsidiaries to rectify them within a set time frame. It provided guidance to subsidiaries on improving their environmental management systems, refining risk prevention plans, and effectively enhancing environmental compliance and green development capabilities.





Launching a Special **Biodiversity and Ecological Environment Inspection**

During the reporting period, a special environmental inspection was conducted on 29 subsidiaries located in the Yangtze River and Yellow River basins to ensure compliance with emission standards and prevent pollution of water sources, soil, and air, striving to reduce negative impacts on local river ecosystems while maintaining biodiversity within the basins.

Strengthening emergency management for environmental incidents

The Company implemented the Emergency Response Plan for Environmental Incidents, adopting a tiered management approach. Subsidiaries formulate comprehensive and specialized emergency plans, on-site response plans, and other incident response measures based on their scale and risk level. Regular emergency drills are conducted to ensure rapid and effective responses to environmental incidents.

Case

Subsidiary conducted a comprehensive emergency drill for production safety accidents

In 2024, Qishuyan Institute conducted a comprehensive emergency drill for production safety accidents. Teams including the command group, rescue group, security group, and logistics group responded swiftly and carried out their tasks, effectively enhancing employees' emergency response capabilities and safety awareness.



Qishuyan Institute Conducting a Comprehensive Emergency Drill for Production Safety Accidents

Conducting environmental protection capability training

The Company has standardized the management process of environmental protection training, combining online and offline methods to provide environmental education and training, continuously strengthening environmental management capabilities and enhancing environmental awareness among all employees.

During the reporting period, the Company organized three rounds of ecological and environmental protection training with a total of 351 participants. The training covered national policy interpretations, environmental supervision, and pollutant discharge permit management, with a focus on standardized hazardous waste management, pollutant emission control, corporate emergency response plans for environmental incidents, and standardization of environmental management operations.



Environmental Protection Achievements



The total environmental protection investment amounted to 420.6354 million yuan

Environmental Protection Awards

Туре	2024 Achievements	Cumulative Total
National Green Factory	Puzhen Co., Ltd., CRRC Qiqihar Group, Ltd., etc.	40
National Green Supply Chain Management Enterprise	CRRC Changchun, Sifang Co., Ltd, Qishuyan Co., Ltd., Qishuyan Institute, CRRC Zhuzhou Institute, etc.	12
Recognized as best examples of the SASAC's Central State-owned Enterprise Green and Low-Carbon Best Practices	Sifang Co., Ltd	2
Recognized as best examples of the Ministry of Ecology and Environment's "National Green and Low-Carbon Model Cases"	CRRC Zhuzhou	1

No environmental incidents occurred during the reporting period, and there were no administrative penalties related to environmental issues. The total environmental protection investment amounted to 420.6354 million yuan, promoting green transformations at multiple production bases and enhancing environmental management and sustainable development capabilities.

Energy and Resource Usage

The Company implements precise control over the use of energy, water resources, raw materials, and packaging materials, promoting reduction and harmless treatment in production and distribution processes, and encouraging resource recycling and efficient reuse.

Resource Category	Main Types	
Water Resources	Production: cleaning, testing, cooling, etc. Other: office, canteen, bathrooms, etc.	
Energy	Purchased electricity, purchased thermal energy, gasoline, diesel, natural gas, liquefied petroleum gas, etc.	
Raw Materials	Steel, aluminum, stainless steel, surface coatings, etc.	
Packaging Materials	Wood, plastic, steel, etc.	

Energy Management

The Company strictly complies with the Renewable Energy Law of the People's Republic of China and the Energy Conservation Law of the People's Republic of China, issuing the Guiding Opinions on Energy Efficiency Improvement and formulating special energy efficiency improvement plans. By optimizing product structure and energy consumption structure, the Company enhances energy utilization efficiency and increases the proportion of green energy, continuously promoting energy efficiency management. Subsidiaries have improved their energy management systems based on the Energy Conservation and Ecological Environment Protection Management Regulations, employing smart energy management, energy-saving technology upgrades, and energy recycling to achieve overall energy consumption reduction targets.

Intelligent Energy Management

Optimizing the integrated control of the State Grid, photovoltaics, and energy storage systems.; advancing smart green lighting retrofitting.

Efficient Energy Utilization

Conducting energy benchmarking, energy audits, and energy-saving reviews to strengthen refined energy management; implementing an energy trusteeship model for air compressors, enabling real-time monitoring and intelligent control; upgrading motors and transformers; upgrade or replace inefficient boilers and outdated motors; replacing traditional streetlight sources with LED lighting.

Energy Management Measures

Energy Recycling Utilization

Researching and implementing waste heat recovery solutions for thermal storage devices and equipment, promoting the recycling of motors, boilers, and air compressors.

Case

Subsidiary Enhanced Power Supply System Performance

CRRC applied load monitoring technology to obtain realtime data on the power supply system, using dynamic optimization strategies to enhance overall system performance, achieving an annual electricity cost saving of 6.16 million yuan.



Case

Subsidiary Developed a High-Efficiency **Compressed Air Station**

CRRC Yangtze Group implemented energy-saving improvements in key energy-consuming areas, collaborating with Qishuyan Institute to build a Level-1 energy-efficient compressed air station. The project saves 1.22 million kWh annually, reduces 150 tons of standard coal consumption, and cuts carbon emissions by 720 tons per year.



During the reporting period, the Company's comprehensive energy consumption per 10,000 yuan of output value was 0.0203 tons of standard coal, a 15% decrease compared to the 2021 baseline, successfully achieving the three-year target of a 13% reduction. An additional 47.3 MW of photovoltaic capacity was installed, bringing the total operational capacity to 209.31 MW. The Company's annual green electricity usage reached 122 million kWh.

Green CRRC



Employee monitoring power supply system operation data



Axle Non-cycling Refrigerated Dryer

Energy Consumption Usage Indicator Unit 2024 Total Energy Consumption Tons of Standard Coal 573.156.99 Direct Energy Consumption Tons of Standard Coal 177,220.47 Tons of Standard Coal 395,936.52 Indirect Energy Consumption Energy Consumption per 10,000 yuan Tons of Standard of Output Value Coal/10,000 yuan

Water Resource Utilization

Strictly complying with the *Water Law of the People's Republic of China* and the *Circular Economy Promotion Law of the People's Republic of China*, the Company adopts circulating water equipment and implements reclaimed water reuse measures to promote water resource recycling and efficient utilization, improving water use efficiency and reducing water resource consumption.

Establish cooling water circulation systems for electric arc furnaces, intermediate frequency furnaces, and air compressors; promote the recovery and reuse of steam condensate; optimize water circulation in heat treatment quenching processes; and advocate reclaimed water reuse to reduce water waste and improve utilization efficiency.



Adopt biochemical deep treatment processes to ensure wastewater meets reuse standards, allowing it to be used for cleaning, cooling, and landscaping, significantly reducing fresh water consumption.

Water Resource Management Measures

Curing the reporting period

Fresh water consumption per 10,000 yuan of output value decreased by 5.26% year-on-year.

Case

Subsidiary Increases Reclaimed Water Utilization

CRRC Dalian has fully applied reclaimed water for landscaping, restrooms, and mop sinks, reducing fresh water consumption. The Company has also strengthened the maintenance of sewage treatment stations, improving the efficiency of wastewater treatment equipment.



Indicator

Fresh Water Consumptio

Fresh Water Consumption Yuan Output Value

Green Raw Materials

Promote the priority use of environmentally friendly materials across subsidiaries in core businesses (rail transit equipment and clean energy equipment) to reduce emissions of toxic and hazardous substances. In surface coating applications, the Company enhanced source reduction, continuously increase the proportion of water-based coatings and fully implementing green and low-carbon production. Water-based coatings are used exclusively in railway freight car painting, reaching over 90%, while their use in urban rail vehicles has increased to over 75%, effectively reducing volatile organic compound (VOC) emissions.

Case

Subsidiary Improved Coating Process

A subsidiary under CRRC Yangtze Group conducted trials on a water-soluble combined primer and finish coat in accordance with the *Technical Conditions for Water-Soluble Paint* (*Combined Primer and Finish Coat*) for *Railway Freight Cars (Interim*). This significantly improved the overall efficiency of vehicle painting, extended the replacement cycle for environmentally friendly materials, and reduced paint consumption by over 30%.



Green CRRC 3



Reclaimed Water Reuse Equipment

Water Resource Usage		
	Unit	2024
	Tons	15,208,547
per 10,000	Tons/10,000 yuan	0.54



Bogie Automatic Spraying System

Circular Packaging

Strictly complying with the Circular Economy Promotion Law of the People's Republic of China, the Company adheres to the principles of green environmental protection and efficient use. Leveraging an integrated "transportation services + VMI warehousing services + integrated storage and transportation tooling" solution in smart logistics industry within the rail transit industry chain, the Company promotes circular packaging services.

The Company has set a goal of zero-emission in disposable packaging and developed corresponding action plans to promote reusable packaging materials and establish a circular packaging ecosystem. It has compiled the Circular Shared Packaging standard, revised procurement evaluation criteria to reward the use of green circular packaging. The Company also implements simplified packaging structures. Self-manufactured components are transported in material boxes, expanding the scope of circular packaging and bare packaging, while suppliers are encouraged to optimize packaging designs to support sustainable packaging solutions.

As of the reporting period, the Company has invested in 74,000 reusable packaging units, replacing 640,000 wooden crates annually, reducing carbon emissions by 445,000 tons per year, and releasing 394,000 tons of oxygen annually. Cumulatively, 3.02 million wooden crates have been replaced, protecting 285,000 acres of forest.

Curing the reporting period

The Company has invested in 74,000 reusable packaging units, replacing 640,000 wooden crates annually, reducing carbon emissions by 445,000 tons per year, and releasing 394,000 tons of oxygen annually.

Emissions Management

Solid Waste Disposal

Hazardous Waste Management

and Disposal Measures

standards, with no instances of excessive emissions.

The Company strictly complies with the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste, the Pollution Control Standard for Hazardous Waste Storage, and other relevant laws, regulations, and industry standards. The Operations, Safety and Environmental Protection Department serves as the central solid waste management unit, responsible for formulating pollution prevention policies, work plans, and targets, organizing technical exchanges and promotion, and overseeing subsidiaries' implementation of waste management measures. Other departments perform their respective duties according to their responsibilities. The Company has developed the Solid Waste Pollution Prevention and Management Guidelines, classifying solid waste into general waste and hazardous waste for differentiated management and standardized disposal. It has established goal-oriented management from policy formulation, source reduction, categorized storage, resource utilization, harmless disposal, and public awareness campaigns, implementing continuous improvement measures.

The Company has formulated the Hazardous Waste Management Guidelines to implement hazardous waste management plans and maintain detailed records. Subsidiaries strictly comply with regulations in handling hazardous waste generated during industrial production, including waste paint residue, used paint buckets, waste lubricating oil, spent activated carbon and filter cotton, and sludge from wastewater treatment plants. Emergency response plans and management policies have been developed to ensure classified control and compliant disposal of hazardous waste, adopting multiple measures to achieve waste reduction.

suppliers.

100% harmless treatment rate.





The Company comprehensively manages pollutant emissions, implementing source control and fullprocess supervision for air emissions, wastewater, and solid waste to minimize environmental impact. During the reporting period, all emission indicators met or exceeded national and local environmental

High-solid/water-based coatings and high-voltage electrostatic spraying technology are used in painting processes to reduce waste paint generation. Eco-friendly adhesives are promoted to minimize toxic waste. Digital printing replaces traditional developing processes, reducing waste developer fluid and ink cartridge consumption. Toner cartridges are collected and recycled by

Dedicated hazardous waste storage facilities are established to prevent cross-contamination. Non-recyclable hazardous waste such as waste coatings, used paint buckets, and waste mineral oil is entrusted to qualified third-party agencies for incineration or landfill disposal, ensuring a

An IoT-based monitoring platform is introduced to track waste generation, storage, and disposal in real time, optimizing waste reduction strategies.

General Solid Waste Management and **Disposal Measures**

Following the General Industrial Solid Waste and Household Waste Management Guidelines, the Company adheres to the principles of "reduction, resource utilization, and harmless disposal." A classification management system is implemented to promote recycling, efficient recovery, and compliant storage, transfer, and disposal of general solid waste. Each subsidiary has established environmental responsibility policies to ensure the effective recycling and utilization of general solid waste. For household waste, subsidiaries comply with the Household Waste Classification Marking Standard (GB 19095), conducting waste separation and green living and waste classification awareness campaigns. Construction waste is handled by the project contracting entities for unified disposal.

Classified Recycling

Household waste classification demonstration sites are promoted, and standardized improvement actions for solid waste storage areas are actively carried out to ensure construction and management compliance with regulatory requirements. A comprehensive waste classification and recycling ledger system is established to efficiently separate and reuse materials such as waste foundry sand, discarded packaging, and used paper cartons, reducing resource waste. The Yiqipai green recycling trading platform is utilized to build a circular waste utilization system, enabling efficient waste recovery, fair valuation, and precise redistribution.

Digitalized Office Practices

The Company promotes paperless office initiatives, reducing the use of paper documents and minimizing waste from office supplies.

Case

Subsidiary Implemented Waste Resource Utilization and Reduction

CRRC Dalian has actively pursued waste resource utilization and reduction initiatives. Measures include feeding scrap steel and waste wires into the furnace for reuse and introducing a used sand regeneration system to extract and recycle foundry waste sand, increasing in-house resource utilization. Additionally, they utilizes a digital collaboration platform for document management and employs reusable dining utensils, reducing waste generation and operational costs.





Recycled Foundry Sand

Case

Multiple Subsidiaries Recognized as "Zero-Waste Factories"

Sifang Research Institute was awarded the provincial-level "Zero-Waste Factory" title in Shandong, while CRRC Dalian, CRRC Qiqihar Group, Sifang Co., Ltd, and Yongji Electric's subsidiaries received city-level "Zero-Waste Factory" certifications. These factories have successfully passed evaluations by implementing raw material substitutions, process optimizations, and technological upgrades to continuously reduce solid waste at the source and enhance resource utilization.



Zero-Waste Factory at Sifang Co., Ltd Subsidiary

During the report

During the reportir totaled 27,475 while non-hazard The generation of by 1.39% year-o The overall waster

Waste Type

Total Hazardous Waste

Hazardous Waste per 10,0 Revenue

Total Non-Hazardous Was

Non-Hazardous Waste per Revenue

Waste Recycling Rate

Waste Recycling Rate

Wastewater Treatment

The Company's wastewater primarily originates from production, including machine processed oilcontaining wastewater, heat treatment cleaning water, cooling water, and domestic sewage from factory sites. The main pollutants include COD and ammonia nitrogen. A rainwater-sewage separation system is implemented to improve wastewater management. Process wastewater undergoes physical-chemical or bio-chemical treatment to meet discharge standards before being released into municipal sewage systems. Through technological innovation and management optimization, subsidiaries employ a "source reduction – process control – end treatment – resource reuse" approach to significantly reduce wastewater emissions

ing period
ng period, the Company's hazardous waste emissions $\overline{5.20}$ tons,
bus waste emissions reached $524,187.00$ tons. non-hazardous waste per 10,000 yuan in revenue decreased
over-year. recycling rate was 80.26%.

Waste Disposal Indicators

	Unit	2024
	Tons	27,475.20
)00 Yuan	Tons/10,000 Yuan	0.0011
ste	Tons	524,187.00
r 10,000 Yuan	Tons/10,000 Yuan	0.0213
Waste Recycled		
	Tons	420,844.13
	%	80.26

The Company strictly complies with the Water Pollution Prevention and Control Law of the People's Republic of China and the Comprehensive Sewage Discharge Standards, with the Operations, Safety and Environmental Protection Department overseeing water pollution control efforts. This department is responsible for formulating pollution control policies, guiding subsidiaries in their implementation, and ensuring other subsidiaries carry out their responsibilities. The Company has also developed the Water Pollution Prevention and Control Guidelines, which regulate drainage system design, wastewater treatment equipment, and pollutant discharge standards.

Reduction at source

Process control

- Adoption of water-based coatings, electrostatic spraying and other processes to cut down on organic wastewater discharge; reduction of water consumption through watersaving technologies such as boiler circulating water systems.
- Deployment of an online wastewater monitoring system for real-time monitoring of the discharge of various key pollutants.
- Implementing wastewater collection and pre-treatment to achieve efficient removal of oil, phosphorus and nitrogen.
- Adoption of biochemical depth treatment process, so that wastewater reuse standards for cleaning, cooling and greening, significantly reducing fresh water consumption, some enterprises to achieve "zero discharge" of wastewater.

Wastewater Treatment Measures

End-of-pipe governance and

• Combined with the utilization of resources, the company has increased the reuse rate of water to more than 10%, promoting the green transformation of the industry and providing a model for emission reduction in the industrial sector. In the future, we will further integrate low-carbon technology and digital means to move towards the goal of "zero wastewater".

