Guangshen Railway Company Limited Social Responsibility Report 2024



March 27, 2025

Contents

I. About This Report	1
II. Sustainability Management Framework	3
III. Issue Materiality Analysis	4
IV. Standardized Operation and Integrity Management	6
V. Safety Guarantee & Passenger and Freight Transport	10
VI. Environmental Protection and Technological Innovation	20
VII. Employee Rights & Benefits and Social Welfare	30
Appendix	.38

I. About This Report

01 Company profile

GSRC was registered and established in Shenzhen, China on March 6, 1996 in accordance with the *Company Law of the People's Republic of China*. In May 1996, H-shares (stock code: 00525) and American Depositary Shares issued by GSRC were listed on the Stock Exchange of Hong Kong Ltd. (SEHK) and the New York Stock Exchange respectively. In December 2006, the A-shares (stock code: 601333) issued by GSRC were listed on the Shanghai Stock Exchange (SSE). In January 2007, GSRC purchased the Guangzhou-Pingshi section (southern section of Beijing-Guangzhou Railway) with the funds raised from the issuance of A-shares, helping it upgrade from a regional railway operator to a national backbone railway service provider and significantly improve its passenger and freight transport capability. From November 2020 to January 2023, the Company completed the delisting of its American depositary shares from the New York Stock Exchange, ceased over-the-counter trading, and revoked its registration. Currently, the Company is the only railway transportation enterprise listed on both the Shanghai and Hong Kong stock exchanges in China.

GSRC mainly provides transport services along the Shenzhen-Guangzhou-Pingshi section, and cooperates with the MTR Corporation Limited in offering passenger services of through train to Hong Kong. The Company also provides entrusted railway transport services for railways, such as Wuhan-Guangzhou High-speed Railway, Guangzhou-Zhuhai Intercity Speed High Railway, Guangzhou-Shenzhen-Hong Kong High-Speed Railway, Guangzhou-Zhuhai Railway, Xiamen-Shenzhen Railway, Guangdong Railway, Nanning-Guangzhou Railway, Guiyang-Guangzhou High-speed Railway, the Pearl River Delta Metropolitan Region Intercity Railway System, Maoming-Zhanjiang Railway, Shenzhen-Maoming Railway, Meizhou-Shantou High-Speed Railway, Guangzhou-Shitan Railway, and Ganzhou-Shenzhen High-speed Railway, Nansha Port Railway, Maoming Bohe Port Railway, Guangzhou-Shanwei High-speed Railway and Meizhou-Longchuan High-Speed Railway.

The Shenzhen-Guangzhou-Pingshi Railway operated by GSRC, with a service mileage of 481.2 km, runs through the whole territory of Guangdong Province longitudinally. Among them, the Guangzhou-Pingshi section is the southern section of the Beijing-Guangzhou Railway—the main north-south artery of China's railways. The Guangzhou-Shenzhen section is an important railway channel from mainland China to Hong Kong, and is an important part of China's railway transportation network.

02 Purpose and scope of report

GSRC, as a listed company providing comprehensive railway passenger and freight transport services. The Company is committed to integrating corporate management practices with social responsibility, embedding the concept of sustainable development into its development strategy and business management activities. We continuously strengthen ecological and environmental protection, fulfill social responsibilities, and improve corporate governance while enhancing our governance capabilities, competitiveness, innovation capacity, risk resilience, and return-generating ability. The Company discloses its Social Responsibility Report (hereinafter referred to as "this Report") to fulfill its obligation as a listed company to disclose sustainability-related information and to inform the public about our efforts to achieve overall social responsibility objectives in promoting economic, social, and environmental sustainability.

Unless otherwise specified, the data and information in this report are obtained from GSRC and its subordinate stations and depots. Unless otherwise specified, this report mainly describes the economic, environmental, social and other activities of passenger and freight operations and diversified operations of GSRC during the period from January 1, 2024 to December 31, 2024, and also gives a brief review of relevant past activities. Unless otherwise specified, the financial data in this report are expressed in RMB.



03 Basis and reporting cycle

The content of this report is determined on matters of disclosure in accordance with the requirements of the *Guidelines No. 14 of the Shanghai Stock Exchange for Self-Regulation of Listed Companies*—Sustainability Report (Trial) released by the SSE and the Listing Rules - Appendix 2 Environmental, Social and Governance Reporting Guide of the Hong Kong Stock Exchange (HKSE).

This report tries to provide a comprehensive picture of what GSRC has done to fulfill its social responsibilities. GSRC will continue to refine and improve the disclosure content and format of the CSR report in the future and update the report annually.

04 Reporting principles and data sources

This Report follows the principles of materiality, quantification, and consistency, outlining and presenting the Company's key environmental, social, and governance matter (ESG matter) performance for the year 2024.

In order to collect the data and information on fulfilling CSR, GSRC sent relevant questionnaires to all units (departments). Relevant data and information are collected

mainly through GSRC's intranet, realizing the "paperless data collection".

In case of discrepancies in the two versions, the Chinese version shall prevail.

II. Sustainability Management Framework

05 Sustainability management framework

The Board of Directors of GSRC is the top regulator of ESG matters. GSRC's management is responsible for leading the functional departments, such as human resources, operation, finance, transport, and general affairs to carry out various work related to social responsibilities, and the Secretariat of the Board of Directors is responsible for the summary and disclosure of the Company's social responsibility information. Each station and depot subordinate to GSRC shall set up full-time departments and posts for labor safety, technical management, salary and welfare, staff training, health and hygiene, environmental protection and energy saving, etc. to fulfill corporate social responsibilities.

Through the various levels of the sustainability management framework, personnel, and data aggregation channels—such as the office system, regular inspections, specialized research, and work meetings—the Company conducts due diligence to identify and address potential negative impacts or risks related to sustainability. Additionally, we have established a comprehensive compliance risk database covering key areas and business processes of the Company.

06 Corporate social responsibility outlook management

When it comes to fulfilling social responsibilities, GSRC focuses on satisfying passenger and freight transport demands and takes action on the premise of guaranteeing transportation and production safety and creating operation management benefits. To be specific, GSRC assumes six major social responsibilities, including construction and development, transport operation, safety production, harmonious construction, public welfare, and environmental protection. These responsibilities are correlated and interlinked to jointly serve the core target of satisfying passenger and freight transport demands.



III. Issue Materiality Analysis

07 Issue materiality analysis framework

The objective of the issue materiality analysis framework in this Report is to identify and assess key ESG matter issues, ensuring that the content aligns with the Company's strategy, stakeholder expectations, and sustainability goals. This framework includes two analytical dimensions—financial materiality analysis and impact materiality analysis—along with corresponding evaluation methods.

Analytical dimension	Financial materiality analysis	Impact materiality analysis
Evaluation criteria	 Potential impact on the Company's financial performance: Identifies whether each issue has a significant effect on the Company's business model, operations, development strategy, financial condition, operating results, cash flow, financing methods, and costs. Impact on the Company's long-term value creation: Evaluates the issue's influence on key value drivers, including brand reputation, customer relationships, employee morale, and innovation capacity. Time span of financial impact: Evaluates the short-term (within one year and one to three years), mid-term (three to five years), and long-term (over five years) financial impact of the issue. 	 Degree of impact on stakeholders: Assesses the impact of issues on stakeholders such as shareholders, employees, customers, suppliers, communities, and the environment. Contribution to sustainable development: Assesses whether the Company's performance on the given issue significantly affects economic, social, and environmental sustainability. Breadth and depth of impact: Evaluates the number of affected stakeholders, geographical scope, and duration of the impact.
Analytical methods	 Quantitative analysis: Utilizes financial and industry data to quantify the potential impact of issues on the Company's financial performance. Qualitative analysis: Assesses the impact of issues on the Company's long-term value creation through expert interviews and case studies. 	 Stakeholder research: Collects data through surveys and field research to understand stakeholder concerns and expectations regarding social responsibility issues. Expert evaluation: Industry experts and management assess and rank the significance of issues. Case studies: Draws on best practices from peer companies or other leading industries to assess the influence and importance of issues.