Air Emission Reduction

The Company strictly adheres to the Air Pollution Prevention and Control Law of the People's Republic of China, the Comprehensive Emission Standards for Air Pollutants, and the Unorganized Emission Control Standards for Volatile Organic Compounds (VOCs). The Operations, Safety and Environmental Protection Department is responsible for overseeing air pollution control efforts, formulating regulatory policies, and ensuring compliance across subsidiaries, while other departments execute specific responsibilities according to their roles. The Company has also developed the Air Pollution Control Management Guidelines, which set requirements for pollution control equipment management, VOC treatment, pollutant monitoring, and emergency response to environmental incidents.

The Company's air emissions mainly come from painting, heat treatment, and welding processes, with primary pollutants including sulfur dioxide, nitrogen oxides, VOCs and particulate matter. By promoting low-VOC raw and auxiliary materials, standardizing operating procedures, and establishing monitoring plans, the Company implements comprehensive control over air emissions. Through equipment upgrades, process optimization, and supporting exhaust gas treatment facilities, the Company has completely replaced coal-fired boilers and kilns with natural gas alternatives. For dust control, technologies such as cartridge filtration, bag filtration, and electrostatic precipitation are employed to significantly enhance exhaust gas treatment efficiency.

Case

Subsidiary Enhances Air Pollution Control

CRRC Tangshan invested over 5 million yuan to upgrade its painting line organic waste gas treatment system, incorporating multi-stage activated carbon chambers to prevent unorganized VOC emissions, increase contact area with adsorbents, and improve overall treatment efficiency.



Case

Subsidiary Upgrades VOC **Treatment Equipment**

CRRC Qigihar Group invested over 10 million yuan to upgrade pollution control systems, transitioning its subsidiaries from using activated carbon adsorption to an advanced "zeolite rotor + RTO" process. They also upgraded its VOC continuous monitoring system.



	U	
Wastewater Pollutant Type	Unit	2024
Total Wastewater Discharge	Tons	8,712,094.17
Wastewater Reduction	Tons	579,546.24
COD	Tons	347.87
Ammonia Nitrogen	Tons	34.23



Subsidiary Implements Rainwater-Sewage Separation

A subsidiary under CRRC Yangtze Group has strictly enforced a rainwater-sewage separation system to ensure wastewater treatment facilities operate effectively. The Company has also implemented reclaimed water reuse, achieving zero wastewater discharge.





Rainwater-Sewage Separation Treatment

Wastewater Discharge Indicators

Green CRRC



Waste Gas Treatment Equippment



Waste Gas Treatment Equippment

کر During the reporting period

The Company's VOCs emissions were 3,071.12 tons, marking a 26.13% reduction compared to the 2021 baseline,

successfully achieving the three-year VOC reduction target of 6%

Using 2024 as the baseline year, the Company aims to keep VOCs emissions below 3,000 tons within the next three years,

expecting a reduction of over 3% compared to the 2024 baseline.

Air Pollutant Emission Indicators

Pollutant Type	Unit	2024
Ozone-Depleting Substance Emissions	Tons	89.96
Sulfur Oxide Emissions	Tons	77.31
Particulate Matter (PM) Emissions	Tons	1,063.36
Nitrogen Oxide Emissions	Tons	215.71
Vocs Emissions	Tons	3,071.12
Mercury Emissions	Tons	0
Heavy Metal Emissions	Tons	0
Dioxin Emissions	Tons	0

Climate Change Response

The Company actively integrates the national "dual carbon" strategy into its core development, steadily advancing carbon peaking and carbon neutrality efforts as key measures to address climate change. It continuously improves top-level dual-carbon planning, strengthens energy management and emission reduction, and contributes to achieving national sustainable development and carbon neutrality goals.

Climate Governance

Board Oversight of Climate Matters

During the reporting period, the Board of Directors and the ESG Management Committee reviewed climate-related matters five times, reviewing and formulating documents regarding topics such as the construction of the dual-carbon management system, the implementation plan for integrating the "carbon + R&D" system, and carbon management measures in production and operations.

Climate Governance Research

The Company conducted two climate governance research studies during the reporting period, analyzing the impact of the EU's CBAM regulation and the new Battery Directive on the Company. It also benchmarked against ISSB sustainability disclosure standards IFRS S1 and S2 to conduct relevant research, enhancing its climate governance capabilities.

Category 9 hydrofluorocarbon (HFCs) emissions amounted to 88.45 tons, but their ozone depletion potential (ODP) is zero.

** The calculation of volatile organic compounds (VOCs) emissions is based on the full-process material balance method.



The Company has established a top-down "dual carbon" management system. The Board of Directors and the Dual Carbon Leadership Group oversee climate change management decisions, reviewing major matters such as climate action strategic planning, regulatory systems, implementation plans, and key initiatives. The Dual Carbon Work Group and the ESG Management Committee formulate climate action strategies, set phased work goals and action plans, and coordinate the identification and response to climate risks and opportunities. The Operations, Safety and Environmental Protection Department houses the Dual Carbon Office, which is responsible for organizing and advancing the implementation of dual-carbon action plans and related initiatives.

Climate Strategy

4

The Company comprehensively identifies the risks and opportunities brought by climate change, making green and low-carbon initiatives a core element of its sustainable development strategy. Building on the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2021 and the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2021 and the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2021 and the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2021 and the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2021 and the *Carbon Peaking and Carbon Neutrality Action Plan* released in 2023, the Company has established a clear strategic direction for climate governance. This is guided by 10 policy documents, including the *Investment Guidelines for Clean Energy Equipment and System Solutions Enterprises, Guidelines for Green Energy Use*, and *Guidelines for Low-Carbon Procurement and Supply Chain Development*, forming a "1+10+N" dual-carbon action system as the blueprint to guide subsidiaries at all levels in implementing action plans and emission reduction initiatives, enhancing the Company's carbon neutrality efforts.

Adopting the "6G" philosophy—Green Investment, Green Innovation, Green Manufacturing, Green Products, Green Services, and Green Enterprise—the Company focuses on the entire value chain, full lifecycle, and all processes. This spans four key areas: product technology innovation, industrial and supply chain development, production and operation management, and product lifecycle management. The Company has developed a dual-carbon indicator system with 58 quantifiable metrics and 81 key projects, strengthening its position across ten key areas: industry, technology, manufacturing, green electricity, supply chain, carbon footprint, digitalization, standard systems, benchmarks, and branding. The goal is to become a leader in green manufacturing, a creator of green living, and a pioneer of green development.

C Overview of CRRC Carbon Peaking and Carbon Neutrality Action Program

National Dual Carbon Strategy and

CRRC "1+10+N" Action System

58 quantitative indicators (clarifying responsible parties)	Industry	Technology	Manufactı	Green electricity	Supply chai	in Product lifecyc	Di	gitization	Standard system	den	Pilot nonstration	Internationa brand
Three stages	decrease chain re	, carbon inter ed by 18%, c duced by 10° o carbon mo	arbon acr %, and a l	ow-carbon	decreas chain re	0, carbon intens sed by 25%, car educed by 25%, ro carbon mod ted	bon across , and a low-	value -carbon	is achieve reduced b	d, carbo y 50%,	neutrality duri on across valu and a low-ca del are fully e	rbon and
81 key projects (clarifying leading departments)	Freight • Promo subway • Develo	te standard		 Research on I technology sy low carboniza trains Research on I power system 	ystem for ation of hydrogen	 Cancel coa oil fired bo Substitute energy rela processes 	ilers fossil	proje • Own proje	wind farm ect of own green	ic		and
	carbon manag	ne/ onent produc ofootprint gement and oreduction	t	 Application a promotion of energy cloud platform 	smart	 Greenhous emission si Product sta Technical p standards 	tandards andards	integ proje • Zero line/ • Low	gy and transport, ration demonstra ct carbon produc workshop carbon and zer on factory	ation	of green carbon v	uilding project and low- vind power tric power
10 green and low-carbon competitive advantages	Vitality	Potent	tial	Strength	Power	Join forces	Appea	l Tensi	on Cha	rm	Efficacy	Belief
Overall Objective		Take the lead in achieving carbon neutrality in operations by 2035, and strive to achieve carbon neutrality across full value chain by 2050										

CRRC Dual-Carbon Action Framework



During the reporting period, 11 subsidiaries formulated enterprise-level dual-carbon action plans based on these guidelines, continuously refining the dual-carbon action system. The Company developed the *Carbon Industry Development Plan*, promoting the green and low-carbon transformation of its existing industries while expanding into the carbon industry. To enhance carbon research and development, the "*Carbon + R&D*" System Integration and Implementation Plan was compiled to encourage the adoption of low-carbon, zero-carbon, and negative-carbon technologies in R&D and design. To improve carbon management, the *Carbon Management Implementation Plan for Production and Operation* was formulated to drive a comprehensive green and low-carbon transformation in manufacturing.

Risk and Opportunity Management

The Company pays great attention to climate-related risks and opportunities, continuously strengthening risk assessment and response measures. It actively enhances its climate risk management framework, formulating response measures to improve climate resilience.

Climate Risk Identification and Response Measures

Туре	Climate-Related Risk Description	Financial Impact	Response Measures
	Policies and Regulations		
Transition Risks	Due to the impact of regulations and policies on energy conservation, emission reductions, and carbon trading, stricter carbon emissions controls on the factories in the future may require the Company to purchase carbon credits, leading to higher operational costs.	Direct cost increase ↑	 Stay aligned with the latest "dual carbon" regulations and policies, fully implementing the dual carbon action plan, to accelerate the development of low-carbon technologies and proactively expand into green and low-carbon industries.

Green CRRC

CRRC's 10 Dual-Carbon Guidelines

Туре	Climate-Related Risk Description	Financial Impact	Response Measures
	Technology		
	Advancements in energy-efficient equipment and technologies are driving the replacement of traditional high-energy-consumption equipment. The Company may need to invest in new equipment, adopt energy-saving technologies, or optimize processes, leading to higher capital expenditures. Additionally, expenditure on the development of innovative new energy products and alternative technologies may rise.	Indirect cost increase (equipment upgrades & R&D investment) ↑	 Develop energy-saving and carbon-reduction technologies to support the development of clean energy equipment. Advance energy transition efforts, implement energy-saving and carbon-reduction retrofits, and promote green transformation in rail transit equipment.
	Market		
Transition Risks	Climate change trends may affect product market access, leading to shifts in customer preferences and new demands, such as stricter carbon footprint requirements. If the Company fails to meet the growing demand for low-carbon products, its competitiveness and sales may decline. Additionally, fluctuations in raw material and fuel prices could increase operational costs.	Direct cost increase ↑ Direct revenue decrease due to lower demand ↓	 Implement green supply chain management and drive supply chain green transition. Implement quality improvement and efficiency enhancement initiatives to ensure substantial growth in operational performance. Implement centralized, full-scope procurement of materials and services to lower costs. Carry out product carbon footprint management and certification, and establish zero-carbon
	Reputation		scenario demonstrations.
	With the introduction of the "dual carbon" goals and carbon neutrality policies, stakeholders expect the Company to actively address climate change and enhance transparency in information disclosure. If the Company fails to adequately respond to demands in energy conservation and emission reduction, it may negatively impact the Company's reputation.	Indirect cost increase ↑ Direct revenue decrease ↓	 Strengthen ESG initiatives and reinforce the Company's green development image. Maintain open stakeholder communication. Identify, revise, and incorporate ESG concerns into strategy. Ensure timely and compliant disclosure of reports.
	Short-term (Acute)		
Physical Risks	Increasing frequency of extreme weather events (e.g. typhoons, floods, tropical cyclones) may damage factories, workshops, offices, and equipment, resulting in asset losses, data losses, and employee safety risks. Damage to equipment, service interruptions, or major equipment failures may impact business continuity and cause direct or indirect harm to the Company's financial interests. Extreme heat could strain power supply, impacting the operations of electricity- intensive equipment and causing revenue loss.	Indirect cost increase ↑ Direct revenue decrease ↓ Asset depreciation ↓	 Establish a risk emergency management system. Develop emergency plans, strengthen emergency drills, and improve the effectiveness of environmental risk emergency management.
	Long-term (Chronic)		
	Rising global temperatures may increase the need for cooling systems, leading to higher maintenance and operational costs. Water shortages could raise procurement costs for alternative water sources, further driving up expenses.	Direct/indirect cost increase ↑ Direct revenue decrease ↓	 Improve energy efficiency and implement digital management for systematic energy conservation. Adopt advanced technologies, such as CO - based air conditioning systems, as an alternative to traditional AC.

Identification and Response to Climate Opportunities

Туре	Climate-related Opportunities	Financial Impact	Response Measures
Resource Efficiency	Improving energy efficiency helps reduce production costs.	Direct cost reduction ↓	 Upgrade energy-saving equipment and carry out energy-saving technological improvements to enhance energy efficiency. Develop relevant management systems to promote efficient resource use.
Energy Substitution	Increasing the share of clean energy can lower energy costs. Optimizing processes and upgrading equipment can reduce greenhouse gas emissions, making the Company less sensitive to carbon emission cost changes.	Direct cost reduction ↓ Direct revenue increase ↑	 Promote the development and utilization of renewable energy such as wind, solar, and biomass, and advance clean energy equipment. Adopt new production processes or equipment to reduce energy consumption.
Products and Market	In the context of low-carbon economic transformation, customers' preference for low-carbon products will drive the demand for green, low-emission rail transit products, potentially boosting Company revenue. Developing new energy products may also result in government incentives and rewards.	Direct revenue increase ↑	 Promote the green, low-carbon development of the rail transit industry and develop new energy-powered vehicles. Expand emerging industries based on green and low- carbon strategies.

Greenhouse Gas Emission Reduction Measures

Emission Monitoring and Digital Management



A series of emission reduction initiatives is implemented, including the establishment of a detailed action plan for the dual carbon strategy, with 81 key projects underway. The plan is continuously advanced to ensure its implementation. The Company implements the Carbon Emission Target Management and Assessment Measures, incorporating carbon emission targets into the enterprise performance evaluation system while conducting regular monitoring of the progress. By innovating carbon emission monitoring and digital management, product carbon footprint calculation and certification, the Company is advancing the green transformation of rail transit equipment and clean energy equipment, and continuously improving the fine management of carbon emissions, promoting the synergistic progress of emission reduction and green development.

The "Carbon Monitoring Smart Cloud Platform" enables real-time online monitoring of carbon emissions data, pushes data in real time, and provides warnings on data fluctuations. Monthly data assessments and manual reviews are conducted to ensure data quality. During the reporting period, new functions were added to the platform, including real-time data push notification and data fluctuation detection. The number of enterprises using the platform increased from 78 to 81, and abnormal process handling was reduced by 55% compared to 2023.



Carbon Monitoring Smart Cloud Platform

Product Carbon Footprint Management and Certification

The Company has established a carbon footprint management system for typical products, developed calculation standards, and started building a background database to create a CRRC Carbon Footprint Ecosystem, actively accounting for carbon footprints for whole products and components.

During the reporting period, 12 typical rail transit and clean energy products were selected for carbon footprint calculation and baseline carbon footprint identification. Carbon footprint certification was completed for four types of products, including the new energy shunting locomotive, C70E freight train, CR400BF electric multiple unit, and standard city rail type A train. Additionally, carbon asset and carbon footprint training was held to enhance the team's capability in their management.

Case

Company Releases Carbon Footprint of New Energy Locomotive

The Company has conducted a full lifecycle carbon emission study on both new energy locomotives and old internal combustion locomotives. The Company has completed carbon footprint calculations for pure electric, hybrid, hydrogen fuel cell new energy locomotives, and three types of internal combustion locomotives, and has released the world's first carbon footprint report for pure electric new energy locomotives. Based on a 30-year operational cycle, a 1,000-ton load, 40% of standard operating speed, and electricity consumption sourced from green power, the carbon footprint during the usage phase of a pure electric new energy locomotive is reduced by 94.2%.





Footprint Certificate

Case

Company Hosts Carbon Asset and Carbon Footprint Training

In March 2024, the Company organized a Carbon Asset and Carbon Footprint training session, with 124 participants from 65 subsidiaries. The training covered topics such as the current state and analysis of carbon markets, carbon asset trading and management, green electricity and green certificate applications, and carbon footprint standards.





Carbon Asset and Carbon Footprint Training

Zero-Carbon Scenario Demonstration Construction

The Company has initiated the construction of zero-carbon scenario demonstrations, establishing four zero-carbon factories and five zero-carbon workshops. Two subsidiaries, CRRC Changchun and CRRC Tangshan were awarded the "2024 China Industrial Carbon Peaking" and "Leading Enterprise" title.

Green Transformation of Rail Transit Equipment

The Company continues to promote low-carbon energy transformation and the development of green transportation. It has developed the Old DC Internal Combustion Locomotive Elimination Plan to accelerate the transition of outdated internal combustion locomotives to new energy ones. A special task force for new energy locomotives has been established, focusing on digitalization, intelligence, greenness, modularity, lightweight, and platform integration, committing to creating a modern industrial system for new energy locomotives characterized by five features: green, intelligent, high-end, economical, and safe. New energy urban rail vehicles, including hydrogen fuel cell-driven regional trains, have been introduced to support the low-carbon transportation transformation.