08 Issue materiality matrix

Based on the issue materiality analysis framework, a comprehensive assessment was conducted using the concept of double materiality, considering both financial materiality and impact materiality. The resulting issue materiality matrix is structured as follows:

Core issues: High financial materiality and high impact materiality.

Important issues: Either high financial materiality with low impact materiality or low financial materiality with high impact materiality.



Relevant issues: Low financial materiality and low impact materiality.

Issue type	Specific issues	dimension	Materiality analysis
	Climate change response	Environmental	
	• Energy utilization	Liiviioiiiieittui	
	 Innovation as driver 		High financial
Core issues	• Supply chain security	Social	materiality
	• Product and service safety and quality	Boelai	High impact
	• Employees		materiality
	• Business ethics (anti-commercial bribe	Sustainability	
	and anti-corruption)	governance	
	• Pollutant emissions		
	• Waste management		
	• Environmental compliance management	Environmental	
	• Water resource utilization		Low financial
Important	Circular economy		materiality
issues	 Social contribution 		High impact
	• Data security and customer privacy	Social	materiality
	protection		
	 Stakeholder communication 	Sustainability	
	Stakeholder communication	governance	
	• Ecosystem and biodiversity protection	Environmental	
	Rural revitalization		Low financial
Relevant	• Technology ethics	Social	materiality Low
issues	• Equal treatment of SMEs		impact
	• Due diligence	Sustainability	materiality
	 Anti-unfair competition 	governance	

The issue materiality analysis is based on the Company's current business operations as well as external economic, social, and environmental conditions. The importance of specific issues may rise or decline in the future, leading to potential changes in issue categorization. For issues with high financial materiality, the Company adheres to the sustainability reporting disclosure requirements of the SSE, conducting analysis and disclosures in accordance with key content areas such as governance, strategy, impact risks and opportunities management, as well as specific disclosure requirements for relevant issues.

IV. Standardized Operation and Integrity Management

09 Corporate governance and internal control

GSRC complies with securities laws and regulations, exchange listing rules, etc., continuously improves the corporate governance structure, and promotes the standardized operation of the General Meeting of Shareholders, the Board of Directors, the Board of Supervisors and the management. Throughout the year, the Company convened three shareholder's meeting, eight meetings of the Board of Directors, five meetings of the Board of Supervisors, eight meetings of the Audit Committee, two meetings of the Remuneration Committee, four meetings of Nomination Committee and 15 general manager office meetings. During the reporting period, the Company further improved its corporate governance system, completing revisions to the Articles of Association, the Insider Information and Insiders Management System, and the Business Performance Assessment Measures. The Company carried out director, supervisor, and senior management election and resignation procedures, and in accordance with the revised Company Law, promptly issued four announcements on the resignation of directors, supervisors, and senior management personnel. Additionally, we elected four directors and two supervisors, appointed three senior management personnel, and duly reported the newly appointed directors, supervisors, and senior management personnel to the SSE and the HKSE as required.

The Company has established management norms and procedures in line with the Company's operating characteristics, and has established a relatively complete internal control evaluation system.

10 Party building work

The Company's Party Committee and grassroots Party organizations actively advanced disciplinary education, guiding Party members and officials to thoroughly study, accurately understand, and strictly adhere to Party discipline. We integrated this education with problem-solving, operational improvements, and business development, ensuring that the outcomes of Party discipline education continuously translate into a driving force for high-quality development.

In 2024, the Company's Party Committee issued the *Implementation Rules for Self-Inspection and Self-Rectification in Comprehensive and Strict Party Governance* and the *Assessment and Evaluation Measures for Party Branch Work*, among other institutional policies. A total of 19 Party committees were held throughout the year to earnestly implemented the "first issue" system. 72 issues were studied in advance, and 86 issues were approved through decision-making.

By the end of the reporting period, GSRC and its all stations and depots have

established 18 Party committees, 92 general Party branches and 785 Party branches, with 9,580 Party members.

11 Stakeholder communication

From a financial materiality perspective, establishing stakeholder communication channels and maintaining interactions with stakeholders require minimal financial resources and do not significantly impact financial performance. Effective stakeholder communication enhances operational management efficiency and secures stakeholder support. However, its role in driving long-term value creation for the Company remains limited. In terms of time frame, this issue is part of the Company's routine operations, with potential short-term financial implications due to cost expenditures, but no significant impact in the medium to long term. From an impact materiality multiple stakeholders, perspective. this issue involves including shareholders/institutional and individual investors, government authorities, regulatory bodies, suppliers, and employees. It constitutes an essential aspect of the Company's daily operations and management, exerting ongoing economic, social, and environmental impacts. The influence of stakeholder communication is broad in scope and long in duration. Therefore, this issue is of low financial materiality but high impact materiality.

The key communication topics, channels, methods, and frequency of the Company's engagement with various stakeholders are as follows:

Stakeholder	Key communication topics	Main communication channels and methods	Frequency
		• Notices, circulars, and announcements of the Annual General Meeting and Extraordinary General Meeting of Shareholders	At least once a year
 Business performance Major investment 		• The Company's periodic reports include financial reports such as the annual report, first-quarter report, semi-annual report, and third-quarter report	Four times per year
tional and individual investors	 decisions Dividend policy Corporate governance information 	• Dividend distribution implementation announcements	As required
		• Annual, semi-annual, and third-quarter results briefings	Three times per year
		• The Company's investor relations channels include the website, telephone, email, and SSE E-interactive, among others	As needed
	Investor visits	As needed	
Securities regulatory	 Corporate information disclosure Reporting of major events Regulatory policy 	• Periodic reports and ad hoc announcements	As required
bodies/stock exchanges		• Filing of relevant information for listed companies	As needed

Stakeholder	Key communication topics	Main communication channels and methods	Frequency
	consultations Compliance 	• Annual disclosure performance evaluation	Once a year
	operations	• Questionnaires and data collection forms	As needed
	Implementation of	Telephone, emailWork reports	As needed Annually
	 policies and regulations Progress of major project construction Work safety 	 Data submissions Thematic meetings Research and discussion sessions 	Monthly As needed Case-by-case basis
Government	 conditions Fulfillment of social responsibilities Industry development recommendations 	• Official correspondence	As needed
	 Procurement needs information Procurement 	• Company website, designated tender procurement platforms	As required
Suppliers/ partners	 Inocurementmanagement policiesContract	• Procurement work meetings	As required
	 Contract performance status Supplier evaluation 	• Routine contract inspections	At least once a year
		Telephone, emailMedia interviews and	As needed
Passengers/ shippers/public	transport informationRailway freight	 reports 12306 and 95306 railway websites 	As required
simplet s/public mediatransport information• Service quality feedback		• Passenger and freight service counters, bulletin boards, etc.	As required
	• Corporate development strategy	• Employee representative meetings	At least once a year
	 Production and business operations 	 Internal company website 	As needed
Employees	• Compensation and benefits policies	• Regular work meetings	Monthly, weekly
	• Career development	• Training and learning	As needed
	pathways	• On-site research visits	As needed
	• Employee opinions and suggestions	• Internal opinion and suggestion collection	As needed
	 Railway safety knowledge 	 Railway safety awareness campaigns 	As needed
Community	• Environmental protection measures	• Volunteer public welfare activities	As needed
	 Community co-development activities Public welfare project information 	• Railway environmental improvement projects along rail lines	Case-by-case basis

12 Business ethics (anti-commercial bribe and anti-corruption)

Business ethics (anti-commercial bribe and anti-corruption) is a core issue with high financial materiality and high impact materiality. From a financial materiality

perspective, significant corruption incidents may have a substantial negative impact on the Company's cash flow, financing methods, and costs, potentially causing severe losses or delays in business operations. Adhering to business ethics and strictly implementing anti-commercial bribe and anti-corruption measures help reduce legal and regulatory compliance costs while improving compliance management and operational efficiency, thereby creating long-term value. The Company prioritizes anti-corruption and financial risk control as key short-term and long-term strategic tasks. From an impact materiality perspective, this issue concerns multiple stakeholders, including shareholders, government authorities, regulatory bodies, suppliers, and employees. It plays a crucial role in enhancing corporate governance, standardizing business management practices, and promoting high-quality corporate development. Strengthening business ethics also improves the Company's operational efficiency and profitability while contributing to the economic and social development of its service areas with broad and profound positive impacts.

Governance

The Company and its affiliated Party committees and discipline inspection commissions are committed to strengthening Party conduct and integrity. The Company implements a scientific decision-making process for "Three Major and One Great"¹ matters, while its internal audit institutions conduct specialized internal audits covering major projects and leadership performance evaluations. The Company places significant emphasis on business ethics and continuously reinforces its anti-commercial bribe and anti-corruption efforts by establishing and refining relevant policies to regulate corporate operations and ensure strict compliance in employee responsibilities and authority.

Strategy

Building a modern railway business management system and a modern railway governance framework are the Company's strategic objectives. The integrity of Party conduct and governance, as well as asset, fund, and property rights management, have been incorporated into the Company's business performance assessment indicators. The Company has established dedicated reporting channels for violations and misconduct, clearly defining the scope of commercial bribery and corruption. Senior management and key personnel are required to sign an annual declaration, while managerial and technical staff undergo annual assessments to regulate the ethical conduct of all employees. The Company has included anti-commercial bribe provisions as mandatory clauses in its contract templates. Additionally, it has established mechanisms for financial and budgetary oversight, accountability, and internal audit supervision in accordance with the *Implementing Rules for Fund Management*, the *Administrative Measures for Fund Allocation*, and the *Administrative Measures for Subjective Rules*.

Impact, Risk, and Opportunity Management

The Company identifies compliance risk points in areas such as investment and financing, fund transactions, and infrastructure construction and strengthens compliance risk management. The Company believes that strong business ethics and rigorous anti-commercial bribe and anti-corruption practices contribute to long-term

¹ Major decision-making, important personnel appointments and removals, major project arrangements, and large-scale fund use

value creation, enhancing corporate credibility, strengthening financing advantages, and optimizing the supply chain.

Indicators and Targets

The Company conducts anti-corruption training through legal education campaigns, centralized disciplinary education, and specialized lectures. A total of 32 directors, supervisors, and senior management members participated in training sessions, while 38,000 employees received anti-corruption training. In 2024, there were no corruption-related lawsuits filed and concluded against the Company or its employees.

13 Equal treatment of SMEs

The Company adheres to the market principles of fairness, impartiality, and equal transactions. During the reporting period, the Company's transactions with small and medium enterprises (SMEs) are relatively limited, with small transaction amounts per contract. Contract signing and execution are well-regulated, and overdue payment risks are controllable. Cooperation with SMEs is not a core business segment of GSRC, and related transactions do not have a significant impact on financial performance in the short or long term. The Company strictly implements the requirements of the *Regulation on Ensuring Payments to Small and Medium-sized Enterprises* to protect the legitimate rights of SMEs and optimize the business environment. These transactions have a limited impact on business continuity and social influence. The Company has not faced litigation, regulatory penalties, or major public opinion incidents due to SME cooperation issues. The practice of equal treatment of SMEs has not had a significant impact on the Company's operations, reputation, or stakeholder interests.

14 Anti-unfair competition

The Company's analysis indicates that anti-unfair competition is not a material issue from both financial and impact perspectives. From a financial perspective, potential economic compensation and losses related to this issue are minimal relative to the Company's overall asset scale and revenue and do not materially affect financial status or business performance. From an impact perspective, the Company's operational practices do not involve false advertising, infringement of trade secrets, or monopolization of the transportation market. Public and media attention to this issue is limited, and it has not affected the Company's development strategy or market reputation.

During the reporting period, the Company was not involved in any lawsuits or major administrative penalties related to unfair competition.

V. Safety Guarantee & Passenger and Freight Transport

15 Product and service safety and quality

The Company's core business is railway passenger and freight transportation, where transport safety and service quality directly affect revenue and cost structure. Railway transportation is characterized by fast speed, high capacity, minimal influence from natural conditions, versatility in passenger and freight transport, and safe and punctual operations, making it a preferred choice for travelers and freight shippers. The Company considers product and service safety and quality a core issue for sustainable development, with high financial materiality and high impact materiality.

Financial materiality analysis. Revenue impact: If a major railway safety incident or significant service quality issue occurs, short-term consequences may include customer (passenger/freight shipper) loss, substantial compensation liabilities, and regulatory penalties, which could severely impact business operations, financial performance, and cash flow. In the long term, such incidents could damage the Company's brand reputation, customer relationships, employee morale, and business innovation, negatively affecting key value drivers. Cost impact: Continuous investment in safety (including track and equipment maintenance, employee training, and technological upgrades) increases short-term operating costs but helps reduce long-term accident-related costs (such as compensation and suspension losses). Furthermore, a high level of safety and quality in railway operations enhances the Company's financing options and lowers financing costs.

Impact materiality analysis. The GSRC operates the Guangzhou-Shenzhen Intercity Railway and the Guangzhou-Pingshi section of the Beijing-Guangzhou Railway, while also providing operational services for multiple railway lines in Guangdong Province. In 2024, the Company transported 69.11 million passengers (excluding entrusted operations) and 14.1 million tons of freight. Ensuring the safety of railway passenger and freight transport supports regional economic and social development. Any transport safety incidents could lead to casualties, cargo losses, or infrastructure damage, with negative impacts on society, the economy, and the railway industry. Additionally, if accidents occur during the transportation of energy materials (such as coal and liquefied natural gas) or hazardous chemicals, delays in energy supply or environmental pollution could disrupt regional energy efficiency and structure, causing environmental damage.

Governance

The Company places high importance on railway transport safety and upholds the concept of safety-driven development. It has established specialized safety and quality departments and personnel teams across its stations and divisions. The Company continuously strengthens a comprehensive safety protection system integrating human, physical, and technical defenses, rigorously implementing railway transport safety measures, track and equipment maintenance, and personal safety protection regulations.

Strategy

The Company incorporates the development of a modern railway transport service system and a modern railway safety assurance system into its strategic objectives. Safety indicators and passenger/freight service quality are included in the Company's business performance evaluation criteria. The Company strictly complies with the *Work Safety Law of the People's Republic of China*, the *Railway Law of the People's Republic of China*, the *Railway Law of the People's Republic of China*, and the *Railway Safety Management Regulations*, focusing on high-speed rail and passenger train safety while continuously strengthening railway safety risk control and emergency response capabilities.

Impact, Risk, and Opportunity Management

The Company identifies compliance risk points in safety management and service quality, strengthening its management of transport safety, operational safety, construction safety, fire safety, external railway safety, and service quality.