Case

Subsidiary Releases First Hydrogen Energy Regional Train

In March 2024, CRRC Changchun successfully completed the operational testing of China's first hydrogen energy regional train, marking a significant breakthrough in the application of hydrogen energy in the rail transit sector.



Case

Subsidiary Releases First New Energy Intelligent Intercity Regional Multiple Unit

In September 2024, Sifang Co., Ltd launched China's first new energy intelligent intercity regional multiple units, CINOVA H2, at the Berlin International Trade Fair for Transport Technology. The train operates with zero carbon emissions throughout its journey, achieving a 15% reduction in energy consumption per 100 kilometers per passenger. After operation, each train set reduces CO2 emissions by approximately 730 tons annually.





Hydrogen Energy Regional Train

Clean Energy Equipment Development

The Company is developing strategic emerging industries, driving breakthroughs in clean energy equipment technology, and leveraging new energy development and construction to promote industry iteration and upgrade. This will accelerate the rapid development of a modern energy system that is clean, low-carbon, safe, and efficient.

Case

Subsidiary Develops 20MW Floating Offshore Wind Turbine

In October 2024, Zhuzhou Institute successfully launched the world's largest 20MW floating offshore wind turbine, "Qihang." The turbine is capable of generating 62 million kWh of clean electricity annually, which can supply power to approximately 37,000 households. This is equivalent to saving 25,000 tons of coal and reducing carbon dioxide emissions by 62,000 tons.



Case

Subsidiary Builds Songyuan Onshore Wind Power Zero Carbon **Demonstration Industrial Park**

In 2024, CRRC Shandong Wind Power Co., Ltd. began planning the Songyuan Zero Carbon Industrial Park, which includes functions such as energy supply, ecological greening, energy management system, low-carbon living, and low-carbon offices. The rooftop photovoltaic project received approval for a 1.76MW capacity, generating 2.288 million kWh per year.





Songyuan New Energy Equipment Industrial Park Distributed Photovoltaic Power Generation Project

Indicators and Targets

The CRRC Carbon Peak and Carbon Neutrality Action Plan clearly defines the "35-50" carbon neutrality goal, aiming for operational carbon neutrality by 2035 based on achieving carbon peak by 2018, and striving for full value chain carbon neutrality by 2050.

Climate-Related Targets

Greenhouse Gas Emissions

During the reporting period, the Company's total greenhouse gas emissions (Scope 1 and Scope 2) amounted to 2,000,109.88 tons of CO₂ equivalent, a reduction of 8,604.56 tons of CO₂ equivalent compared to the total emissions in 2023 (Scope 1 and Scope 2).

Greenhouse Gas (GHG)

Indicator	Unit	2024
Total GHG Emissions (Scope I, II)	Tons of CO ₂ Equivalent	2,000,109.88
GHG Emissions (Scope I)	Tons of CO ₂ Equivalent	317,759.04
GHG Emissions (Scope II)	Tons of CO ₂ Equivalent	1,682,342.06
GHG Emission Intensity (GHG Emissions per 10,000 Yuan of Production Value)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0707
GHG Emission Intensity (Scope I)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0112
GHG Emission Intensity (Scope II)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0595
GHG Emission Reduction	Tons of CO ₂ Equivalent	8,604.56

^{*} The calculation of greenhouse gas emissions is based on the GB/T 32150-2015 General Principles for Greenhouse Gas Emission Calculation and Reporting for Industrial Enterprises.

In alignment with the national "14th Five-Year" dual carbon targets, and the three-year performance evaluation indicators, a target was set to reduce carbon emission intensity by 17% in 2024 compared to 2021. As of the end of the reporting period, the Company's carbon emission intensity had decreased by 19.7% compared to 2021, achieving the target.

The Company has implemented new industry policies such as the *Guidelines for Green Energy Use*, Guidelines for Clean Equipment Investment, and Large Base Construction Investment Measures, setting investment goals to continuously increase investment in clean technology. During the reporting period, the investment in clean technology increased by 2.208 billion yuan compared to the previous year.

^{**} The electricity emission factor is calculated regionally according to the National Development and Reform Commission's Greenhouse Gas Emission Calculation Methods and Reporting Guidelines for Mechanical Equipment Manufacturing Enterprises (Trial). The data for the regional electricity emission factors is sourced from the Provincial Energy Balance Tables in the China Energy Statistical Yearbook. The heat emission factor is calculated according to the same guidelines from the National Development and Reform Commission.





0	Protecting the Rights and Interests of Employees —	
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Protecting the Rights and Interests of **Employees**

CRRC upholds a people-oriented philosophy, providing equal employment opportunities, protecting fundamental rights and interests of employees, optimizing remuneration systems, and establishing effective communication and feedback channels. The Company continuously enhances employee wellbeing and strives to create a legally compliant, fair, just, and mutually supportive work environment.

Compliant Employment

Strictly adhering to the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and other relevant laws, regulations, and employment policies in its domestic and overseas places of operation, the Company has established the Regulations on the Protection of Employee Rights, ensuring that labor contracts are signed with employees based on the principles of "legality, fairness, voluntary participation, mutual agreement, and good faith", covering matters related to employee rights, including working hours, leave policies, compensation and benefits, labor conditions, and labor protections.

Strictly enforcing the Provisions on the Prohibition of Using Child Labor and the Law on the Protection of Minors of the People's Republic of China, along with other laws and regulations, and adhering to international human rights treaties such as the core conventions of the International Labour Organization (ILO), the Universal Declaration of Human Rights, and labor rights protection mechanisms, the Company rigorously verifies employee identities to eliminate child labor and firmly opposes all forms of forced or compulsory labor. As of the end of the reporting period, there have been no incidents of child labor or forced labor within the Company.

Diverse and Inclusive Policies

The Company promotes the concept of multicultural integration and actively fosters an equal and inclusive work environment. It continuously implements the Regulations on the Protection of Employee *Rights* to ensure that no employee is subjected to discrimination based on gender, marital status, race, color, ethnicity, religion, age, disability, or other personal characteristics. The Company provides employment opportunities and accessible work environments for employees with disabilities. It strictly prohibits workplace harassment, ensuring that employees are protected from improper infringements, such as physical, verbal, sexual, or psychological harassment, abuse, and threats. Dedicated employee rights protection channels have been established to enable employees to report any issues related to discrimination or inequality in a timely manner and receive appropriate resolution.

Diverse Talent Recruitment

The Company actively broadens its talent selection channels to attract a diverse range of high-caliber professionals. Its international operations prioritize local employment, offering diverse employment opportunities across different regions and professional fields for talents with various professional backgrounds. Additionally, it continuously optimizes its workforce structure to support diverse and equitable career development.

During the reporting period, the Company adopted a combined approach of social recruitment, campus recruitment, and flexible talent acquisition to continuously and precisely attract high-caliber professionals. It further implemented the graduate recruitment reform plan, systematically training recruiters to enhance their presentation skills and professional capabilities. The Company schemed and organized 12 "urban university cluster" recruitment events in cities such as Berlin, Paris, Beijing, and Shanghai, and conducted targeted "Future Star" internship recruitment. It continuously intensified efforts to recruit outstanding master's and doctoral graduates from top universities, signing nearly 3,000 graduates in 2025. Among them, holders of a degree above a master's accounted for 75%, reflecting a 4% increase compared to the previous year, while graduates from leading domestic and international universities made up 67%, reflecting a 23% increase compared to the previous year. The Company also strengthened flexible talent acquisition by engaging top university experts in joint research projects, cumulatively recruiting nearly 50 high-level "dual- appointed" professionals.

Indicator Total Number of Employees Percentage of Employees by Gender Percentage of Male Employees Percentage of Female Employees Percentage of Male Senior Management by Gender at the Headquarters Percentage of Female Senior Management by Gender at the Headquarters Percentage of Employees By Workplace Location Percentage of Employees in Mainland China Percentage of Employees in Hong Kong, Macao, Taiwan, and Overseas Percentage of Employees by Age Group Percentage of Employees Aged 30 and Below Percentage of Employees Aged 30 to 50 (Inclusive) Percentage of Employees Aged above 50 Percentage of Employees By Educational Background Percentage of Employees with a Bachelor's Degree or Below Number of Ethnic Minority Employees Social Insurance Coverage Rate Number of Labor Dispute Incidents

Human Resources Indicators

Unit	2024
Persons	152,082
96	83.45
%	16.55
96	88.89
%	11.11
%	95.60
%	4.40
%	17.05
%	64.24
%	18.71
%	0.41
%	12.37
%	87.22
Persons	7,806
%	100
Cases	0

Remuneration System

The Company adheres to the principle of "equal pay for equal work" and implements the *Interim Measures for Remuneration Management*, the *Guidelines for All-Employee Performance Management*, and the *Guidelines for Reform of Internal Distribution System in Enterprises* to regulate the remuneration structure, salary levels, growth strategies, and payment strategies for employees across various sequences. In addition to providing competitive base salaries, the Company offers multiple incentive policies, including performance bonuses, mid- and long-term equity incentive plans, profitsharing schemes, and special rewards, covering all employees (including both management and nonmanagement employees).

Employee remuneration incentives are closely linked to performance evaluations. Establish performance management measures and an incentive mechanism covering all employees (including both management and non-management employees) in accordance with the *Guidelines for All-employee Performance Management*. Formulate annual business plans based on the Company's strategic objectives, which are further broken down into key performance indicators (KPIs) and goal setting (GS) by departments to serve as a basis to create individual employee assessment forms. The assessment forms cover three categories: organizational performance, individual tasks, and personal behavior, with each category weighted according to the employee's job level. Assessment scores are determined based on the evaluation results of each indicator and are directly linked to remuneration distribution, career development, and performance evaluation and recognition, ensuring an effective connection between performance management and the incentive mechanism. Both management and non-management employees who excel in meeting the requirements of their individual assessment scores are eligible to receive corresponding incentive-based remuneration, such as performance bonuses and special rewards.

Mid- and Long-term Incentive Plans

The Company continuously implements the *Guidelines for Mid- and Long-Term Incentives*, thoroughly reviewing the implementation of equity incentives and strengthening dynamic control. It adopts a tailored approach for each enterprise, guiding qualified subsidiaries to implement stock rights, stock options, dividend rights, and other incentive measures for employees who have made significant contributions or are outstanding technical talents. The goal is to encourage shared business outcomes and risk-sharing, while also guiding employees to pay more attention to the Company's long-term development.

As of the end of the reporting period, a total of 10 equity incentive plans had been approved and implemented, covering various incentive tools such as equity incentives for employees of technologybased enterprises, employee stock ownership in mixed-ownership reform enterprises, equity incentive for listed companies and strategic placement for listing on SSE STAR Market, involving 42 subsidiaries with more than 2,200 people, holding a total of 1.297 billion shares.



Welfare and Care

Employee Insurance and Supplemental Medical Coverage

Rights to Rest and Leave

Physical and Mental Well-being Care

Care for Female Employees

The Company emphasizes the protection of female employee rights and interests, building the "CRRC Care House" and organizing activities such as the "CRRC Female Worker's Reading Season," actively creating a work environment conducive to the development of female employees. During the reporting period, the Company conducted "Two Festival" warm-hearted events, raising over 40 million yuan in assistance funds, and providing assistance to 44,500 employees and 2,291 work teams.

Case

The Company Leadership Paid a Comfort Visit to Front Line Employees during the Spring Festival

On the eve of the 2024 Spring Festival, the Company leadership paid a comfort visit to employees at the Beijing High-speed Train Service Center and conducted an inspection of the after-sales service support operations during the Spring Festival travel rush.





Chairman c

sustainable growth.

52

The Company strictly adheres to national policy requirements, committed to meeting the diverse needs of employees and providing diverse welfare benefits to all employees to drive the Company's

The Company fully contributes to basic pension insurance, basic medical insurance, unemployment insurance, work-related injury insurance, maternity insurance, and housing provident fund. In addition to statutory benefits, each subsidiary, based on its business performance, provides all employees with non-remuneration benefits such as supplementary commercial insurance, supplemental medical insurance, and corporate annuities.

The Company ensures that all employees are covered by local urban employees' social insurance and are legally entitled to paid annual leave, family leave, marriage and funeral leave, maternity leave, and other types of leave, thus effectively safeguarding employee rights.

Employee health care is integrated into all aspects of employees' work and life. The Company provides annual health check-up benefits and organizes regular health screenings to promptly identify potential health issues. It continues to focus on employees' mental health and is committed to providing comprehensive psychological support services.

The Company pays close attention to the physical and mental health of employees, improving care mechanisms to enhance employee recognition, sense of belonging, and well-being. Regular activities are organized for expatriates and domestic families, such as comfort visits, heatstroke prevention, flood prevention and disaster relief, and back- to-school assistance in autumn. Funds are allocated for employee care and support programs.

f the Company Paid a Comfort Visit to Front-Line Employees

Democratic Management

The Company actively promotes the democratic management of employees and respects their legal rights to freely and voluntarily join organizations. It improves the enterprise's democratic management system, with the employee representative assembly as the core. As the daily operational body of the employee representative assembly, the labor union actively participate in the democratic processes during reforms and restructuring, provides timely feedback on reasonable employee demands, prevents and resolves labor disputes, strengthens the function of democratic supervision, protects employees' legal rights and interests, and promotes the stable and harmonious development of the Company. Through democratic management, the Company enhances employees' sense of belonging and responsibility, and fosters harmonious labor relations, thereby laying a solid foundation for the its sustainable development.

Collective Agreement

In accordance with the Labor Contract Law of the People's Republic of China, the Trade Union Law of the People's Republic of China, the Regulations on Collective Contracts, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Special Rules on the Labor Protection of Female Employees, and other laws and regulations, the labor union represents the employees in revising and negotiating to sign the Collective Agreement and the Special Collective Contract for the Protection of Rights and Interests of Female Employees (hereinafter referred to as the Special Agreement for Female Employees) with the Company, covering all employees.

On January 9, 2023, the Company convened the third meeting of the second Employee Representative Assembly. The attending representatives discussed and approved the Collective Agreement and the Special Agreement for Female Employees revised in line with the latest regulations and related guidance. The union chairman, representing all employees, signed the above agreements with the Company. The revised Collective Agreement primarily covers topics such as labor compensation, working hours, rest and leaves, labor contract management, labor safety and hygiene, insurance benefits, vocational training, provisions in the collective contract, and supervision and inspection, ensuring all employees are protected under the Collective Agreement. The revised Special Agreement for Female Employees focuses on strengthening the provisions on the protection of female employees' legal rights and interests, as well as their special interests.

The Collective Agreement and the Special Agreement for Female Employees are valid for three years. In 2025, the Company plans to conduct a new round of equal negotiations based on the actual conditions and sign new ones in early 2026 to better safeguard the legal rights and interests of all employees, protect female employees' legal rights and interests, as well as their special interests.

Smooth Communication Channels for Employees

The Company respects employees' rights to express reasonable demands and is committed to building smooth communication and feedback channels. It implements regular communication between employees and supervisors, as well as a mechanism for talent discussions. Employees can seek consultation and assistance through channels such as employee representative assembly, joint meetings, the labor union, the labor dispute mediation committee, collective bargaining, and management communication.

A satisfaction survey system has been established for employees. With a focus on issues that are commonly concerned by employees, such as career development, training and development, reform and innovation, corporate culture, and work environment. Satisfaction survey questionnaires have been designed and distributed on an annual basis, and the feedback was received through all-staff (employee representative) meetings to ensure smooth communication channels and gather employee suggestions. During the reporting period, a satisfaction survey was conducted once at the headquarters level through a questionnaire, with an overall satisfaction rate of 97.5%. At the subsidiary level, ongoing surveys were conducted in a tiered and categorized manner. Based on the results of the satisfaction survey, the Company conducted a thorough analysis of the research data, systematically reviewing employee feedback, focusing on common and key issues, and promptly optimizing management strategies to continuously improve employee satisfaction and sense of belonging.

Promoting Talent Growth Together

Career Development

The Company continuously implements systems such as the Measures for the Management of Core Technology Leading Talents and systematically classifies the five levels of "CRRC Chief Scientist, CRRC Scientist, CRRC Chief Expert, CRRC Senior Expert, and CRRC Expert". It steadily advances a dynamic management mechanism of "selection every two years, contract renewal every four years," constructing a "Y- shaped" career development path that integrates management and technology. It has improved and implemented an "eight-level" vocational skills (positions) evaluation mechanism, improving the skill talent evaluation system that is oriented towards professional abilities, focuses on work performance, emphasizes the cultivation of craftsmanship spirit, and fosters professional ethics development, and has established a development pathway for skilled talent following the "8+5" model (i.e., chief technician, specialist master technician, senior technician, technician, advanced worker, intermediate worker, junior worker, apprentice, and recipients of the China Skill Prize, chief skill expert, senior skill expert, skill expert, and subsidiary skill experts) and strengthened the cultivation of "dualteacher" talents.

D1	1
D2	Executives
M1	
M2	
М3	Middle Management
M4	
M5	
	Administrative Management Channel

stimulate the vitality of talents.

The Company ensures smooth career development paths for employees, improves the talent training system, and provides a favorable environment for employee growth.