Risk type	Description and impact	Timeframe
Transition risks		
Policy and legal risks	Railways play a critical role in supporting and driving economic and social development. Regulatory oversight of railway safety management and service quality by national and regional government agencies continues to improve. For instance, national and provincial governments have enacted the <i>Railway</i> <i>Safety Management Regulations</i> , while the Ministry of Transport has introduced the <i>Measures for Supervision and Management of</i> <i>Railway Transport Service Quality</i> and the <i>Measures for</i> <i>Supervision and Management of Railway Passenger Transport</i> <i>Safety Inspection</i> . Additionally, the National Railway Administration has implemented various railway safety rectification initiatives. These policies, regulations, and measures may lead to legal and regulatory changes, presenting both risks and opportunities for the Company's transport safety and service quality management, potentially impacting the Company and its stakeholders.	Short to medium term
Market risks	Passenger and freight shippers are increasingly concerned about railway transport safety and service quality. The diversification of transportation market choices and intensifying market competition pose challenges. If the Company fails to successfully expand its high-speed rail passenger business and advance the transformation of railway freight into modern logistics, its overall market efficiency and competitiveness may be weakened.	Short to medium term
Reputation risks	As a railway transportation enterprise, the Company places great emphasis on railway transport safety and is committed to providing high-quality passenger and freight transport services, thereby building and maintaining a strong reputation in the transport market. However, major safety incidents, passenger casualties, or service quality issues could attract widespread social attention and trigger major public opinion crises. If the Company fails to take appropriate countermeasures to mitigate public opinion risks, its reputation may suffer negative consequences.	Short to medium term
Physical risks	•	
Personnel risks	Railway construction safety, transport safety, and fire safety are key priorities in railway safety management. The management of railway passenger services also places great emphasis on security checks, boarding and alighting arrangements, public health, epidemic prevention and quarantine, and food quality to ensure the safety of railway workers and passengers. In the event of a major safety incident, there could be casualties or public health crises.	Short to medium term
Environmental risks	The Regulations on Safety Supervision and Management of Railway Dangerous Goods Transport issued by the Ministry of Transport stipulate that if an incident such as combustion, explosion, environmental pollution, poisoning, theft, loss, or leakage occurs during the transport of dangerous goods, the escort personnel and on-site personnel must report it in accordance with national regulations and implement preliminary emergency response measures as outlined in the emergency plan. If a railway dangerous goods transport accident occurs, it may result in casualties, hazardous substance leakage, or environmental pollution, increasing the Company's potential risk costs.	Short to medium term

Despite the transition and physical risks facing the Company's railway passenger and freight transport operations and service quality, proactive and effective measures can help the Company seize development opportunities and enhance operational efficiency.

Opportunity type	Description and impact	Timeframe
Expanding the transport market	In railway passenger transport, national railways transported 4.08 billion passengers in 2024, a year-on-year increase of 10.8%. A well-structured passenger train product system has been established, characterized by the complementary development of high-speed and conventional rail, diversified service categories, rationalized structures, and sufficient supply. Passenger demand for railway transport is becoming increasingly diversified, with growing expectations for transport capacity and service quality. In railway freight transport, driven by the development of new-quality productive forces, the railway industry is accelerating the transformation of railway freight into modern logistics. Efforts are being made to build a modern logistics system, effectively reduce overall social logistics costs, and enhance the convenience, timeliness, and end-to-end service capabilities of railway freight products. The Company will actively seize opportunities in the railway passenger and freight transport markets by developing transport products and supporting services that meet market demands, thereby enhancing the attractiveness and competitiveness of its passenger and freight transport services.	Medium to long term
Enhancing service quality	Ensuring railway transport safety and improving service quality will help strengthen the influence and competitiveness of railways in the transport market.	Short to medium term

Indicators and Targets

During the reporting period, the Company successfully achieved its annual safety production targets, with no major safety incidents occurring.

Track and Equipment Safety

In 2024, the Company reinforced its responsibility for track and equipment safety, implementing comprehensive, full-process control of track safety risks. Efforts were made to ensure the high quality and optimal condition of track infrastructure by enhancing equipment monitoring, inspection, and data analysis. The Company conducted extensive equipment refurbishments and track maintenance, strengthened safety protection for key areas such as mainline hubs, tunnels, bridges, pedestrian overpasses, and level crossings, and enforced the management and maintenance of track enclosure facilities.

GSRC track operations (including entrusted lines)	2024 work volume	2023 work volume
Replacement of steel rails (km)	178.177	178.383
Replacement of curved worn rails (km)	10.401	19.67
Installation/replacement of turnouts (sets)	298	259
Large machine tamping (km)	1053.88	1041.54
Track maintenance (km)	466.4	617.2

GSRC track operations (including entrusted lines)	2024 work volume	2023 work volume
Repair of water damage on tracks (cases)	47	62
New and elevated isolation fences (m)	29208	21724
Installation of blade security fences (m)	36164	32217

Train Station and Passenger Safety

Key Passenger Stations – Passenger Traffic (including Entrusted Operations) and Security Screening in 2024

Station	Passenger traffic (ten thousand)	Security screening machines (units)	Handheld security devices (units)	Hazardous items confiscated (cases)
Guangzhou Railway Station	1,112.22	18	80	256,213
Guangzhou Baiyun Railway Station	710.90	25	120	100,475
Guangzhou East Railway Station	2,090.08	18	90	240,837
Guangzhou South Railway Station	8,937.59	56	129	491,698
Shenzhen Railway Station	1,070.62	19	38	87,242
Shenzhen North Railway Station	6,091.48	37	74	354,206
Shenzhen East Railway Station	660.64	15	30	156,520
Futian Railway Station	433.78	8	16	27,541

The Company strictly enforces full enclosure management at its passenger stations, strengthens security checks for passengers entering stations, and ensures smooth and safe exit passages. Hazardous materials are firmly prevented from entering stations and boarding trains, ensuring the safety of passenger stations and railway operations.

Personal Safety

The Company places great importance on employee safety and fully implements the comprehensive workplace safety responsibility system. It has established a safety management framework that includes a series of specialized safety management rules, technical regulations, and operational guidelines, further strengthening its safety management foundation. From 2020 to 2024, GSRC achieved the "zero death" goal for employee liability accidents for five consecutive years. In 2024, 44 employees of the Company were injured on the job, resulting in a total of 6,164 lost workdays (including 3,030 lost workdays due to one employee's serious injury).

Ensuring passenger safety remains the core objective of the Company's operations. A multi-layered protection system is in place to guarantee the highest level of safety for high-speed and passenger trains: (1) Ensuring vehicle and equipment safety – Regular maintenance and inspections are conducted on passenger station facilities and trains to ensure they remain in optimal technical condition. (2) Enhanced monitoring and emergency preparedness – Comprehensive monitoring systems and emergency response equipment are installed at stations and on trains to track real-time operating conditions and swiftly handle any emergencies. (3) Employee safety training –

Railway personnel receive regular safety training to ensure they are proficient in emergency response procedures, enabling quick and effective actions in critical situations. (4) Passenger safety awareness and crowd management – During peak travel periods, such as Spring Festival and summer holiday travel seasons, safety awareness campaigns are intensified, and measures are taken to manage passenger flow and prevent operational overload risks.

Quality Management

The Company continues to enhance the management of transportation products and service quality, and has won a number of quality honors and certifications.

Quality management unit	Quality management team (group)	Quality honor/certification
Guangzhou Railway Building Maintenance Division	Production Dispatch Monitoring Center QC Team	Silver Award, Guangdong South China Star Outstanding Quality Management Team
	Headquarters	Railway Freight Car Factory Overhaul and Section Overhaul Service Quality Management System Certification
Guangzhou Carriage	Guangzhou East Depot EMU Special Repair Team	Guangdong "Quality Trustworthy Team"
Maintenance Division for Passenger Train	Guangzhou Crew Workshop QC Team 5T Operations Workshop Excellence QC Team	Guangdong Province Outstanding Quality Management Team
	Guangzhou East Depot EMU Quality Improvement QC Team Guangzhou Carriage Maintenance Division for Passenger Train, Guangzhou Depot Workshop QC Team	Railway Industry Outstanding Quality Management Team
Guangzhou-Kowloon Train Onboard Service	Dongguan East Preparation Workshop QC Team	Railway Industry Outstanding Quality Management Team
Division	Beijing-Guangzhou EMU Second Crew Team, Group Three	Railway Industry "Quality Trustworthy Team"

Passenger and Freight Services

Passenger Transport Business

In 2024, the Company's passenger transport business completed a passenger volume of 69.11 million, representing a year-on-year increase of 16.5%, with passenger revenue reaching RMB10,995 million. We deeply practice the service philosophy of "people-oriented, passenger-first", actively adapting to the development changes in railway passenger transport and passenger travel demands, and continuously improving service quality.