"Y"-shaped Career Development Path of CRRC

The Company promotes a multi-level position management system, providing clear promotion channels and support measures. For position changes and internal transfers, dynamic management principles are applied, allowing core talents to apply for promotion or contract renewal based on the results of the contract period assessment and performance contribution. It also systematically advances the selection and training of young cadres, strengthens the linkage between performance evaluations and remuneration distribution, and carries out talent evaluation reviews in an orderly manner to fully

During the reporting period, the Company adhered to a performance-oriented approach, revised and implemented core talent evaluation standards, and completed the selection of core talents, title assessments, and vocational skill evaluations. The Company appointed 22 new scientists, 200 chief experts, 866 senior experts, and 2,912 experts. Additionally, an additional 341 employees received senior professional titles and 1,756 received advanced professional titles. There was also an addition of 19 specialist master technicians, 653 senior technicians, and 1,074 technicians. The scale of "dualteacher" talent continued to expand, with 39 skilled workers awarded senior engineer titles, and 39 technology talents awarded senior technician titles.

Training System

The Company deeply practices the talent concept of "leading with talent first," continuously improves the employee training management system, and enhances the focus on professional skills training. The Company focuses on the urgent needs of various talent teams' capability building, and following the laws of employees' career development, it scientifically and systematically develops and implements the Company's *2024 Training Plan*, aiming to promote the training and development of various talents and empower employees at all business positions and levels.

Leadership Training

The Company focuses on leadership development and has developed a "Politician + Specialist" standard system for high-quality and specialized enterprise leadership personnel. It has established a four-tiered leadership training and development system, ranging from "Basic, Development, Excellent, to Outstanding," aimed at company leaders, business backbones, high-skilled talents, and management personnel at all levels. Additionally, it has organized training programs on political literacy, management abilities, digitalization, and internationalization. During the reporting period, courses such as the Senior Digital Economy Workshop, Industrial Engineering Management, Marketing, and Project Management were held, aiming to help managers grow in leadership and professional capabilities.

In terms of training for corporate leadership, an international leadership development training session has been organized to strengthen the professional management training of leaderships. By benchmarking and engaging in exchanges with internationally leading companies, the program focuses on learning advanced concepts of modern corporate governance. The emphasis is on enhancing strategic thinking, international perspective, corporate governance, and the ability for reform and innovation, with a focus on strengthening the capabilities of leaderships.

In terms of leadership training for business backbones, efforts have been made to continuously strengthen the development of management talent pool. The innovative "Training + Further Education" model has been implemented, with a systematic approach involving 4 training modules: "Course Guidance, Case Analysis, Benchmark Visits, and Overseas Study Programs." The focus is on broadening international perspectives, introducing new concepts, and inspiring new ideas, aiming to comprehensively enhance the professional quality and performance capabilities of management talents, while continuously strengthening the development of the management talent pool.

In terms of leadership training for highly skilled talents, systematic training has been carried out through programs such as skills enhancement training courses and management empowerment training courses for the digital age.

The Company continuously strengthens the construction of the training management system and deepens the application of the "CRRC Learning Cloud Platform." A tiered and categorized video course library has been established, covering courses on management practices and leadership training, among other topics. The aim is to enhance the overall competency, management skills, digital management capabilities, and technological innovation abilities of employees at all levels. The video courses are accessible to all employees.

Case

Organizing the Senior Digital Economy Workshop

The Company organized the senior digital economy workshop to support CRRC's high- quality development. Through providing professional theoretical guidance, sharing typical cases, visiting benchmark enterprises, holding dean forums, and conducting discussions and exchanges, the program aimed to enhance employees' digital leadership abilities.





Senior Digital Economy Worksho

Case

Organizing ESG Training

In May 2024, the Company organized an ESG training session to help the team enhance their strategic thinking and comprehensive management capabilities from the perspective of sustainable development. The training was attended by 103 employees from 62 subsidiaries at various levels. The content covered mainstream domestic and international ESG disclosure standards, ESG framework systems, and industry practices.



Vocational Skills Training

For skilled talents, the Company organized a Skills Week event themed "Promoting Craftsmanship Spirit, Building a Strong Manufacturing Nation," aiming to implement and advance a three-year action plan to enhance their quality and capabilities. The initiative supports the growth and development of skilled talents through various activities, including advanced operational techniques, demonstration studio selections, innovative achievements exhibitions, and cutting-edge technology skills training.

Case

Focusing on Skill Competitions to Enhance Skills

Tangshan Branch established a horizontal-driven, vertically-guided, multi-level technical worker grid competition system, aiming to create gold medal workers through "work"-themed skill competitions.



Degree Courses and Certifications

The Company organized the Annual Staff Meeting of the National Rail Transit Equipment Industry-Education Integration Community. To fully facilitate collaboration channels between enterprises and educational institutions, the Company systematically advanced the coordinated development of key elements in vocational education — including major design, curriculum development, textbook compilation, teacher training, and training base construction. It also deepened industry-education integration and supported employees in obtaining academic degrees and relevant certifications for personal growth and advancement. Collaborations with prestigious universities such as Zhejiang University and Tongji University were established to organize training and selection programs for employees to pursue master's and doctoral degrees in engineering, and recommend employees to personally participate in major engineering research projects for further study. Following the principles of "voluntary registration, selective recommendation, rigorous assessment, and fairness," the selection of trainees, course design, and practical enterprise internships were carefully implemented. The scope of partner universities and the number of joint training quotas were significantly expanded. Employees with substantial engineering practice experience and key roles in major research projects, were recommended for further education. Corporate mentors and internship practice topics were recommended to partner institutions. Efforts were made to lead the joint training of integrated circuit talents, with a continued focus on building an exceptional engineering talent pool.

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People-oriented CRRC



2024 ESG Training Session



Skill Competitions

Organizing the Overseas DLS Business Talent **Training Session**

The Company partnered with the Macau University of Science and Technology to offer customized teaching and strengthen cross-cultural communication and training across various professional disciplines, with a focus on enhancing the comprehensive business capabilities of DLS backbones.





Overseas DLS Business Talent Training Session

Supplier Safety **Capability Training**

The Company launched a program on the prevention of work-related injury throughout the supply chain, leveraging its own safety management advantages to establish an integrated "Help, Learn, Check, Practice, Supervise" system, addressing both "Dispersing" and "Blocking" issues using a pointto-surface approach. Through on-site support, safety empowerment, and the establishment of workrelated injury prevention training bases, the Company led more than a hundred companies in the supply chain to improve their safety management levels.

Special Guidance on the Prevention of Work-Related Injury throughout the Supply Chain

In October 2024, the Company organized in batches for the heads of 50 key supply chain enterprises, providing targeted guidance on the prevention of work-related injury across the supply chain, and distributing the Work-related Injury Risk Manual for Small and Medium-sized Enterprises. Through case analysis, interactive Q&A, and on-site visits to safety education and training bases, along with various practical scenario experiences, the training aimed to strengthen the learning and practice of safety management standards.



Special Guidance on the Prevention of Work-related Injury throughout the Supply Chain

During the reporting period Employee training coverage reached 100%

During the reporting period, the Company made continuous efforts to strengthen the construction of the training and development system, formulating and implementing the Decoding the National Brand strategic guidance, operational control, and practical case "Three-Step" development plan. It systematically developed 133 specialized courses with more than 1.5 million words and organized 60 company-level training sessions, covering over 7,700 person-times. Additionally, the Company strengthened the operation and application of the "CRRC Learning Cloud Platform" and the development of the video course system, promoting and establishing a total of 23 learning branches, and organizing and publishing over 1,200 video courses. An online training program for newly recruited university graduates was developed to provide online training for more than 3,400 new employees.

Employee Training Indicators

Indicator	Unit	2024
Employee Training Coverage Rate	96	100
Male Employee Training Rate	96	100
Female Employee Training Rate	96	100
Senior Management Training Rate	96	100
Middle Management Training Rate	96	100
General Employee Training Rate	%	100
Number of Employee Training Sessions	Times	341,651
Annual Training Expenditure	10,000 yuan	22,088.45
Total Annual Training Duration	Hours	13,964,198
Average Training Duration per Employee	Hours	96
Average Training Duration Per Male Employee	Hours	97
Average Training Duration Per Female Employee	Hours	90
Average Training Duration Per Senior Management Employee	Hours	109
Average Training Duration Per Middle Management Employee	Hours	86
Average Training Duration Per General Employee	Hours	101

Building Safety Assurance

The Company values employee safety and occupational health, making continuous efforts to build a scientific and sound safety management system, advancing the standardization of safety production, thus laying a solid safety foundation for the Company's high-quality development.

Safety Management

The Company has established the "CRRC Safety Tower" safety production management system, with the Safety Production Committee led by the chairman and the president serving as the highest leadership body for safety production work, and a safety production responsibility system with the main responsible person assuming primary responsibility. It has appointed a safety director, set up safety management departments, and designated dedicated safety management personnel. Safety production responsibilities have been clearly defined and incorporated into the performance assessment criteria for each subsidiary, stipulating that the strategic and performance management departments are responsible for organizing and guiding the overall strategy, while the safety management departments are tasked with the specific implementation of safety production strategies and performance management mechanisms.

In accordance with regulations such as the *Measures for the Safety Production and Supervision Management* of *Central Enterprises*, the Company has included the safety production into the business performance evaluation system of responsible persons (chairman, president, and vice president). Any production safety accidents occurring within the evaluation period shall result in point deductions or demotion during the assessment, and the assessment results are closely linked to performance and remuneration. The Company has established the *Regulations on Safety Production Reward and Punishment*, linking the performance evaluation of responsible persons in subsidiaries to safety production responsibility accidents. Based on the frequency and impact of accidents, penalties such as written warnings and salary deductions shall be imposed. Where 1,000 consecutive days of safe production are achieved, rewards shall be given to relevant department and enterprises to promote continuous optimization and improvement of safety management.

Following relevant regulations and standards, including the *Safety Production Law of the People's Republic* of *China, Prevention and Control of Occupational Diseases Law of the People's Republic of China, and* the *Requirements for Occupational Health and Safety Management System*, the Company has prepared the *Safety Management System Compilation*, which includes 35 safety production and occupational disease prevention management regulations, such as the *Regulations on the Management of Safety Production*, the *Regulations on All-Employee Safety Production Accountability*, the *Regulations on the Management of Occupational Health*, and the *Regulations on the Management of Emergency Response Plan*, covering the business sectors, branches, and operational processes of all subsidiaries, spanning the entire value chain - from product development and manufacturing to after-sales service - and establishing a safety management system with clearly defined responsibilities, comprehensive safety risk identification, clear reward and punishment mechanisms, and well-established emergency response plans.

During the reporting period, 15 new safety management system standards were added, and 8 existing ones were revised, further strengthening the basis of safety production management.

As of the end of the reporting period

All manufacturing subsidiaries had obtained ISO 45001 Occupational Health and Safety Management System certification.

Supplier and Contractor Safety Management

In terms of contractor and supplier safety management, the Company has developed the *Regulations on the Safety Production Management of Related Parties*, adhering to principles such as "Three Regulations and Three Musts," "whoever assigns the contract is responsible for the management and accountability," and "local management." Based on safety risks and management authority, contractors and suppliers of different natures are subject to integrated safety management, safety supervision management, and chain safety management, respectively. The Company provides safety training for contractors and suppliers before they enter the premises, standardizes operational procedures and accident emergency response processes, ensures the proper provision of protective equipment, and regularly conducts safety supervision work.

Risk Prevention

The Company clearly stip Parties the following:

For suppliers and contractors, key areas to be audited include the scope of operations, registered capital, outsourcing (labor) contracts, labor contracts, basic information of employees, personnel qualifications, insurance, health conditions, educational level, accident history, safety training, accident risk tolerance, and other related factors. The principle requires certification through occupational health and safety management systems or second-party audits. The competent authorities shall strictly review and approve; those with no legal qualifications or who fail to meet the relevant safety production laws and regulations shal not be allowed to enter into contracts or agreements.

For labor dispatch parties, process outsourcing parties, in-plant logistics and transportation providers, equipment maintenance service providers, and other related parties (suppliers and contractors), production safety responsibility accidents shall be incorporated into the Company's internal control indicators and evaluated according to standards. An annual safety production performance evaluation shall be conducted, and a negative list and exit mechanism for related parties shall be established. Priority shall be given to related parties with high reputations and excellent safety performance.

For equipment engineering operators, infrastructure construction contractors, external transportation providers, commuting service providers, leasing parties, and other service providers, safety supervision and inspection shall be implemented. Where they fail to comply with national safety production laws and regulations or the Company's safety production rules and fulfill their safety management responsibilities, have disordered safety management, ineffective hazard mitigation, or experience production safety accidents resulting in personal injury or property damage, the Company shall have the right to pursue economic and legal responsibility according to the relevant clauses in the contract or safety agreements.

Safety indicators for contractors (outsourced personnel) shall be systematically managed, specifically including the "number of work-related fatalities," "ratio of work-related fatalities," "work days lost due to work-related injuries," "lost time work-related injury rate," and "total recordable accident rate." Each year, the safety production performance of such contractors shall be evaluated. For contractors who fail to meet the safety performance standards, a negative list and exit mechanism for related parties shall be established, with priority given to contractors with high reputations and excellent safety performance.

In accordance with the *Guidelines for the Construction and Implementation of the Safety Production Risk Classification and Control System*, the Company identifies and assesses potential safety production and occupational health risks during operations and manufacturing processes. It conducts a comprehensive analysis of various risk sources and their potential impacts based on hazard source identification. Through systematic evaluation, risk priorities are determined, and corresponding control measures are developed and implemented to effectively reduce and prevent safety risks.

Risk lassification

Establishment of risk database

Risk hierarchical control

Risk evalua

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In accordance with the risk classification and control procedures, a comprehensive identification process is organized at least once a year. The risk database, risk control checklist, and other related content are updated in a timely manner based on changes in risk points, hazard source identification, and risk evaluations. A risk assessment activity is also conducted, performing a comprehensive and systematic evaluation, preparing a safety risk assessment report, and providing improvement comments to continuously enhance the effectiveness of risk control.

The Company clearly stipulates in the Regulations on the Safety Production Management of Related



Occupational Health and Safety Risk Management Process

Actions and Measures

Continuously strengthen the safety protection and development of occupational disease prevention systems. Based on systems such as the Safety Production Responsibility Assurance System and the Regulations on the Management of Safety Inspection and Hazard Control, regularly conduct comprehensive checks, daily inspections, and special inspections for each subsidiary in terms of system construction, safety management systems, emergency response plans, safety education and training, hazard investigation, the development and implementation of safety operating procedures, and other matters. Promptly issue rectification notices for identified issues and actively follow up on the implementation of corrective actions. Promote the effective enforcement of the system through audit inspections to fully safeguard the safety and health of employees and related parties.

Safety Production Grade Evaluation

Safety Hazard Investigation and Rectification

Improvement of Safety **Emergency Response Systems**

Safety Capability Building

Safety Training

Prevention and Control of **Occupational Diseases**

Following the principle of "one batch per year, full coverage within three years," the 2024 safety production grade evaluation for was conducted for 29 enterprises in 5 groups, identifying and rectifying 1,411 issues.

Focus on six key areas of safety hazard investigation and rectification for electric vehicles, fire safety inspections for rental assets, special inspections for safety production expenses, safety checks in highrisk accident areas, safety hazard inspections during the flood season, and safety risk management for overseas projects to comprehensively perform safety management.

Establish a domestic "1+13+N" emergency response system (1 general plan, 13 specialized plans, and several site handling plans and emergency cards). Establish an overseas "1+10+N" emergency system (1 general plan, 10 specialized plans, and several emergency response videos), along with a "1+17" safety assurance system (1 guiding opinion, 17 specialized plans and guidelines).

Accelerate the digitization of safety, promote the transformation and upgrade of the Safety Tower Operation Platform, Safety Network Digital Intelligent Management Platform, Global Emergency Command Center, and other safety platforms, and use digital means to improve safety management efficiency and accuracy.

Innovate the safety training model by introducing the "Safety Murder Mystery" format. Strengthen safety capacity building and conduct 13 sessions of rotating training for full-time safety management personnel, with a total of 1,142 individuals obtaining safety production management qualifications.

Continuously strengthen the management of occupational disease prevention, effectively preventing, controlling, and eliminating occupational disease hazards in the working environment in accordance with the Procedures for the Prevention and Control of Occupational Diseases and the Regulations on the Prevention and Control of Occupational Hazards.



Safety Objectives

As of the end of the reporting period, the Company has achieved the "zero" target for safety productionrelated fatalities, Class | fire accidents, and newly diagnosed occupational diseases for five consecutive years. During the reporting period, employees lost 5,114 workdays due to work-related injuries, resulting in a lost-time injury rate of 0.38. Contractors and outsourced workers lost 785 workdays due to work-related injuries, with a lost-time injury rate of 0.19. As of the end of the reporting period, the safety performance objectives set for 2024 have been fully achieved. The Company has established safety performance objectives for 2025 at the end of the reporting period, and a safety assurance plan will be gradually implemented in 2025 to ensure the completion of safety performance. The safety performance objectives set by the Company for 2024 and 2025, along with their completion status, are detailed in the table below:

Indicator	Unit	Target Value for 2024	Actual Value in 2024	Target Completion in 2024	Target Value for 2025
Safety production-related fatalities	Cases	0	0	Achieved	0
Class I fire accidents	Cases	0	0	Achieved	0
newly diagnosed occupational diseases	Cases	0	0	Achieved	0
Work-related fatalities of full-time and part- time employees	Persons	0	0	Achieved	0
Work-related fatalities of contractors/ outsourcing personnel	Persons	0	0	Achieved	0
Lost time work-related injury rate of full-time and part-time employees	/	< 1.0	0.38	Achieved	< 1.0
Total recordable accident rate of full-time and part-time employees	/	< 1.0	0.51	Achieved	<1.0
Lost time work-related injury rate of contractors/outsourcing personnel	/	< 1.0	0.19	Achieved	< 1.0
Total recordable accident rate of contractors/ outsourcing personnel	/	< 1.0	0.33	Achieved	< 1.0

The Company has developed contingency plans in advance for potential restructuring and layoff compensation. In case of a restructuring, the Company has a clear severance compensation policy for employees whose positions are affected, ensuring that their basic livelihood is protected during the transition period. At the same time, the Company actively carries out redeployment efforts, matching employees to other suitable positions within the Company based on their skills and experience wherever possible.



Investment RMB 526.42 million

Person-times of Employe Production Training 519,178 person-times

* The calculation formula is detailed in Appendix I

Liability Insurance 100%

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Occupational Health Expenses RMB 24.25 million

Committed to Social Welfare

implementing the national requirements on rural revitalization and social welfare. Through various public welfare and assistance programs, the Company actively fulfills its social responsibilities.

Public Welfare Activities

The Company actively fulfills its social responsibility by promoting knowledge dissemination and cultural interaction through the "CRRC Eco-connect Center" Exchange Center platform and the "Starry Sky Project" science popularization initiative. Volunteers are organized to participate in community services, Lei Feng volunteer activities, environmental protection efforts, and other public welfare initiatives to spread warmth and goodwill to society.

Curing the reporting period

The Company organized 59 public welfare activities, with over 6.000 participants and a total of 200,000 hours of volunteer service.

Launching the "CRRC Eco-connect Center" Exchange Center

The "Lyuchi" Exchange Center (Indonesia) is dedicated to fostering connections through vehicle. It displays cutting-edge rail transit equipment and fosters Sino-Indonesian cultural interactions. More than 10 science popularization lectures and business-cultural exchange events have been held, with over 500 participants in total.





icial Launch of the "Lyuchi" Exchange Cen

Developing the "Starry Sky Project" Science Popularization Program

The Company launched the "Starry Sky Project" science popularization initiative leveraging new media platforms to release various forms of science popularization content on topics such as the CR450 EMU and new energy locomotives, aiming to promote China's advancements in high-end equipment manufacturing and advocate for railway heritage preservation.





Launch of the "Starry Sky Project" Science Popularization Initiative

Rural Revitalization

The Company adheres to the approach of "industry-led, coordinated development, and bridging gaps," continuously improving its assistance model featuring "multi-dimensional support and fullscale efforts". Solid progress has been made in the five key aspects of rural revitalization. During the reporting period, the direct assistance funds amounted to 22.11 million yuan, and 21.06 million yuan was introduced; 15 assistance projects were implemented and 1 new project was introduced, assisting 4 leading enterprises and 3 rural cooperatives and providing 230 previously impoverished people with job transfer opportunities; agricultural products worth 40.62 million yuan were purchased and sold under assistance from designated assistance counties, while agricultural products worth 770,000 yuan were purchased from other previously impoverished regions; the Company actively organized and participated in the "Central Enterprise Consumption Assistance" and "Spring Festival Consumption Assistance Initiative by Central Enterprises," contributing to agricultural product sales totaling 18.82 million yuan.

Industrial Revitalization - Revitalizing Rural Communities through the Nut Industry

The Company explored a "shareholding cooperation + asset leasing" model to promote localized processing in the nut industry, driving an increase of over 7.6 million yuan in collective village economies across 38 villages and creating job opportunities for 250 local residents, contributing to border area development rural prosperity and income increase.



Talent Revitalization - "Swan Project" Leadership Enhancement Training for Rural Revitalization

In July 2024, the Company successfully held the "Swan Project" leadership enhancement training session for rural revitalization in the supported areas. Since 2018, the project has been held for 7 consecutive years, training a total of 556 grassroots leaders and rural cooperative leaders from the supported regions.







Nut Processing Project in Kangcheng Community



2024 Rural Revitalization Leadership Enhancement Training Session - the "Swan Project"





Win-win CRRC

•	High-quality Products and Services —	
•	Upholding an Innovation-driven Approach ———	
•	Building a Sustainable Supply Chain	



High-quality Products and Services

Quality System

CRRC upholds the principle of quality first, strictly adhering to product quality control standards to provide customers with safe, efficient, intelligent, and eco-friendly rail transit solutions, and continuously enhance customer experience and satisfaction.

The Company has established the "CRRC-Q" quality management system, which centers on the rail transit equipment industry while extending across all business segments, covering processes such as manufacturing, after-sales service, talent management, quality risk control, supplier collaboration, and full life-cycle services. It has formulated the *Quality Management Provisions*, the *Measures for the Management of Special Quality Audit*, the *Quality Accident Investigation and Handling Measures*, and other management systems to establish the quality management framework and quality and safety responsibility management mechanism, clarify the quality responsibilities at all levels of the organization, and standardize quality management operations.

In accordance with ISO 9001, ISO 22163, and other applicable quality management system standards, the subsidiaries develop a quality management system covering the entire product process, exerting effective control over requirement identification, R&D and design, material procurement, production and manufacturing, after-sales operation and maintenance, and other processes. They also establish a product recall management mechanism to ensure compliant product quality following regulatory requirements set by the National Railway Administration and other government agencies.

In terms of international product quality control, the Company has developed the *Measures for the Management of "System" + (DLS) Business Quality* and the *Measures for the Management of International Business Products' Quality.* In the area of technical management and quality standards, the Company has formulated the *Measures for the Management of Wind Power Complete Unit Technologies* and the *Specifications for the R&D of Wind Power Products,* as well as quality and safety standards for hydrogen energy and lithium batteries. Additionally, it has published six safety technical specifications, including the *Safety Technical Specifications for Lithium-ion Battery System Applications* and the *Safety Technical Specifications for Hydrogen Energy and Fuel Cell System Applications* that covers hydrogen production, storage and transportation, hydrogen refueling, system applications, vehicle applications, and other processes.

As of the end of the reporting period, all primary manufacturing subsidiaries have obtained the ISO 9001 Quality Management System certification. Some subsidiaries have also obtained certifications for the ISO 22163 Railway Quality Management System, IATF 16949 Automotive Industry Quality Management System, EN 15085 Welding System, DIN 6701 Bonding Quality Management System, and other international and industry-specific certifications.

Risk Control

The Company pays close attention to the evolving demands of customers for higher- quality products and services. It proactively adjusts its strategic deployment, and takes various measures to ensure that every stage of product design, production, and delivery is fully compliant with customer requirements. The Company strictly implements product service and recall management mechanisms, including the *Measures for the Management of Product Application and Maintenance Services*, the *Measures for the Management of Defective Product Recall*, the *Measures for the Management of On-site Failure Disposal*, and the *Non-conforming Product Control Procedures*. Comprehensive services such as repair, expert support, and product optimization are provided to ensure timely response to product quality issues and their effective resolution.

At key stages such as demand identification, R&D and design, material procurement, production manufacturing, and after-sales operation and maintenance, the Company strictly enforces quality inspection and control measures. It organizes quality management maturity evaluations to address root causes of quality issues. During the reporting period, the Company conducted special quality inspections for 16 new energy equipment subsidiaries, and regularly tracked the progress of issue improvements. It carried out root cause quality issue rectification, and planned "N-Prevention" quality and safety management actions for its new energy equipment subsidiaries, focusing on the prevention and control of potential quality risks in wind power, energy storage, photovoltaic, and other products.

Quality Culture

The Company actively participates in the revision of domestic and international standards, and promotes the "CRRC Q" standard concept. Currently, quality safety management, project hierarchical management, and other methods have been integrated into the ISO 22163 Railway Industry Quality Management System Standard. It organizes and conducts "Quality Month" activities and special training to comprehensively enhance employees' quality awareness.

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Conducting the "Quality Month" Series Activities

In September 2024, with the overall goal of "Revitalizing the Brand (Quality Excellence) Year" for quality work, all levels of subsidiaries were organized to conduct the "Quality Month" activities, aiming to create a positive atmosphere where everyone cares about, values, creates, and enjoys quality.



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Special Training for the ISO 22163 Standard

In 2024, the Company organized relay training sessions focused on the key points and content changes of the ISO 22163 standard, further strengthening quality support.



During the reporting period, the Company received no administrative penalties concerning the safety and quality of products and services, and experienced no product withdrawals and recalls due to quality safety reasons.

Information Security

Following the Data Security Law of the People's Republic of China, the Cybersecurity Law of the People's Republic of China, and the Measures for the Administration of Data Security in the Industrial and Information Field (Trial), the Company has formulated systems such as the Network Management Measures, the Measures for the Management of Data Security, the Specifications for the Classification and Grading of Data Security Technical Data, and the Measures for the Management of Data Entry and Exit to continuously improve its data management system and standards, and regulate internal data management activities, with a focus on protecting customer privacy during the acquisition and use of customer information. Subsidiaries, under the unified data system, have formulated and implemented their specific rules according to their actual conditions. As of the end of the reporting period, 21 subsidiaries in total had obtained ISO 27001 certification.



Site of the "Quality Month" Activity



Special Training for the ISO 22163 Standard
The Company has researched and formulated an overall data security management plan to advance the identification of important data, data classification and grading, and data security risk assessments. It has conducted commercial encryption application security assessments to achieve the application of commercial encryption technology in Level 3 protection system and safeguard network and information security. Additionally, it has built a unified data management platform to perform the identification of sensitive data, and organized information security training activities to enhance employees' data governance and cybersecurity capabilities.

During the reporting period, the Company was honored with the title of "Leader" in China's industrial data governance and experienced no incidents of customer privacy leakage.

Upholding an Innovationdriven Approach

The Company is steadfast in making technological innovation a core strategy, adhering to independent, open, and collaborative innovation, aiming to establish an internationally leading rail transit equipment product system and knowledge system to provide strong momentum for "CRRC Creation" and "Chinese

Technological **Innovation System**

The Company has formulated the Measures for the Management of Scientific and Technological Innovation Evaluation, the Guiding Opinions on the Reform of the Science and Technology System, and the Management Measures for the Construction of Overseas R&D Centers to enhance technological research and product R&D capabilities, and ensure standardized management of research project applications and new product development.

The Company continuously innovates to maintain technological competitiveness and sustainable development, and relentlessly optimizes the technological research system and strengthens the product R&D system to advance the shift from "product- driven technology" to "technology-driven products." It improves the collaborative innovation mechanism, builds a market-based technology trading mechanism, and accelerates internal technology conversion and incubation to achieve rapid transformation of technological achievements, industry structural transformation, and vertical development. A scientific and technological innovation evaluation system is built to optimize innovation resource allocation, enhance technology management levels, and improve the effectiveness of scientific and technological.

Innovation Capabilities

The Company has revised the Measures for the Management of Specialized Technology R&D Centers and the Measures for the Management of Overseas R&D Centers to continuously strengthen the capability of scientific and technological innovation. It has developed the Measures for the Management of the National High-Speed Train Technology Innovation Center (Trial) to promote collaborative construction of the National High-Speed Train Technology Innovation Center, and jointly funded with the National Natural Science Foundation of China to establish a joint innovation and development fund for enterprises in the fields of rail transportation equipment and clean energy equipment, with 26 guidelines released in the first phase.

The Company continuously promotes digital and intelligent transformation integration, and has formulated the work plan for the construction of the "1 Guideline + 4 Specifications" system for R&D digitalization. It has established the artificial intelligence leadership group and set up a digital intelligence business unit to form the overall development plan for artificial intelligence, as well as implementation plans for scenarios, industries, and common technologies. It has made efforts to advance the construction of the CRRC intelligent manufacturing system, drafted the Intelligent Manufacturing Capability Maturity Model and Methods for Rail Transportation Equipment, and established 4 digital workshops and 27 intelligent production lines.

Establishing the World Vocational and **Technical Education Development** Conference

In November 2024, the World Vocational and Technical Education Development Conference was established. The Company, as the initiating unit, is committed to promoting the internationalization of vocational education and constructing a highlevel integration of industry and education for the national rail transportation equipment sector.



Innovative Achievements at the World-class Rail Transportation Equipment Exhibition

In September 2024, the Company participated in the International Trade for Transport Technology (InnoTrans) in Berlin, Germany, fully showcasing passenger and freight solutions as well as full life-cycle system solutions, and demonstrating the Company's technological innovation capabilities in green and low-carbon areas.



As of the end of the reporting period, 11 national-level R&D institutions (including 2 national innovation centers), 22 nationally-certified technology centers, 18 overseas R&D centers, and 17 specialized technology R&D centers within CRRC have been established. The Company employs 19,000 R&D personnel, including 873 high-end talents (experts at or above the senior technical series of CRRC), with 2 individuals receiving the National Engineer Award.



Win-win CRRC



Innovation **Achievements**

During the reporting period, the total R&D investment amounted to 16,685,588,000 yuan, accounting for 6.77% of total revenue, with R&D personnel representing 13.90% of the total workforce. The Company led or participated in 9 international standards, 100 national standards, 23 industry standards, and 63 group standards. As of the end of the reporting period, the "Fuxing High-Speed Train" project won the grand prize of the 2023 National Award for Science and Technology Progress.

The CR450 EMU Prototype was Released, Advancing the High-speed Rail Technology Innovation

In December 2024, the CR450 EMU prototype was officially released, which was produced by Sifang Co., Ltd. and CRRC Changchun. The prototype incorporates new power devices and other key technologies, reducing its weight by 19.7% compared to the CR400 EMU, increasing power density by 45%, and improving rated efficiency by 0.5%. The release of this EMU marks a significant breakthrough in technological innovation, offering a Chinese solution for the development of global high-speed rail technology.



The Subsidiary Rolled off the Mainline Freight Diesel Locomotive for Export to Kazakhstan

In November 2024, CRRC Dalian rolled off the self-developed mainline freight diesel locomotive for export to Kazakhstan. This locomotive will serve as an important achievement in China and Kazakhstan's high-quality Belt and Road collaboration in rail transportation, further advancing the modernization of Kazakhstan's railways.



Export of Diesel Locomotives to Kazakhstan for its Mainline Freight

Intellectual Property

The Company has developed systems such as the Measures for the Management of Intellectual Properties, and issued the Work Plan for the High-Quality Development of Intellectual Properties and the Measures for the Management of Technology Transfer, embedding the concept of high-quality development into the entire chain of intellectual property creation, protection, management, and utilization. It has conducted a patent asset survey to solidify the foundation of intellectual property work.

As of the end of the reporting period, the Company had a total of 31,614 authorized patents. During the reporting period, 4,952 new patent applications were filed, including 3,673 new invention patent applications, and 1,733 authorized invention patents. It has won 14 China Patent Gold Awards, 13 Silver Awards, and 72 Excellence Awards in total.

Key Indicators of Technological Innovation

Indicator	Unit	2024	
R&D Investment	10,000 yuan	1,668,558.80	
R&D Investment Growth Rate	%	12.64	
R&D Investment Percentage	%	6.77	
Percentage of Growth Rate of R&D Investment	%	7.12	
Number of R&D Personnel	Persons	21,138	
Proportion of R&D Personnel	%	13.90	
Number of Cumulative Authorized Patents	Pcs	31,614	
Number of Cumulative Authorized Invention Patents	Pcs	17,110	
Number of Patent Applications	Pcs	4,952	
Number of Invention Patent Applications	Pcs	3,673	
Number of Authorized Invention Patents	Pcs	1,733	

Building a **Sustainable Supply Chain**

Management System

of ESG principles into the construction of the supply chain, continuously strengthening risk control, and performing supplier cultivation and empowerment. The goal is to integrate digitalization, intelligence, and sustainability across the entire industrial chain, and drive the improvement of sustainable supply chain performance.

The Company has established a "two-level, three-tier" management system. The "two levels" refer to the supply chain management headquarters of the industrial chain and primary subsidiaries. The "three tiers" include the Industrial Chain and Supply Chain Management Committee as the decisionmaking agency, the Industrial Chain Management Department and relevant business departments as the management, and subsidiaries as the operation body. During the reporting period, the Company revised and issued the Supplier Management Measures, covering 4 regulations: the Regulations on the Management of Supplier Performance Evaluation, the Regulations on the Management of Supplier Misconduct and Blacklist, the Regulations on the Management of Overseas Suppliers, and the Regulations on the Management of Anti- Corruption and Anti-Bribery by Suppliers, to standardize supplier qualification certification, performance evaluation management, and resource pool management mechanisms.