(1) Enhancing ticketing services: To implement the measures and requirements of the China Railway Group, we optimized and improved ticket rebooking, reimbursement vouchers, and student discount ticket purchase zones. New features were introduced on the 12306 mobile app, such as pre-filling of ticket purchase requirements and subscription of train ticket sales reminder. We also executed the "coupon ticket" and "periodic ticket" discount programs for the Guangzhou-Shenzhen Intercity Railway

and the Guangzhou-Shenzhen-Hong Kong High-Speed Railway, and improved the "flexible travel" train number change service at the Futian Station on the Guangzhou-Shenzhen-Hong Kong High-Speed Railway, further facilitating passengers who frequently travel between Guangzhou-Shenzhen and the Guangdong-Hong Kong regions.

(2) Optimizing train operation plans: We dynamically optimized the operation plans for trains of Guangzhou-Shenzhen Intercity Railway and Hong Kong West Kowloon Railway. The Guangzhou East Railway Station was adjusted to only handle high-speed train services, with more high-speed trains being scheduled to Guangzhou Railway Station, Guangzhou East Railway Station, and Shenzhen Railway Station to facilitate travel for passengers in central urban areas. The opening and operation of the Guangzhou-Shanwei High-speed Railway and the south section of the Shanwei-Shantou High-Speed Railway allowed further densification of train operations between the Guangdong-Hong Kong-Macao Greater Bay Area and the Chaoshan region.

(3) Improving passenger waiting and boarding environment: To ensure a clean and comfortable waiting environment for passengers, we promoted the comprehensive upgrading of passenger service equipment and facilities in stations, including the updating of waiting seats, unimpeded boarding channels, repair of elevators and escalators, and replacement of drinking water equipment, to provide convenience for passengers during waiting and boarding. Self-service equipment for ticket purchase, rebooking, real-name verification, and entry-exit station ticket checking were improved across stations, enabling a fully self-service experience of ticket purchase, entering the station, ticket check, boarding and exiting.

(4) Improving service quality: The "Railway Smooth Travel" service was fully implemented on high-speed trains, including services for business seats, key passengers, excess fare payment for seat upgrade, catering services, and fault reporting and handling. Further standardization and optimization were made to passenger complaint handling, assistance requests, and lost items search processes.

Freight Transport Business

In 2024, the Company actively promoted the transformation of railway freight into modern logistics and implemented measures to effectively reduce overall social logistics costs. The total freight volume completed was 14.1 million tons, with freight revenue reaching RMB1,623 million.

The Company has deeply integrated with the national strategy for the construction of the Guangdong-Hong Kong-Macao Greater Bay Area by accelerating the development of the railway modern logistics system and continuously driving cost reduction and efficiency improvement in logistics, strongly supporting the development of the real economy. The number of international trains in the Greater Bay Area has been increasing year by year, forming a logistics network centered around Guangzhou, Shenzhen, and Dongguan with 19 transport lines, radiating to over 30 cities in 15 countries in Central Asia, Europe, and Africa.

16 Supply chain security

Ensuring the supply chain security for our transportation operations is a core issue for sustainable development, carrying both high financial materiality and high impact materiality. Equipment leasing and service fees, as well as material consumption, constitute significant components of our main business costs. To maintain normal operations, we require supply chain support across multiple aspects, including line equipment, operational services, materials and supplies, information technology and digitalization, as well as energy and power, covering all stages and processes. In the short and medium term, the stability of supply sources, pricing, and cooperative relationships within the supply chain significantly impact our business operations, financial condition, cash flow, financing methods, and costs. By optimizing long-term supply chain security, we can further enhance transportation efficiency and service quality, thereby creating long-term value. In terms of impact materiality, our supply chain security involves multiple stakeholders, including suppliers, passengers, cargo owners, and employees. It plays a crucial role in ensuring railway transportation safety, facilitating the smooth movement of people and goods, and promoting regional economic and social development.

Governance

We and our stations have formulated procurement management measures to strengthen supply chain management. Major project construction and bulk material procurement must undergo decision-making review and approval, and a comprehensive mechanism for daily inspections, audits, and supervision of the supply chain has been established.

Strategy

We will enhance supply chain security management, channel financial and resource investments into core businesses, and strengthen the stability and security of the industrial chain.

Impact, Risks, and Opportunities

We strictly adhere to procurement management regulations, ensuring supply chain security through supplier qualification review, contract execution, daily communication, and inspection and supervision. We have established a robust supplier candidate database to identify potential risks and opportunities.

Risk type	Description and impact	Timeframe	
Transition risks			
Policy and legal risks	The National Railway Administration has issued relevant technical standards for railway industry equipment, and China State Railway Group Co., Ltd. has introduced the <i>Railway Equipment Renewal and Upgrading Action Plan</i> , imposing new and higher requirements on our supply chain security management. Compliance with these technical standards and participation in the renewal and upgrading initiatives may lead to increased costs but will also promote equipment upgrades, expand the application of advanced equipment, enhance production capacity, and improve our supply chain security capability.	Medium to long term	
Market risks	We are committed to lawful, compliant, transparent, and efficient supply chain management, establishing sound supervision mechanisms and evaluation methods for suppliers. Failure to	Short to medium term	

Risk type	Description and impact	Timeframe
	properly implement supply chain security management may result in issues such as substandard quality, unstable supply, and monopolized sources, increasing our potential expenditure on maintaining supply chain security.	
Physical risks		
Aging and malfunction risks	We prioritize the maintenance of line equipment, ensuring supply chain security from the source by establishing a safety assurance system for locomotives, signaling equipment, track infrastructure, and more. Failure to implement relevant maintenance, inspections, and rectifications may result in an inability to promptly and effectively address aging and malfunction risks in line equipment, impacting railway operational safety.	Short to medium term
Technological obsolescence risks	Our railway operations must comply with national railway technical standards to ensure system integrity, compatibility, and interconnectivity. Failure to implement supply chain security management measures may lead to non-compliance in project construction, outdated technical equipment, or difficulties in upgrading existing technical equipment, thereby increasing potential expenditures.	Short to medium term

Opportunity	Description and impact	Timeframe
Cost reduction and efficiency enhancement	Establishing a supply chain security assurance system can maintain a secure, stable, and efficient supply chain, thereby reducing costs and enhancing supply chain security and resilience.	Medium to long term
Enhancing advanced production capacity	If we respond to the railway equipment renewal and upgrading initiative, we will be able to further improve equipment safety, enhance service performance, facilitate digitalization and automation in transportation operations, and enhance advanced production capacity, thereby strengthening our competitiveness in the transportation market.	Medium to long term

Indicators and Targets

Our supply chain security goal is to ensure the uninterrupted supply of equipment, materials, and services through effective management measures, thereby maintaining the continuity of our transportation and business operations. We aim to establish a transparent supply chain management system that ensures information traceability, identifies, assesses, and responds to potential supply chain risks, and minimizes operational disruptions or losses caused by supply chain issues. In 2024, we and our stations will implement 403 public bidding projects and 12,687 procurement projects through other means, involving a total of 8,397 suppliers, including 8,395 from the Chinese mainland and two from the Hong Kong region.

17 Data security and customer privacy protection

	Company data sources	Passenger/cargo owner privacy			
	Operational data	 Identity information 			
	Customer data	Contact information			
	Financial data	 Payment information 			
	Employee data Travel (logistics) information				
	Security and monitoring data	• Behavioral data (consumption habits,			
		complaints, and feedback)			
		 Membership information (frequent travelers) 			
	Data security: Protecting internal	Customer privacy protection: Ensuring that			
	company and customer data from	customer personal information is not misused			
u	nauthorized access, leaks, tampering, or	or disclosed, maintaining customer control			
	destruction.	over their personal data.			

In the short term, data security and customer privacy protection have minimal financial impact, with controllable cost expenditures. However, these issues involve multiple stakeholders, including suppliers and customers, and play a crucial role in earning long-term public trust, building our reputation, ensuring secure operations, and maintaining social stability. These aspects are essential safeguards for the Company's sustainable development. Therefore, this issue is of low financial materiality but high impact materiality.