12) **Supplier Qualification** Certification (Access)

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Supplier Performance

Evaluation

(Evaluation Management)

According to the Supplier Management Measures, new suppliers entering the system shall complete seven review processes: supplier registration, potential supplier review, supplier recommendation or self-recommendation, comprehensive capability assessment, trial supplier approval, CRRC product certification or third-party product certification, and qualified supplier approval. In addition to basic qualification requirements, energy conservation, environmental protection, carbon peaking and carbon neutrality, and ESG-related requirements are included as important elements in the supplier qualification certification. For different types of procurement, suppliers shall have the corresponding quality management system certification and product certification, such as ISO 9001, ISO/TS 22163, IATF 16949.

According to the Regulations on the Management of Supplier Performance Evaluation, the evaluation includes performance evaluation, credit evaluation, green carbon peaking and carbon neutrality and ESG evaluation, and outstanding contribution assessment. Based on the results of supplier performance evaluation, suppliers are subject to management by levels. The green evaluation for suppliers includes, but not limited to, energy management, environmental management, occupational health management system certification, and green factory certification. ESG evaluation covers environmental protection, human rights protection, labor management, and business ethics, with a focus on the supplier's compliance with environmental protection regulations during the production process and the management effectiveness of reducing the emission of toxic and harmful substances. Regular performance screening and audits are conducted for suppliers.

Management Of Supplier Resource Pool

(Misconduct Management And Exit)

According to the Regulations on the Management of Supplier Misconduct and Blacklist, quality issues, delivery issues, breach of contract, infringement upon intellectual property rights, violation of national environmental protection regulations for carbon peaking and carbon neutrality, and dishonesty are subject to management by levels based on the severity of the impact. Cooperation may be terminated in severe cases. In terms of managing the reduction of toxic and harmful substance emissions by suppliers, the Company will provide corrective guidance to suppliers who fail to meet the requirements, helping them improve their environmental performance. Where a supplier fails to meet the requirements within the specified period, the Company shall consider terminating the cooperation. Suppliers who fail to meet environmental protection requirements shall receive corrective guidance, and those who repeatedly fail to meet the audit requirements for toxic and harmful substance emissions shall have their cooperation eligibility revoked.

Strategic Focus

The Company has formulated and issued the Measures for the Management of Industrial Chain and Supply Chain's Resilience and Security, focusing on risk control across nine key areas: strategic planning, supervision and evaluation, planning management, supplier management, procurement logistics, security resilience, digital transformation, green and low-carbon initiatives, and talent development. The goal is to strengthen the management of key supply chain links. The Company continuously deepens its "Comprehensive Procurement" strategy, reducing procurement costs and improving operational efficiency. Additionally, it advances the construction of "one network, one platform" to achieve standardized supply chain management.

Risk Management

management.

Digital Management of Supply Chain

The Company has formulated the Measures for the Management of Digital Platform of Industrial Chain and Supply Chain to standardize business data management, performing in-depth optimization of the "CRRC Purchase" 2.0 platform in four major areas: architecture optimization, regulatory support, data governance, and functional upgrades, to realize the online aggregation and visual analysis of key business scenario data. During the reporting period, 276 secondary subsidiaries at all levels began application on the platform, with 37,000 qualified suppliers entering the system.

The Company has established a supplier development mechanism through various means such as mentoring, training, and expert deployment to help suppliers improve and enhance the overall quality and standards of the supply chain services. It provides suppliers with specialized training on the "CRRC Q" quality and technical standards, aiming to promote the transfer of "CRRC Q" quality standards to strategic emerging industries and comprehensively enhance the quality of supplier products and services.

Win-win CRRC

For identified supply chain security, supply disruptions, and compliance risks, the Company has implemented digital management and training empowerment measures to improve supply chain

Online Monitoring of Supply Chain Risk

In conjunction with the construction of the Treasury Platform, the Company has built a false trade identification model covering business processes such as contracts, logistics, and invoices, and established a prevention and control mechanism for risks before, during, and after the event, to perform ongoing online monitoring of supply chain risks. The goal is to leverage the function of big data monitoring and standardize market trade control.

Building a Good ESG Ecosystem for the Synergized Development of Supply Chain and Industrial Chain

On October 20, 2024, the Company hosted the "ESG China•Innovation Conference (Green Supply Chain Sub-Forum)" under the theme "New Quality Leadership and Industry-Driven: Practicing the Construction of a Green Supply Chain," aiming to establish a green and low- carbon supply chain ecosystem and promote the collaborative development of industrial chain partners.



ESG China · Innovation Conference (Green Supply Chain Sub-Forum)

Collaborative Development

With the goal of shared construction and mutual benefits, the Company advanced a "Five Unifications" management model, namely unified system standards, unified category management, unified supplier management, unified digital platform, and unified capability development, to coordinate the management of upstream and downstream supply chain. It issued the Implementation Plan for Supplier Qualification Certification in 2024 and the Notification on the Formulation and Release Process of Supplier Product Certification Implementation Rules to gradually promote the sharing and mutual recognition of supplier and product qualifications. As of the end of the reporting period, 1 general rule and 62 specific product certification rules have been published, with 70 CRRC-level suppliers completing the unified qualification certification, promoting their mutual recognition and sharing.

Establishing the "CRRC Supplier Management and Evaluation Center"

In June 2024, the "CRRC Supplier Management and Evaluation Center" was officially established, laying the foundation for building an innovationdriven, open and inclusive, co- built and shared, and mutually recognized and trusted supply chain ecosystem.









Win-win CRRC

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Inauguration Ceremony for the "CRRC Supplier Management and Evaluation Center"

Number of Suppliers by Region 37,072 Companies

Number of Suppliers in	Number of Suppliers in Hong Kong,
Mainland China	Macao, Taiwan, and Overseas
36,845 Companies	227 Companies
Number of Audited	Number of Suppliers Suspended
Suppliers	for Non-compliance
14,622 Companies	36 Companies





Excellence in Governance at CRRC

0	Optimizing Corporate Governance ————	80
0	Upholding Business Ethics —	82
0	Standardizing Compliance Operations —	85
0	Strengthening Risk Control	86
0	Upholding Party Leadership —————	87

UN SDGs



Optimizing Corporate Governance

Governance System

CRRC continuously strengthens the construction of its organizational structure. It clarifies the responsibility boundaries of the "Three Meetings", improves corporate governance mechanisms, and enhances the scientific nature and operational efficiency of decision-making, aiming to comprehensively establish a standardized modern corporate governance system.

Strictly adhering to the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Code of Corporate Governance for Listed Companies, and other laws and regulations, and requirements, the Company has formulated policies such as the Articles of Association, the Notice on Further Standardizing the Board Construction of Subsidiaries, and the Measures for the Evaluation of Subsidiary Board, establishing a "Three Meetings and One Level" corporate governance framework that comprises the Shareholder's Meeting, the Board of Directors, the Board of Supervisors, and the Management. This structure ensures clear authority and responsibility, as well as standardized operations, between the governing bodies, decision-making bodies, supervisory bodies, and executive management. The board of directors has four specialized committees: Strategy and Sustainability, Nomination, Remuneration Appraisal, and Audit Risk, providing multi-dimensional support for major decision- making.

During the reporting period, 2 Shareholder's Meetings were convened, with 13 resolutions approved; 11 board meetings were held, with 53 resolutions approved; 14 meetings of specialized board committees were held; and 6 external director research visits were organized.

Board Composition

Board appointments follow a merit-based selection principle, aligned with the Company's business model and specific needs. The Company has adopted a board diversity policy, with the Nomination Committee comprehensively considering factors such as gender, age, cultural background, professional expertise, and skills to continuously optimize the board's composition.

As of the end of the reporting period, the Board of Directors consists of 6 members, including 3 executive directors and 3 independent non-executive directors. They have expertise in business management, rail transit, law, administration, and accounting, ensuring independent and professional decision-making by the Board of Directors.

Remuneration Policy for Senior Management

The remuneration of Company senior management consists of a base salary and performancebased pay, closely tied to performance evaluations, which are determined based on the Company's annual operational performance and individual assessment results. The performance assessment covers performance in assigned areas, achievement of personal goals, team collaboration and other elements. Additionally, energy conservation and emission reduction, environmental protection, quality efficiency, technological innovation, and production safety are incorporated into the senior management performance assessment system and linked to sustainable development goals. For significant safety, quality, and environmental protection risks, a "one-vote veto" mechanism is applied in performance assessments. In cases of serious violations of national laws and regulations or failure to fulfill duties resulting in corporate asset losses, the Company may deduct or reclaim part or all of the awarded performance-based annual salary and tenure-based incentive income. The remuneration distribution plan for directors and senior management is reviewed by the Remuneration Committee of the board of directors, then submitted to the board of directors for approval, and finally approved by the shareholders' meeting.

Information Disclosure

Strictly adhering to the Company Law of the People's Republic of China, the Securities Law of the People's Republic of China, the Guidelines for Investor Relations Management of Listed Companies, the Measures for the Management of Investor Relations, and other relevant laws and regulations, the Company has formulated policies such as the Measures for the Management of Information Disclosure to ensure fair, just, and open disclosure while safeguarding investors' right to be informed about and other legal rights.

Investor Relations

Protection of **Shareholder Rights** and Interests

During the reporting period, the Company issued more than 300 announcements in the stock market, corporate bonds and inter-bank markets, including annual reports, semi-annual reports, guarterly reports and related documents, as well as announcements of resolutions of the shareholders' meeting, the board of directors and the board of supervisors, and other major matters, achieving legal and compliant information disclosure throughout the year, with no false records, misleading statements, or material omissions, and no violations of information disclosure regulations. The information disclosure work was widely recognized by the capital market, regulatory authorities and professional institutions. The business performance assessment achieved 13 consecutive A ratings. Since the SASAC began evaluating board standardization, the Company has received an "Outstanding" rating for 6 consecutive years. Additionally, it has been awarded the "A-Level" honor in annual information disclosure for listed companies by the SSE for 9 consecutive years.

The Company has established a regular communication mechanism, inviting directors, supervisors, and senior management to directly engage with investors and accurately interpret the Company's operational performance through regular performance briefings, telephone conferences, and press conferences. It also conducts reverse roadshows, inviting investors to visit production bases and demonstration centers to visually communicate the Company's value. Dedicated personnel are assigned to handle phone calls, receive emails, and respond to inquiries on the SSE's E-Interaction platform, ensuring efficient communication with investors. The Company focuses on nurturing key institutional investors, maintaining good relationships through calls, visits, and other means, and actively participates in investor education activities to guide investors toward rational investment decisions.

During the reporting period, the Company held 1 performance press conference, 2 performance roadshows, 1 reverse roadshow, 3 performance briefings, and 4 performance telephone conferences. In terms of honors, the Company won the "Golden Bull Most Investable Company in the Capital Market" award, the "Golden Information Disclosure" award, and the Investor Relations "Tianma Award". It also ranked in the "Top 100 Most Valuable Companies Listed on the Mainboard" by Securities Times and won the Gold Award at the LACP Vision Award for its annual report. Chairman Sun Yongcai received the "Golden Bull Outstanding Entrepreneur" award, and Board Secretary Wang Jian received the "Golden Bull Board Secretary" award.

The Company attaches great importance to the right to influence remuneration within its governance structure, ensuring shareholders' key rights and interests are safeguarded in remuneration decisions. According to the governance structure, shareholders have the right to vote comprehensively on remuneration policies and their implementation, covering policy content, payment amounts, and reports from the Remuneration Committee. Shareholders' voting rights extend to the overall remuneration policy and total remuneration, not limited to individual components, ensuring full participation in decision-making. The scope of votes includes all executive directors of the board of directors, allowing both collective and individual votes to respect shareholder autonomy. A once-ayear remuneration voting mechanism is implemented, ensuring continuous shareholder oversight and adjustment of remuneration policies to align with the Company's strategy and shareholder interests, thereby promoting the Company's stable development under a fair and reasonable remuneration system.

In response to the SSE's initiative to "enhance quality, improve efficiency, and focus on returns," the Company has formulated a special action plan, adhering to a prudent dividend policy while continuously balancing long-term development and investor interests. Since its reorganization and listing in 2015, the Company has performed cash dividend distribution annually, with the dividend distribution amount steadily increasing. The average annual dividend distribution ratio over the past three years was approximately 49%, achieving a win-win outcome with investors.

The Company has established an information disclosure system for stocks, bonds, and inter-bank markets, supported by a "five-in-one" collaborative working mechanism involving the chairman, board secretary, business departments, subsidiaries, and expert teams to ensure high-quality disclosures. It strengthens the quality of fundamental information sources, rigorously reviews disclosure content, and fulfills disclosure obligations. Additionally, it participates in major project communication and review processes to ensure standardized decision-making, timely disclosure, and compliance in areas such as external investments, guarantees, financial assistance, and related transactions.

Upholding Business Ethics

The Company regulates the construction of the business ethics management system, focusing on areas such as anti-bribery, anti-corruption, advocating fair competition, maintaining open channels for reporting and complaints, supporting legitimate business competition, opposing unethical market transactions, and actively creating a healthy business environment.

Integrity and Anti-corruption

Strictly adhering to the Criminal Law of the People's Republic of China, the Company Law of the People's Republic of China, the Law of the People's Republic of China on Supervision, the Law of the People's Republic of China on Administrative Sanctions for Public Officials, the Regulations on Integrity in State-Owned Enterprise Leadership, and other laws and regulations, as well as international principles and initiatives such as the United Nations Convention Against Corruption, the Company has formulated and issued documents including the Guiding Opinions on Building a "All- in-One" Comprehensive Supervision System and the Measures for the Management of Anti-Corruption Compliance.

An "all-in-one" comprehensive supervision system has been established, creating a joint meeting system for supervisory work to study key supervision matters. The leadership team (chairman, president, vice president) is the responsible entity for the management of anti-corruption compliance and internal supervision, and the dedicated supervision departments include the Discipline Inspection and Supervision Committee, the Inspection Office, the Audit Committee, and the Board of Supervisors. The Legal Compliance Department and Party Committee Cadre Department are responsible for key supervision, while departments such as HR and Finance perform business supervision functions. All departments are interconnected, forming a coordinated supervision effort to legally promote anti-corruption compliance.

Anti-corruption Risk Management

Procurement personnel shall strictly comply with the *Code of Conduct for Procurement Personnel*, ensuring appropriate boundaries in familial relationships, maintaining a clear distinction between public and private matters, and implementing the "Eight Prohibitions."

Strictly implement the *Commission Management Measures*, enforce the elevated management of commissions for both domestic and international projects, strengthen preliminary argumentation, decision-making approvals, compliance due diligence, contract joint signing, payment supervision, risk control, and document management, and reinforce accountability. The Company implements a "zero-tolerance" policy toward corruption and categorizes projects based on areas where corruption is more likely, such as procurement and marketing, to identify and control integrity risks precisely.



Marketing personnel shall strictly comply with the *Code of Conduct for Marketing Personnel,* maintaining honesty, fair competition, and implementing the "Six Prohibitions."

Strictly implement the *Regulations on the Management of Business Reception*, adhere to legal and regulatory requirements, maintain integrity, thriftiness, and transparency, and strictly follow the approval, registration, and reimbursement procedures.

Anti-corruption Supervision and Inspection

The Company conducts regular internal anti-corruption supervision and special inspections at least once per year, covering all Company operations, with a focus on elements such as the implementation of major projects and the governance of overseas corruption. It conducts progress meetings, research and supervision, talks, letter inquires and disciplinary inspections in a comprehensive manner to strengthen routine supervision, ensuring effective implementation of feedback from inspections. Actions violating anti-corruption policies shall be handled seriously, depending on the severity and

Anti-corruption Training

efforts.

Review of Business Ethics Standards

Supplier Integrity

The Company has established the *Regulations on the Management of Anti- Corruption and Anti-Bribery by Suppliers* and implemented a dynamic supervision mechanism to monitor suppliers' corrupt behaviors throughout the entire process. It organizes subsidiaries at all levels to sign integrity commitment letters with suppliers and encourages suppliers to comply with anti-corruption and anti-bribery laws and regulations when cooperating with other enterprises. Suppliers who violate the integrity commitment or make false, deceptive statements, representations, or guarantees may be blacklisted based on the severity of their actions. In terms of supplier integrity training, the Company conducts at least one special supply chain integrity education session annually and strengthens suppliers' awareness of integrity through platforms such as the procurement and supply chain management system work meetings.

Number of Anti-corruption	Duration of Anti-corrup
Training	Training
116 Times	232 Hours
Percentage of Employees Receiving	Number of Directors R
Anti-corruption Training	Anti-corruption Trainir
100 %	6 Persons

cators of Anti-Corruption Training in 2024

impact of the violations, through measures such as talks and reminders, criticism and education, rectification requests, and accountability. For key areas with concentrated power, intensive capital, and abundant resources, the Company urges subsidiaries to carry out "project approval supervision" to drive the construction of a long-term clean governance mechanism. Annual reviews of anti-corruption related system documents are conducted to ensure that they are binding in supporting anti-corruption

During the reporting period, 3 special notices on integrity supervision and inspections during holidays were issued, with subsidiaries urged to conduct over 150 supervisions and inspections in total.