We strictly comply with the *Cybersecurity Law of the People's Republic of China*, the *Administrative Measures for the Security Protection of Railway Critical Information Infrastructure*, and other relevant laws and regulations. We have established an integrated cybersecurity protection system, including data classification and identification, network security protection, encrypted data storage, and access control management. Our management measures cover full-process oversight, emergency response, attack-defense drills, and terminal inspections to ensure the security of company data and customer privacy. We strictly enforce the real-name ticketing system and the railway passenger credit record management regulations, ensuring proper recording and timely reporting of passenger credit violations to maintain the effective operation of the credit management system. During the reporting period, no significant data security incidents or customer privacy breaches occurred.

18 Technology ethics

Our business operations do not involve scientific research in technology ethics-sensitive areas. Therefore, technology ethics is not financially or impact-material, but it remains a relevant issue for sustainable development. Our relevant technology applications include facial recognition for passenger check-in, designed to protect passenger rights. Through technical safeguards and institutional constraints, we ensure the security and privacy of facial recognition data. This technology not only enhances railway operational efficiency but also provides passengers with a safer and more convenient travel experience.

VI. Environmental Protection and Technological Innovation

19 Responding to climate change

Rail passenger and freight transportation is our core business. Although railway transportation is less affected by natural conditions, climate change and geological factors still significantly impact railway operations. Responding to climate change is a core issue with high financial materiality and high impact materiality. In the short to medium term, extreme weather conditions such as high temperatures, freezing conditions, typhoons, and heavy rainfall may severely disrupt railway operations, damage railway infrastructure, and cause transport delays, interruptions, or cancellations. These disruptions could lead to increased expenditures on maintenance, repairs, and emergency response, as well as lost transportation revenue. In the long term, climate change may influence travel patterns and transport capacity planning. The transition to a green and low-carbon economy may reduce the demand for fossil fuel transportation (e.g., coal and petroleum). Additionally, costs related to the low-carbon transformation of transportation equipment and the implementation of green operational practices may rise, affecting financial performance. As a critical infrastructure supporting regional economic and social development, the railways operated by GSRC and other serviced lines play a vital role in the modern integrated transportation system. Addressing climate change and ensuring railway transportation safety and stability involve a wide range of stakeholders, including passengers, cargo owners, governments, employees, and suppliers. At the same time, the development of a green and low-carbon railway system has a profound and positive impact on environmental protection and climate change mitigation.

Governance

We and our stations adhere to the principle of "early consultation and proactive risk avoidance" by establishing a climate change early warning and consultation mechanism. We have formulated and refined policies and measures for weather forecasting, safety management, and emergency response. Additionally, we have strengthened emergency plans, drills, personnel training, and equipment preparation to ensure the safe and stable operation of railway passenger and freight transportation.

Strategy

We recognize that responding to climate change and promoting green and low-carbon development are inherent requirements for railway enterprises in implementing the new development philosophy, fostering a new development framework, and advancing high-quality development. We will actively implement national policies on climate change mitigation, energy conservation, and emission reduction, strengthen organizational leadership, enhance responsibility mechanisms, and effectively advance key initiatives.

Impact, Risks, and Opportunities

To thoroughly understand and prudently address the actual and potential impacts of climate change on our business operations, we have identified risks and opportunities associated with climate change.

Risk type	Description and impact	Timeframe
Transition ris		
Policy and legal risks	To implement the Outline for Building a Transport Power, the Opinions of the Central Committee of the Communist Party of China and the State Council on Fully and Accurately Implementing the New Development Philosophy to Achieve Carbon Peaking and Carbon Neutrality, and the Action Plan for Carbon Peaking Before 2030, the National Railway Administration, the National Development and Reform Commission, the Ministry of Ecology and Environment, the Ministry of Transport, and China State Railway Group Co., Ltd. have jointly issued the Implementation Plan for Promoting Low-Carbon Development in the Railway Industry. This plan is a proactive initiative to drive green and low-carbon peaking and carbon neutrality in the transportation industry. These policies and implementation plans will significantly impact our development strategy, business operations, and financial performance, introducing both risks and opportunities for our stakeholders, customers, suppliers, and employees. Additionally, the Guidelines No. 14 of Shanghai Stock Exchange for Self-Regulation of Listed Companies —Sustainability Report (Trial) and the Listing Rules - Appendix C2 Environmental, Social and Governance Reporting Guide of the HKSE require listed companies to disclose their climate change response measures. We recognize that the demand for climate-related information disclosure is increasing.	Short to medium term
Market risks	Investors are increasingly focused on ESG matter disclosures of listed companies, while governments set stricter requirements for green and low-carbon railway development. The public is also shifting toward environmentally friendly travel choices. If we fail to actively respond to these expectations, implement relevant measures, and take effective actions, our market performance and competitiveness may be weakened.	Short to medium term
Physical risks		
Acute risks	Extreme weather conditions, such as high temperatures, freezing conditions, heavy rainfall, thunderstorms, and strong winds, can severely impact the performance of railway materials and equipment, alter geological stability along railway lines, and trigger floods and landslides. These events may damage railway infrastructure and equipment, causing transport delays, interruptions, cancellations, casualties, and property losses. In such cases, our maintenance and operational costs may increase, and we may face compensation claims and regulatory penalties. To monitor geological conditions and ensure equipment safety, we need to establish a comprehensive monitoring system and increase patrols along railway lines, leading to higher operational costs.	Short to medium term
Long-term risks	Over time, climate change may influence travel preferences and transportation layouts, potentially reducing the demand for transporting fossil fuels such as coal and petroleum, thereby impacting our business. If extreme weather conditions become more frequent and widespread in our service areas, our response costs and revenue losses may increase.	Medium to long term

Opportunity	Description and impact	Timeframe
Green and low-carbon development	The Implementation Plan for Promoting Low-Carbon Development in the Railway Industry sets a target for railway energy consumption and carbon emissions per unit of transportation workload to decrease by 10% by 2030 compared to 2020. It also promotes the low-carbon transformation of transportation equipment, optimization of the transportation structure, and green operation and maintenance. These measures present opportunities for us to enhance our reputation in response to climate change improve our production efficiency, and advance sustainable development.	Medium to long term
Cost reduction and efficiency enhancement	Our investment in building and improving climate change monitoring systems enhances our ability to predict and mitigate risks in advance, ensuring safe and efficient railway operations. Implementing railway low-carbon development measures and promoting green railway construction will help improve transport efficiency, increase railway market share, reduce operating costs, and facilitate equipment upgrades, achieving cost reduction and efficiency improvement goals.	Medium to long term

Indicators and Targets

We adhere to the work mechanism of "early consultation and proactive risk avoidance," establishing a comprehensive monitoring and early warning system to enhance emergency response capabilities and preparedness, ensuring the absolute safety and stability of high-speed and passenger train operations. We remain committed to low-carbon, green, and sustainable development to support the full-scale green transition of the economy and society and contribute to the construction of a beautiful China.

We strengthen weather forecasting, formulate early warning plans, and implement graded responses. We analyze and assess extreme weather impacts, train delays and cancellations, cumulative delay durations, and geological disaster occurrences, strengthening transport capacity allocation, line patrols, and facility maintenance.

Case Study

In 2024, Guangzhou Train Onboard Service Division encountered extreme weather conditions, including heavy rainfall and typhoons, for 87 days, issuing 46 emergency warnings. A total of 172 trains were delayed, accumulating 608 hours of delays, and 31 trains were forced to return midway. Our passenger transport team implemented emergency response measures to ensure passenger and crew safety and maintain stable operations.

Super Typhoon "Gaemi" (No. 3 of 2024) impacted railway operations. In response to delays in Shenzhen, we opened additional ticket refund and rescheduling counters, provided public updates on train cancellations, guided passengers, and arranged orderly travel. The Shenzhen Railway OCS & Power Supply Maintenance Division conducted post-typhoon inspections to promptly identify and address line hazards.