The Company organizes anti-corruption compliance training, public awareness campaigns, and case warnings to actively cultivate an anti-corruption compliance culture. It has distributed an *Employee Integrity and Compliance Handbook* to all employees for ethics standards training, and educates part-time employees and outsourced personnel on compliance knowledge through various promotional activities to comprehensively raise compliance awareness across the Company.

During the reporting period, the Company held 2 warning education conferences for cadres, with nearly 12,000 person-times. Subsidiaries independently held 113 such conferences, involving 9,027 person-times of cadres and employees.

The Company attaches great importance to business ethics and compliant operation-related issues, and has developed relevant system documents such as the *Code of Business Conduct* and the *Employee Integrity and Compliance Handbook* to regulate employee behavior and guide related operations. Internal supervision and inspection of business ethics standards are conducted regularly, with a frequency of once per year. The scope covers all business operations and addresses key issues such as anti-bribery, anti-corruption, employee conduct standards, and more. The Company remains vigilant to detect any violations of regulations or discipline, such as employee misconduct, fraud, or corruption. By promptly identifying and warning against abnormal behaviors, the Company ensures early detection, intervention, and resolution, effectively preventing various types of risks and ensuring that all responsible parties fulfill their duties, thereby promoting stable corporate operations.

uption

Number of Employee Receiving Anti-corruption Training 152,082 Persons

Receiving ing Percentage of Directors Receiving Anti-corruption Training 100 %

Anti-unfair Competition

Strictly adhering to the Law of the People's Republic of China Against Unfair Competition and the Anti-Monopoly Law of the People's Republic of China, the Company continuously implements the Code of Business Conduct, the Employee Integrity and Compliance Handbook, and other system documents to regulate the Company's operations and employee behavior. It strictly prohibits a series of unfair competition behaviors, such as false advertising and infringement upon trade secrets.

According to the Code of Business Conduct, employees shall conduct all business activities with integrity and compliance with the law. In marketing activities, they shall maintain the principles of honesty and transparency and ensure the authenticity and accuracy of all marketing information. Fair competition shall be upheld to obtain business opportunities, and it is prohibited to win business through providing improper benefits to others. Employees shall not discuss sensitive competitive information, such as pricing and costs, with competitors, nor shall they obtain competitors' confidential information through illegal means or maliciously spread false information about competitors or other products or services.

The Company has established a complete supervision and assurance mechanism, which is coordinated by the Compliance Committee, with the Discipline Inspection Commission and Legal Compliance Department

General Office of the State Council, such as the Implementation Rules for the Central Committee's Eight-Point Decision and the Implementation Opinions on Strengthening Work Style Construction, the Company

Inspection Committee and the Regulations on the Management of Violation Whistleblowing, which define the management processes for receiving and investigating reports to ensure timely acceptance and

handling of violations of laws and regulations, following the principles of "tiered acceptance, division of

has formulated the Measures for the Management of Petition and Whistleblowing by the Disciplinary

jointly managing reports of violations, and the Audit Department and other business departments collaborating based on their respective responsibilities to conduct investigations into reported violations. In accordance with the relevant guidelines issued by the General Office of the CPC Central Committee and the

Whistleblowing Mechanism

6 Scope of Acceptance

Employees or business partners of the Company may report violations related to national laws and regulations, regulatory provisions, industry standards, international treaties and rules, the articles of association, and other rules and regulations during the Company's operation and management, and employee performance through the whistleblowing platform.



Whistleblowers may report via various methods, including email, telephone, whistleblowing boxes, or visiting the reception room in person. The Company will assign dedicated personnel to handle reports and complaints, regularly collect and review the issues raised, and form a work log to conduct regular assessments. The following are the channels for reporting:

Whistleblowing email: weiguijubao@crrcgc.cc Whistleblowing Tel.: 010-51872519 Whistleblowing address: No. 16-5 West 4th Ring Road, Haidian District, Beijing, China



According to the *Regulations on the* Management of Violation Whistleblowing, the identity of whistleblowers and the information they provide is strictly confidential. The range of individuals with access to the information is limited to prevent leakage or dissemination. All personnel involved in handling the reports shall strictly follow the working procedures, safeguard the whistleblowing materials properly, and prevent the disclosure of the whistleblower's identity or the reported matters to the person reported or other unrelated parties. Retaliation against whistleblowers is strictly prohibited, and any retaliatory behavior resulting in negative consequences shall be subject to accountability or disciplinary actions.

Standardizing Compliance **Operations**

Compliance Management The Company views compliance management as the cornerstone of sustainable development. It strictly adheres to both domestic and international laws and regulations to establish a comprehensive compliance management system with clear responsibilities and rights. By integrating legal and compliance management into business operations, the Company effectively controls key areas and projects, reduces operational risks, and enhances its reputation and market competitiveness.

The Company has established the Compliance Management Measures and set up a Compliance Committee to advance the development of the compliance system in a coordinated manner, ensuring that compliance risks are accurately identified, timely alerted, and properly addressed. The Company continuously improves mechanisms for compliance review, reporting, rectification, whistleblowing, and accountability, reinforcing the system enforcement and supervision implementation to ensure compliance management covers all business processes. Personnel in important positions and key business areas are required to sign compliance commitment letters to ensure the fulfillment of their responsibilities and promote the establishment of a long-term compliance management mechanism. The Company emphasizes the importance of building a compliance culture and values employee compliance training, aiming to foster a culture of active compliance through the participation of all employees.

Case

Organizing the Advanced Workshop for Legal Compliance and Risk Prevention

The Company organizes training sessions, tailoring high-quality lecturer resources to the workshop, with a focus on enhancing the awareness of legal governance, compliant operation, and risk prevention among corporate leaders and cadres. The goal is to effectively improve their ability to identify, prevent, and resolve operational risks, thereby providing strong support for accelerating the construction of a worldclass legal system at CRRC.



Key Indicators of Compliance Training in 2024



Number of Legal Compliance Training 513 Times

Tax Transparency

The Company adheres to legal tax payment and strictly complies with national tax regulations. It emphasizes tax risk management, requiring each subsidiary to conduct tax self-inspections each year, with at least one tax risk self-inspection per year, and reflect the self-inspection results and corrective actions in the annual tax summary report for comprehensive review and evaluation. Each year, a thirdparty organization is engaged to issue an annual corporate income tax declarations and audit report to ensure the accuracy, transparency, and compliance of tax declarations and payments.

Excellence in Governance at CRRC





The Advanced Workshop for Legal Compliance and Risk Prevention

Duration of Legal Compliance Training 1.382 Hours

Person-time of Employees Receiving Legal Compliance Training 42.017 Person-times

Strengthening **Risk Control**

The Company has established a comprehensive risk management system to strengthen internal control construction and improve the effectiveness of such mechanisms, thereby ensuring the stable operation of the enterprise.

Risk Control System

Following the Provisions on the Comprehensive Risk Management for Central Enterprises, the Basic Norms for Internal Control of Enterprises, and other system documents, the Company has developed a risk management and internal control system, and in line with the "Three Lines of Defense" principle in risk management, it has established a comprehensive line of defense penetrating through each level ("point-line- surface + dual firewall") to ensure precise risk management and effective control.



The Three Lines of Defense

The system consists of three levels: At the first level, 2 fundamental regulations - the Comprehensive Risk Management and the Internal Control Provisions - are formulated; At the second level, 9 specialized systems, 27 risk guidelines, and 13 risk manuals, as well as 28 internal control guidelines and 4 internal control manuals are formulated; At the third level, the Risk Management and Internal Control Manual is formulated.

The Company continuously promotes reforms in its risk control mechanism and system, optimizing risk identification, analysis, and response effectiveness. It strengthens supervision before and during key projects, ensuring comprehensive risk management throughout the process. In areas such as investment management and related-party transactions, it further enhances risk control and promotes the deep integration of risk management into the Company's high-quality development. In line with the 2024 Special Action Plan for Preventing and Resolving Major Risks, the Company signs risk mitigation responsibility agreements with relevant subsidiaries to ensure accountability in risk management and resolution. For major decisions such as overseas project bidding and asset acquisitions, the Company strictly follows risk evaluation procedures for major projects to ensure scientific and compliant decision- making.

Internal Audit

The Company has established a framework based on the basic system outlined in the Internal Audit Provisions, focusing on 6 work plans such as the Implementation Plan for Audit Management Reform to develop 10 basic systems such as the Economic Responsibility Audit Measures, 9 internal audit practical guidelines, as well as a series of systems, including the "Four Libraries and One Manual" and work assembly. The Company continuously optimizes and improves the "1+1+N" audit management structure, strengthens the construction of the audit shared center, and concentrates superior resources to carry out internal audit supervision work.

During the reporting period, the Company fully implemented the annual audit priorities of the SASAC and the Company's business priorities. It formulated 390 audit project plans and successfully completed 393, exceeding the annual audit target. The Company continuously advances the digital transformation of the audit risk control system and implements the Work Plan for the Digital Transformation of Audit Risk Control to improve the intelligence and precision of audit work and provide strong support for the Company's stable development.

Upholding Party Leadership

Innovating Practices

Strengthening the Foundation

The Company views Party leadership as the core driving force for high-quality corporate development. It advances the deep integration of Party building with production and operations to create a Partybuilding practice system with characteristics of central enterprises.

construction of talent hubs.

The Company explores innovative paths for Party building. Through the implementation of four major projects - "Value Empowerment," "Museums and Zones Building," "Cultural Inheritance," and "Industrial Innovation," it promotes the revitalization and utilization of industrial heritage, builds cultural confidence, inherits industrial spirit, enhances the competitiveness of central enterprise brands, and promotes the efficient use of assets, thereby driving mutual advancement of Party building and enterprise development.

The Company delves into the red stories and industrial spirit behind industrial heritage, creating a "matrixstyle" education base. For example, the construction of the Changxindian Erqi Memorial Hall has become an important base for red education, passing on red genes, building cultural confidence, and enhancing cultural identity.

The Company transforms industrial sites into industrial museums, urban parks, and cultural creative parks, creating cultural landmarks with characteristics of CRRC. By developing cultural products, it turns the cultural value of industrial heritage into economic benefits, further enhancing brand competitiveness.

Adhering to Xi Jinping's Thought on Socialism with Chinese Characteristics for a New Era, with the "leading innovation" as the theme and the pursuit of innovative breakthrough in the construction of the Party's "Golden Name Card" as the goal, the Company advances the "Four Major Actions" of value creation, demonstration establishment, management enhancement, and brand leadership in a coordinated manner, defines the strategic path of "Seven New Breakthroughs" in business layout, market expansion, technological innovation, reform innovation, management enhancement, integration of production and finance, and the construction of the Party's "Golden Name Card." It deepens the integration of Party building with production and operation, creating a Party-building practice system with characteristics of central enterprises, thereby providing strong assurance for accelerating the construction of a world-class CRRC. By strengthening political and ideological leadership, improving the "Two Safeguards" mechanism, carrying out Party discipline education, and promoting ideological work, the Company facilitates high-quality development of the enterprise. It strengthens organizational foundations, implements projects to improve Party-building quality and efficiency, promotes special Party-building empowerment initiatives, and establishes a Partybuilding brand structure. Additionally, it focuses on building a high-quality cadre team, improves the mechanisms for selecting and appointing people, enhances cadre supervision, and advances the

> The Company promotes the "Serving the Nation through Industry, Daring to Innovate, and Accelerating the Chinese Dream" spirit of Chinese high-speed rail workers, setting up immersive ideological and political classrooms. Using industrial heritage as a medium, the Company tells the history of China's industrial development and CRRC's hard struggle, inspiring Party members and cadres to stand firm in their posts and pass on the industrial spirit.

The Company reconstructs old factory buildings to activate idle assets. For example, CRRC Tangshan has incorporated the casting steel workshop site into the Tangshan Earthquake Memorial Park to integrate industrial heritage revitalization into various stages of cultural industry development, thereby promoting the efficient use of assets.

Outlook for the Future

In 2025, CRRC will use the ESG strategic model as a guide to deepen the integration of sustainable development concepts with the Company's strategy. Focusing on four key themes - "innovative products connecting the world, green operations benefiting humanity, integrity-based corporate governance, and social well-being through virtuous actions" - the Company aims to achieve three overarching goals of "protecting a more harmonious ecosystem, leading a better life, and creating more high- end products."

Governance as the Foundation: Ensuring Steady Corporate Development

The Company will continuously deepen and enhance its reform initiatives to enhance levels of governance, strengthen the development of the board of directors, improve information disclosure quality, and increase market value management capabilities. It will reinforce risk management and internal control, and build a multi- level risk prevention and control system to lay a solid foundation for steady development, and foster a culture of compliance to create a sound corporate ecosystem and achieve high-quality development.

Leadership by Green Development: Igniting the Engine of Green Transformation

The Company will uphold the concept of green development, and, guided by its operational goals, continuously enhance environmental protection, energy conservation, and carbon peaking and carbon neutrality efforts. With a focus on environmental protection, it will continuously strengthen corporate environmental risk inspections, promote online monitoring and early warning for environmental risks, and reinforce environmental compliance. With a focus on energy conservation, it will improve energy efficiency in production, manufacturing, and infrastructure while enhancing electricity demand-side management. With a focus on carbon peaking and carbon neutrality, it will continuously refine the construction of the carbon peaking and carbon neutrality management system, advance the construction of zero-carbon pilot demonstration projects, and accelerate the Company's green transformation and upgrading.

Leadership by Innovation: Strengthening the Leading Role in the Industry

Committed to technological innovation and foundation enhancement through quality improvement, the Company will continue to consolidate its leading role in the global rail transit equipment manufacturing industry. It will continuously refine the "CRRC Q" quality standard system to ensure product safety and performance through rigorous standards and deliver high-end rail transit equipment with strong international competitiveness. It will strengthen its innovation capabilities, accelerate the transformation of technological achievements, and deepen industry-academia-research collaboration. And it will closely cooperate with domestic and international universities, research institutions, and upstream and downstream enterprises within the industrial chain to overcome key technological challenges in the rail transit sector and drive global industry innovation.

People-oriented Practice: Promoting Harmonious Coexistence among Multiple Parties

The Company will continuously practice the people-oriented development philosophy, pursuing mutual benefit and shared success while focusing on the social responsibilities of stakeholders. Internally, it will enhance employee well-being, foster a positive working environment, and provide broad career development opportunities to help employees achieve harmonious integration of personal growth and social value Externally, it will implement the rural revitalization strategy, actively participate in social welfare initiatives, support education, promote employment, and comprehensively fulfill its corporate social responsibilities to advance social harmony and sustainable development. Looking ahead to 2025, remaining committed to its mission of "Connecting the World, Benefiting Humanity", and the and core values of "Upholding Integrity, and Advancing Goodness", CRRC will collaborate with stakeholders to drive coordinated development, deliver excellent rail transit solutions

to global customers, and contribute CRRC's wisdom and strength to sustainable social development.

Appendix

Appendix I: Summary of ESG Performance Indicators

Indicator	Unit	2023	2024	
	Part i: Environmental			
	Environmental Protection			
Amount of Investment In Environmental Protection	10,000 Yuan	46,913.51	42,063.54	
	Emissions Management			
	Waste Gas Pollutant Emissions			
Ozone-Depleting Substance Emissions	Tons	/	89.96	
Sulfur Oxide Emissions	Tons	86.5	77.31	
Particulate Matter (PM) Emissions	Tons	1,064.30	1,063.36	
Nitrogen Oxides Emissions	Tons	217.63	215.71	
/OCs Emissions	Tons	3,101.41	3,071.12	
Mercury Emissions	Tons	0	0	
Heavy Meta Emissions	Tons	0	0	
Dioxin Emissions	Tons	0	0	
	Wastewater Pollutant Discharges			
Total Wastewater Discharge	Tons	9,291,640.41	8,712,094.17	
Wastewater Reduction	Tons	795,505.90	579,546.24	
COD	Tons	371.15	347.87	
Ammonia Nitrogen	Tons	34.92	34.23	
Solid Waste Pollutant Discharge				
Total Hazardous Waste	Tons	24,013.80	27,475.20	
Hazardous Waste Per 10,000 Yuan Revenue	Tons/10,000 Yuan	0.0010	0.0011	
Fotal Non-Hazardous Waste	Tons	507,057.41	524,187.00	
Non-Hazardous Waste Per 10,000 Yuan Revenue	Tons/10,000 Yuan	0.0216	0.0213	

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Indicator	Unit	2023	2024		
Ut	Utilization of Recycled Resource				
	Energy Management				
Total Energy Consumption	Tons of Standard Coal	573,322.26	573,156.99		
Direct Energy Consumption	Tons of Standard Coal	190,633.41	177,220.47		
Indirect Energy Consumption	Tons of Standard Coal	382,688.85	395,936.52		
Energy Consumption per 10,000 yuan of Output Value	Tons of Standard Coal/10,000 yuan	/	0.0203		
	Water Management				
Fresh Water Consumption	Tons	15,596,741	15,208,547		
Fresh Water Consumption per 10,000 yuan of Output Value	Tons/10,000 Yuan	0.57	0.54		
	Waste Recycled				
Amount of Waste Recycled	Tons	410,778.92	420,844.13		
Waste Recycling Rate	%	80.93	80.26		
Addressing Climate Change					
	Greenhouse Gas Emission				
Total GHG Emissions (Scope I, II)	Tons of CO ₂ Equivalent	2,008,714.44	2,000,109.88		
GHG Emissions (Scope I)	Tons of CO ₂ Equivalent	305,114.60	317,759.04		
GHG Emissions (Scope II)	Tons of CO ₂ Equivalent	1,703,599.84	1,682,342.06		
GHG Emission Intensity (GHG Emissions per 10,000 Yuan of Production Value)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0788	0.0707		
GHG Emission Intensity (Scope I)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0120	0.0112		
GHG Emission Intensity (Scope II)	Tons of CO ₂ Equivalent/10,000 Yuan	0.0668	0.0595		
GHG Emission Reduction	Tons of CO ₂ Equivalent	95,048.29	8,604.56		

Greenhouse gas emissions calculated in accordance with GB/T 32150-2015 General guideline of the greenhouse gas emissions accounting and reporting for industrial enterprises.

The calculations for greenhouse gas (GHG) emission reductions encompass Scope 1 and Scope 2 emissions, and reflect annual reductions in 2024.

Indicator	
	Part II: Socia
Emp	loyment and Righ
Total Number of Employees	
Percentage of Employees by Gender	
Percentage of Male Employees	
Percentage of Female Employees	
Percentage of Male Senior Management at The Headquarters	
Percentage of Female Senior Management at the Headquarters	
Percentage of Employees By Workplace Location	
Percentage of Employees In Mainland China	
Percentage of Employees In Hong Kong, Macao, Taiwan, and Overseas	
Percentage of Employees By Age Group	
Percentage of Employees Under 30 Years Old (Inclusive)	
Percentage of Employees Aged 30 to 50 (Inclusive)	
Percentage of Employees Aged Over 50	
Percentage of Employees By Educational Background	
Percentage of Employees With a Doctoral Degree	
Percentage of Employees With a Master's Degree	
Percentage of Employees With a Bachelor's Degree or Below	
Number of Ethnic Minority Employees	
Number of New Employees	
Number of New Female Employees	
Number of New Male Employees	
Number of Newly Recruited Fresh Graduates	

Unit	2023	2024
cial Scope		
ights of Employees		
Persons	154,292	152,082
%	83.09	83.45
%	16.91	16.55
%	83.33	88.89
%	16.67	11.11
%	95.60	95.60
%	4.40	4.40
%	16.83	17.05
%	63.86	64.24
%	19.31	18.71
%	0.39	0.41
%	10.59	12.37
%	89.02	87.22
Persons	7,920	7,806
Persons	6,896	6,475
Persons	1,172	1,071
Persons	5,724	5,404
Persons	3,787	4,308

Indicator	Unit	2023	2024
Number of Newly Employees From Social Recruitment	Persons	3,109	2,167
Employee Turnover Rate	%	1.53	2.64
Turnover Rate of Male Employees	%	1.32	2.24
Turnover Rate of Female Employees	%	0.21	0.40
Turnover Rate of Employees Under 30 Years Old (Inclusive)	%	0.55	1.03
Turnover Rate of Employees Aged 30-50 (Inclusive)	%	0.92	1.30
Turnover Rate of Employees Over 50 Years Old	%	0.05	0.30
Turnover Rate of Domestic Employees	%	1.48	2.64
Turnover Rate of Overseas Employees	%	0.05	0
Social Insurance Coverage Rate	%	100	100
Number of Labor Dispute Incidents	Case	148	0
Oc	cupational Health and Safety		
Number of Work-Related Death Among Full-Time and Part-Time Employees	Persons	0	0
Ratio of Work-Related Death Among Full-Time and Part-Time Employees	96	0	0
Lost Time Injury Frequency Rate Among Full-Time and Part-Time Employees	/	/	0.38
Total Recordable Accident Rate Among Full-Time and Part-Time Employees	/	/	0.51
Number of Work-Related Death Among Contractor/Outsourced Personnel	Persons	/	0
Ratio of Work-Related Death Among Contractor/Outsourced Personnel	%	/	0
Lost Time Injury Frequency Rate Among Contractor/Outsourced Personnel	/	/	0.19
Total Recordable Accident Rate Among Contractor/Outsourced Personnel	/	/	0.33
Volume of Major Safety Incidents or More Serious Incidents	Cases	0	0
Safety Production Investment	10,000 yuan	56,859.92	52,642.28
Coverage Rate of Safety Production Liability Insurance	%	100	100
Person-Times of Those Receiving Safety Production Training	Person-times	488,899	519,178
Occupational Health Expenses	10,000 yuan	2,842.30	2,425.25

Indicator	Unit	2023	2024
Em	ployee Development & Training		
Employee Training Coverage Rate	%	100	100
Male Employee Training Rate	%	100	100
Female Employee Training Rate	%	100	100
Senior Management Training Rate	%	100	100
Middle Management Training Rate	%	100	100
General Employee Training Rate	%	100	100
Number of Employee Training Sessions	Times	373,809	341,651
Annual Training Expenditure	10,000 yuan	22,160.22	22,088.45
Total Annual Training Duration	Hours	14,023,984	13,964,198
Average Training Duration Per Employee	Hours	103	96
Average Training Duration Per Male Employee	Hours	105	97
Average Training Duration Per Female Employee	Hours	97	90
Average Training Duration Per Senior Management Employee	Hours	120	109
Average Training Duration Per Middle Management Employee	Hours	87	86
Average Training Duration Per General Employee	Hours	118	101
	Sustainable Supply Chain		
Number of Suppliers By Region	Companies	20,071	37,072
Number of Suppliers In Mainland China	Companies	19,830	36,845
Number of Suppliers In Hong Kong, Macao, Taiwan, and Overseas	Companies	241	227
Number of Audited Suppliers	Companies	11,225	14,622
Number of Suppliers With Which The Cooperation Was Terminated Due to Non-Compliance	Companies	52	36
	Product Responsibility		
Number of Products Recalled Due to Safety Issues	Products	0	0
Percentage of Products Recalled Due to Safety Issues	%	0	0

\cap	r	
9		

Indicator	Unit	2023	2024	
Rural revitalization and public charity				
Investment In Rural Revitalization	10,000 yuan	/	2,211	
Length of Time Spent In Charity and Volunteer Activities	Hours	185,000	200,000	
Number of People Involved In Charity and Volunteer Activities	Persons	5,700	6,000	
Investment In Charity and Volunteer Activities	10,000 yuan	1,970.88	2,165.00	
	Technological Innovation			
R&D Investment	10,000 yuan	1,481,339.20	1,668,558.80	
R&D Investment Growth Rate	%	11.44	12.64	
R&D Investment Percentage	%	6.32	6.77	
Percentage of Growth Rate of R&D Investment	%	6.04	7.12	
R&D Personnel	Persons	19,000	21,138	
Percentage of R&D Personnel	%	12.31	13.90	
Number of Cumulative Authorized Patents	Pcs	31,335	31,614	
Number of Cumulative Authorized Invention Patents	Pcs	15,783	17,110	
Number of Patent Applications	Pcs	5,615	4,952	
Number of Invention Patent Applications	Pcs	4,064	3,673	
Number of Invention Patents Granted	Pcs	/	1,733	

Indicator	
	Part III: Gov
	Corporate Go
Number of Board Meetings Held	
Attendance rate of the Board of Directors	
Number of Board Directors	
Number of Independent Directors	
Percentage of Board Members Independent of Executives	
Percentage of Executive Directors	
Investor Relati	ons and Sharel
Number of Shareholders' Meetings Held	
F	Risk Control and
Number of Legal and Compliance Training	
Duration of Legal and Compliance Training	
Person-times of Those Receiving Legal and Compliance Training	
Number of Anti-Corruption Training	
Duration of Anti-Corruption Training	
Number of Directors Receiving Anti-Corruption Training	
Percentage of Directors Receiving Anti-Corruption Training	
Number of Executives Receiving Anti-Corruption Training	
Percentage of Executives Receiving Anti-Corruption Training	
Number of Employees Receiving Anti-Corruption Training	
Percentage of Employees Receiving Anti-Corruption Training	
Number of Corruption Lawsuits (Number of Corruption Lawsuits Filed and Concluded Against The Issuer or Its Employees During The Reporting Period)	

2024	

vernance		
overnance		
Sessions	10	11
%	/	100
Persons	7	6
Persons	/	3
%	/	83.33
%	/	50
holder Rights Management		
Sessions	2	2
d Compliance		
Times	333	513
Hours	929	1,382
Person-times	29,836	42,017
Times	89	116
Hours	178	232
Persons	/	6
%	/	100
Persons	/	9
%	/	100
Persons	/	152,082
%	/	100
Cases	0	0

2023

Unit

Indicator	Unit	2023	2024
	Economic Performance		
Total Assets	10,000 yuan	47,179,174	51,282,363
Total Operating Income	10,000 yuan	23,426,151	24,645,680
Growth Rate of Operating Income	%	5.08	5.21
Total Profit	10,000 yuan	1,637,300	1,743,215
Growth Rate of Total Profit	%	1.57	6.47
Weighted Average Return on Net Assets attributable to ordinary Shareholder	%	7.41	7.51
Taxes	10,000 yuan	1,172,628	1,301,910

Lost Time Injury Frequency Rate Among Full-Time and Part-Time Employees = (Number of workplace injuries during the reporting period that prevented fulltime and part-time employees from working for at least one day \div Total number of hours worked by all full-time and part-time employees during the reporting period)×1,000,000

Lost Time Injury Frequency Rate Among Contractor/Outsourced Personnel = (Number of workplace injuries during the reporting period that prevented contractors/outsourced personnel from working for at least one day ÷ Total number of hours worked by all contractors/outsourced personnel during the reporting period)×1,000,000

Total Recordable Accident Rate Among Full-Time and Part-Time Employees = (Number of workplace accidents for all full-time and part-time employees that occurred during the reporting period ÷ Total number of hours worked by all full-time and part-time employees during the reporting period)×1,000,000

Total Recordable Accident Rate Among Contractor/Outsourced Personnel= (Number of all contractor/outsourced personnel injuries that occurred during the reporting period \div Total number of hours worked by all contractors/outsourced personnel during the reporting period) \times 1,000,000

Appendix II: Index of Reporting Indicators

Table of Content	GRI Standards	SSE	НКЕХ	Page
		Preface		
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	1	ESG Governance		
Board Statement	GRI 2-22	Articles 2, 5, 6, 9, 12, and 19	/	P8
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	E	SG Special Topics		
ESG Topic 1: Value Creation – Effectively Supporting the Sustainable Development of the "Dual Tracks, Dual Clusters" Strategy	GRI 3、GRI 203-1、GRI 203-2、 GRI 302-4	Articles 20, 23, 27, 28, 35, 41, 42	/	P14-19
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		Green CRRC		
Environmental Compliance Management	GRI 2-23、GRI 2-24、GRI 3、 GRI 101-2、GRI 101-5、GRI 302	Article 29, 30, 32 (2), 32 (3), 32 (5), and 33 (1)	A3、A3.1	P24-27
Energy and Resource Usage	GRI 2-23、GRI 3、GRI 301、 GRI 302、GRI 303-1、 GRI 303-3、GRI 303-5	Articles 34, 35, 36 and 37	A2、A2.1、A2.2、A2.3、 A2.4、A2.5	P28-32

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Emissions Management	GRI 2-23、GRI 3、GRI 303-2、 GRI 303-4、GRI 305-7、GRI 306	Article 30 (1), 30 (2), 30 (3), 30 (4), 31, and 32 (5)	A1、A1.1、A1.3、A1.4、 A1.5、A1.6	P33-38
Climate Change Response	GRI 2-23、GRI 3、GRI 201-2、 GRI 305-1、GRI 305-2、 GRI 305-3、GRI 305-4、GRI 305-5	Articles 14, 17, 20, 21, 22, 23, 24, 26, 27,and 28	D17、D19、D20、D21、 D22、D24、D25、D27、 D28、D29、D37、D40	P39-47
	Реор	ole-oriented CRRC		
Protecting the Rights and Interests of Employees	GRI 2-7、GRI 2-23、GRI 3、 GRI 401-1、GRI 401-2、 GRI 405-1、GRI 406、GRI 408、 GRI 409	Articles 49, 50 (1)	B1、B1.1、B4、B4.1、B4.2	P50-54
Promoting Talent Growth Together	GRI 2-23、GRI 2-24、GRI 3、 GRI 404-1、GRI 404-2、GRI 405-1	Articles 49, 50 (3), 53 (2)	B3、B3.1、B3.2	P55-59
Building Safety Assurance	GRI 2-9、GRI 2-23、GRI 2-24、GRI 3、 GRI 403	Articles 49, 50 (2)	B2、B2.2、B2.3	P60-63
Committed to Social Welfare	GRI 203、GRI 413	Articles 38, 39 and 40	B8、B8.1、B8.2	P64-65
Win-Win CRRC				
High-Quality Products and Services	GRI 2-23、GRI 203、GRI 302-5、 GRI 416、GRI 417、GRI 418	Articles 47, and 48	B6、B6.2、B6.4、B6.5	P68-70
Upholding an Innovation-driven Approach	GRI 2-6、GRI 2-23	Article 42	B6.3	P70-73
Building a Sustainable Supply Chain	GRI 2-23、GRI 3、GRI 204、 GRI 308	Article 45	B5、B5.1、B5.2、B5.3、B5.4	P74-77

Table of Content	GRI Standards	SSE	НКЕХ	Page
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Optimizing Corporate Governance	GRI 2-9、GRI 2-10、GRI 2-19、 GRI 2-23	/	/	P80-81
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Standardizing Compliance Operations	GRI 2-15、GRI 2-23、GRI 2-26、 GRI 2-27、GRI 3-3、GRI 207	/	/	P85
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Upholding Party Leadership	/	1	B8、B8.1	P87
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		Appendix		
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Appendix III: Definition	GRI 2-2	/	/	P100
Appendix IV: Feedback	GRI 2-29	Article 9	/	P101

Appendix III: Definition

Full Name	Short in the Report
State-owned Assets Supervision and Administration Commission of the State Council	SASAC
Shanghai Stock Exchange	SSE
The Stock Exchange of Hong Kong Limited	НКЕХ
CRRC Changchun Railway Vehicles Co., Ltd	CRRC Changchun
CRRC Dalian Co., Ltd.	CRRC Dalian
CRRC Tangshan Co., Ltd.	CRRC Tangshan
CRRC Qiqihar Group Co., Ltd	CRRC Qiqihar Group
CRRC Yangtze Group Co., Ltd	CRRC Yangtze Group
CRRC Zhuzhou Locomotive Co., Ltd	CRRC Zhuzhou
CRRC Qingdao Sifang Co., Ltd	Sifang Co., Ltd
CRRC Qingdao Sifang Rolling Stock Research Institute Co., Ltd	Sifang Research Institute
CRRC Zhuzhou Institute Co., Ltd.	Zhuzhou Institute
CRRC Nanjing Puzhen Co., Ltd.	Puzhen Co., Ltd.
CRRC Qishuyan Co., Ltd.	Qishuyan Co., Ltd.
CRRC Qishuyan Institute Co., Ltd.	Qishuyan Institute
CRRC Yongji Electric Co., Ltd.	Yongji Electric
CRRC Beijing Nankou Co., Ltd.	Nankou Co., Ltd.

Appendix IV: Feedback

Dear Reader,			
		Environmental, Social, a nts and suggestions. We	
-		propriate option with $$	
-		reflects the economic,	,
○ Very Good	○ Good	() Fair	O Poo
2	ent to which this report	addresses and disclose	es issues of cond
○ Very Good	⊖ Good	⊖ Fair	() Poo
	ity, accuracy, and com	pleteness of the informa	ation, indicators
○ Very Good	() Good	() Fair	O Poo
Please rate the read	dability of the content (of this report:	
○ Very Good	○ Good	() Fair	() Poo
Please rate the ove	rall synthesis of this rep	port:	
○ Very Good	() Good	() Fair	() Poo
Open-Ended Quest	tions		
What aspects of thi	is report did you find m	ost satisfactory?	
What additional inf	formation would you li	ke to see disclosed in th	is report?
What comments or	suggestions do you ha	ave regarding CRRC ESG	initiatives?
You may provide p	ersonal information if y	ou wish:	
Name:			
Occupation:			
Organization:			
Phone:			
Email:			
Address:			
How to contact us:			
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Appendix 101

tee (ESG) report of CRRC. to enhance the quality and standards of this report, we to your feedback!

vironmental impacts of CRRC:			
oor	🔿 Very Poor		
oncern to stakeholde	ers:		
oor	🔿 Very Poor		
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oor	🔿 Very Poor		
Poor	🔿 Very Poor		
oor	🔿 Very Poor		

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