20 Environmental responsibility

The management of pollutant emissions, waste management, water resource utilization, and environmental compliance management is an important issue of our sustainable development. These efforts are incorporated into our daily business operations, where specialized departments, technical personnel, in-house environmental treatment facilities, and third-party professional agencies monitor, treat, and safely discharge (or transfer) wastewater, exhaust gases, and hazardous waste. These activities are subject to government environmental inspections and oversight. Across different time spans, the financial resources allocated to these efforts remain manageable and do not constitute high financial materiality. Our environmental responsibilities include railway and trackside environmental protection, purification of exhaust gases and wastewater, noise reduction, and ensuring the safety of passenger train water supply and personnel water use. These responsibilities involve multiple stakeholders, such as passengers, employees, and communities, spanning extensive railway networks and geographic regions, thus holding high impact materiality.

We conduct monitoring of exhaust gases, wastewater, and noise, operate and maintain environmental treatment facilities, construct and maintain noise barriers in sensitive railway areas, regulate locomotive horn usage, and engage third-party agencies for the safe disposal of hazardous waste. Key environmental data is as follows:

Scope	Indicator	Unit	2024	2023	2024 density (usage or emission/ converted turnover)	Emission density unit
	Total water consumption	Ton	7,132,789.3	6,253,073.22	238.795	t/million t-km
	Industrial water consumption	Ton	1,533,262.6	1,535,506.64	51.331	t/million t-km
	Number of wastewater treatment facilities	Unit	17	17		
	Industrial wastewater discharge	Ton	1,112,905	1,034,518	37.258	t/million t-km
	Industrial wastewater treated	Ton	1,112,905	1,034,518	37.258	t/million t-km
Water use and wastewater	Total water consumption					
discharge	(1) Chemical oxygen demand (cod) removed	kg	408,559	164,700		
	(2) Petroleum substances removed	kg	47,851	42,471		
	Pollutant removal in industrial wastewater					
	(1) Chemical oxygen demand (cod) removed	kg	28,933	29,913	0.969	kg/million t-km
	(2) Petroleum substances removed	kg	1,420	1,168	0.048	kg/million t-km
	Total exhaust gas emissions	10,000 m ³	20,359	23,770	0.682	10,000 std. m ³ /million t-km
Exhaust gas	Number of exhaust gas treatment facilities	Unit	8	8		
emissions	Pollutant removal in exhaust gases					
	(1) Sulfur dioxide removed	kg	0	0		

Scope	Indicator	Unit	2024	2023	2024 density (usage or emission/ converted turnover)	Emission density unit
	(2) Particulate matter removed	kg	19	23		
	Pollutant emissions in exhaust gases					
	(1) Sulfur dioxide emissions	kg	66	101	2.210	g/million t-km
	(2) Particulate matter emissions	kg	43	97	1.440	g/million t-km
Solid waste	Total solid waste generated	Ton	6,551.33	8,226.41	0.219	t/million t-km
statistics	Solid waste recycled	Ton	5,740.16	7,308.98	0.192	t/million t-km
	Solid waste disposed	Ton	792.2	916.34	0.027	t/million t-km

GSRC implemented laws, regulations, and standards such as the *Law of the People's Republic of China on Prevention and Control of Water Pollution* and the *Reuse of Urban Recycling Water* — *Water Quality Standard for Urban Miscellaneous Use* to protect and save water resources through improving water reuse rate. GSRC did not encounter any problems in finding suitable water sources. As GSRC provided passenger and freight transport services, there were no statistics about the use of packaging materials for end-products, except for the protective and reinforcement materials necessary for the transport.

One subsidiary of GSRC — Guangzhou Train Driving and Maintenance Division was listed in the list of key targets under emission supervision 2024. During the reporting period, no significant environmental incidents occurred, nor were we subject to major administrative penalties or criminal liabilities related to environmental violations.

Our existing railway lines and operational sites do not encroach upon ecological protection red lines or nature reserves. For commissioned railway lines and new construction projects, we have obtained environmental impact assessment approvals and implemented appropriate ecological and environmental protection measures. Our business activities do not pose significant impacts on ecosystems or biodiversity.

21 Energy utilization

The operation of electrified railways, passenger stations, and freight yards is highly dependent on electricity supply, while diesel locomotives, power equipment, boilers, and service vehicles require the use of fossil fuels such as diesel, gasoline, and natural gas. Energy costs constitute a significant portion of our core business expenses. We maintain long-term cooperative relationships with electricity suppliers, and fluctuations in electricity prices have a significant impact on our financial performance in the short to medium term. With the growth of renewable energy and the low-carbon development of the railway industry, our long-term electricity costs may decrease, optimizing our energy utilization structure and expenditure. Energy utilization is crucial for ensuring the stable, safe, and orderly operation of our transportation business and serves as an important support for regional economic and social development. Additionally, the increasing supply of renewable and green electricity strengthens the low-carbon advantage of railways, promotes environmental protection, and contributes to climate change mitigation. Therefore, our energy

utilization holds high impact materiality for economic, social, and environmental sustainability.

Governance

We maintain long-term, stable, and positive cooperation with energy suppliers to ensure a secure power supply. Each station has established and refined regulations for energy procurement, maintenance of electrical equipment and facilities, and safety management. Financial, personnel, and technical resources are allocated to safeguard energy supply security.

Strategy

We integrate energy utilization into the modernization of railway infrastructure, adhering to the low-carbon development path of the railway sector to achieve green, safe, and sustainable energy use.

Impact, Risks, and Opportunities

To thoroughly assess and proactively respond to the actual and potential impacts of energy utilization on our business operations, we have identified key risks and opportunities.

Risk type	Description and impact	Timeframe
Transition ris	ks	
Policy and legal risks	The Law of the People's Republic of China on Conserving Energy sets clear regulations for energy conservation in transportation, key energy-consuming entities, technological advancements, and legal responsibilities. The 14th Five-Year Plan for Railway Science and Technology Innovation issued by the National Railway Administration outlines the goal of achieving significant progress in railway energy supply technology by 2025, with high-efficiency and intelligent traction power supply core technologies reaching world-class levels. The Implementation Plan for Promoting Low-Carbon Development in the Railway Industry calls for an increased share of electric and renewable energy-powered locomotives, a higher proportion of green electricity usage, and enhanced utilization of clean energy in the railway sector. Our active participation in energy conservation, emissions reduction, and the adoption of advanced energy technologies, along with increasing the proportion of green electricity, aligns with these regulatory and policy objectives. Failure to meet these energy utilization standards and requirements could expose us to warnings, rectification orders, fines, or other regulatory risks.	Short to medium term
Market risks	Investors and the public have high expectations for the economic benefits of railway low-carbon development and the diversification of energy sources. If we fail to achieve meaningful progress in low-carbon development and clean energy utilization, our market performance and competitiveness may be negatively affected. Additionally, as our energy supply is highly dependent on electricity, significant fluctuations in electricity prices could substantially impact our operating costs.	Short to medium term

Reputational risks	Society is increasingly emphasizing low-carbon and environmental protection initiatives, with more enterprises and projects participating in green electricity trading. For example, the China Import and Export Fair (Canton Fair) achieved 100% green electricity supply for the first time in 2023. If we fail to take active steps in optimizing our energy structure, securing green electricity supply, and engaging in green electricity trading, our market reputation and ESG ratings may be negatively affected.	Medium to long term
Physical risks		
Energy supply disruptions	Extreme weather events or strong earthquakes could damage railway traction power supply networks, disrupting stable electricity supply and leading to transport delays, interruptions, or cancellations. Such incidents could increase our maintenance and operational costs and lead to revenue losses. If fossil fuels and backup equipment are used as temporary substitutes, additional operational costs may arise.	Short to medium term
Insufficient green electricity usage	To advance green railway construction and enhance green operations and maintenance, we may need to invest in technological upgrades and infrastructure modifications. In the long run, insufficient green electricity usage could result in continued reliance on fossil fuels, increased pollutant emissions, and negative environmental impacts.	Medium to long term

Opportunity	Description and impact	Timeframe
Optimizing energy structure	Promoting green railway construction and low-carbon transformation of transportation equipment will gradually increase the proportion of clean energy usage, optimizing the energy utilization structure.	Medium to long term
Cost reduction and efficiency enhancement	Stable energy supply, upgrades to traction power networks, and the adoption of renewable energy locomotives will ensure safe and efficient railway operations. Increasing the proportion of clean energy usage will help reduce energy costs, achieving cost reduction and efficiency enhancement goals.	Medium to long term

Indicators and Targets

We annually establish and publish energy consumption and emissions plans, encouraging stations to conserve energy, enhance energy efficiency, protect and improve the environment, and promote comprehensive, coordinated, and sustainable economic and social development through regulatory enforcement, performance incentives, and the introduction and application of advanced energy technologies and equipment.

Energy consumption and emissions		Values	Consumption and emission density (quantity/converted turnover)			
	2024	2023	Change (%)	Unit	2024	2023
Comprehensive energy consumption (tce)	148,276.74	141,879.89	4.51%	t/million t-km	4.96	4.71
Electricity consumption (10,000 kWh)	60,470.84	52,937.91	14.23%	10,000 kWh/million t-km	2.02	1.76
Diesel consumption (t)	50,265.68	51,765.01	-2.89%	t/million t-km	1.68	1.72
Natural gas consumption (10,000 m ³)	20.31	72.97	-72.17%	m ³ /million t-km	6.80	24.25
Scope 1 emissions (tCO ₂)	159,445	165,228	-3.50%	tCO ₂ /million t-km	5.34	5.49
Scope 1 & 2 emissions (tCO ₂)	483,931	449,293	7.71%	tCO2/million t-km	16.20	14.93

As of December 31, 2024, Guangzhou Train Driving and Maintenance Division operates 151 diesel locomotives and 50 electric locomotives, with a unit traction energy consumption of 88.52 kg tce/10,000 gross ton-km.

Indiastors	Diesel lo	comotive	Electric locomotive		
Indicators	2023	2024	2023	2024	
Diesel fuel (t)	46,484.25	46,946.74			
Diesel unit traction energy consumption (kg/10,000 gross ton-km)	33.17	33.55			
Electricity (10,000 kWh)			36,262.55	38,101.59	
Electric unit traction energy consumption (kWh/10,000 gross ton-km)			139.15	133.75	
Oil and grease consumption (t)	332.25	338.30	22.62	21.59	

We have implemented measures to replace traditional energy vehicles with new energy vehicles. We and our stations have equipped 42 new energy vehicles, which have traveled approximately 129,000 kilometers during the reporting period, resulting in a reduction of about 13.7 tons of carbon emissions.

22 Circular economy

We place great emphasis on circular economy practices, implementing measures such as equipment refurbishment, waste material auctions (e.g., old rails and decommissioned equipment), paperless office initiatives, reclaimed water reuse, and waste classification to conserve resources and improve resource utilization efficiency. We promote digital office systems, electronic display meeting systems, e-tickets, and e-invoices to reduce paper consumption. While circular economy initiatives have no significant financial impact on our company's performance, they align with the *Implementation Plan for Promoting Low-Carbon Development in the Railway Industry* and the *Railway Equipment Renewal and Upgrading Action Plan*, supporting the application of green and low-carbon equipment and the efficient recycling of existing assets. These initiatives contribute positively to sustainable economic, social, and environmental development.

23 Innovation as driver

Innovation as driver is a core issue for our sustainability strategy, carrying both high financial materiality and high impact materiality. We actively implement the railway industry's innovation-driven development strategy, promoting the industrial application of core technologies in key railway fields. Innovation as driver plays a crucial role in enhancing financial performance over the medium to long term by strengthening safety, improving transportation efficiency, and increasing economic benefits. Our company and stations serve as the primary sources of railway innovation needs and as key adopters of technological advancements. To foster innovation, we need to establish and refine mechanisms for mutual benefit across upstream and downstream industries, market-oriented operational frameworks with enterprises at the core, and grassroots innovation incentive and exchange systems. These efforts involve multiple stakeholders, including governments, investors, suppliers, employees, and customers, and have a significant impact on economic and social progress. Furthermore, innovation as driver provides technological support for the construction of low-carbon, green railways and the reduction of railway-related pollution, contributing to long-term environmental protection.

Governance

We and our stations actively leverage railway innovation achievements to ensure transportation safety and stability, maximize the efficiency of existing railway networks, and sustain business growth. Our innovation-driven approach focuses on advancing scientific research projects, introducing key core technologies, and industrializing the application of critical equipment and facilities.

Strategy

We integrate innovation as driver into the modernization of the railway technology innovation system, ensuring that innovation supports the safe and efficient operation of railways. Our strategic objectives include steadily enhancing our overall technical capabilities, strengthening technological innovation capacity, and advancing industrial modernization along the railway supply chain.

Impact, Risks, and Opportunities

To thoroughly assess and proactively respond to the actual and potential impacts of innovation as driver on our business operations, we have identified key risks and opportunities associated with this strategy.

Risk type	Description and impact	Timeframe
Transition risk	S	
Policy and legal risks	The Outline for Building a Transport Power issued by the Central Committee of the Communist Party of China and the State Council, the 14th Five-Year Plan for Railway Science and Technology Innovation issued by the National Railway Administration, and the Railway Equipment Renewal and Upgrading Action Plan issued by China State Railway Group Co., Ltd. set forth guidelines and requirements for railway technological innovation, adoption of advanced technologies, and green low-carbon development. These policies provide strategic direction and potential impacts for our innovation-driven approach, presenting both challenges and opportunities.	Short to medium term
Market risks	Innovation as driver is crucial in our business development, as demonstrated by projects such as the construction of the Guangzhou-Shenzhen quasi-high-speed railway, the completion of China's first four-track electrified railway, and the implementation of intercity railway operations on the Guangzhou-Shenzhen corridor. These innovations significantly enhanced our transportation capacity, operational efficiency, and market competitiveness. However, continuous investment in core technology industrialization and technological innovation requires substantial capital expenditure, exerting pressure on financial performance. Additionally, failure to achieve significant progress in innovation as driver may weaken our market position and competitiveness.	Medium to long term
Physical risks		
Equipment use and maintenance risks	We enhance railway equipment usage and maintenance, adhering to national safety and quality standards, industry regulations, and technical guidelines. Ensuring adequate financial investment in equipment maintenance is essential for operational safety. Failure to comply with relevant technical standards and operational protocols may lead to safety hazards, incompatibility between old and new systems, and construction safety incidents, ultimately impacting railway operations.	Short to medium term
Personnel risks	We have dedicated equipment usage and maintenance management teams across our company and stations. Training programs are adjusted based on evolving production processes, new technologies, and new equipment. If we fail to effectively allocate personnel and implement necessary training, potential issues such as technical staff shortages and inadequate maintenance proficiency may arise.	Short to medium term

Opportunity	Description and impact	Timeframe
High-quality development	By upgrading transportation equipment, modernizing service facilities, and transforming production organization and operational methods, we can enhance operational efficiency and increase advanced production capacity, creating opportunities for high-quality development.	Medium to long term
Workforce development	The industrial application of key railway technologies relies on a skilled workforce. By fostering talent development and recruitment within the innovation-driven framework, we can stimulate technological and managerial innovation, strengthening our technical team and enhancing overall innovation capabilities.	Medium to long term

Indicators and Targets

We strengthen technological and managerial innovation, enforce accountability in equipment use and maintenance management, and establish comprehensive management systems. Key measures include maintaining detailed railway equipment records and technical documentation, making informed investment decisions, enhancing personnel training, introducing advanced technologies and equipment, and initiating scientific research projects to steadily improve our innovation capabilities and achieve high-quality development.

In 2024, we completed 182 major overhauls and 303 fixed asset investments, including 82 investments related to operational safety. Additionally, our company and stations participated in 16 research and development (R&D) and technological cooperation projects. The Guangzhou Telecommunication and Signal Depot filed 14 invention patent applications and was granted 8 patents.

VII. Employee Rights & Benefits and Social Welfare

24 Employees

Employees are both the core production element of railway operations and the carriers of our strategic value, reflecting a multi-dimensional importance. From a financial perspective, employee compensation, benefits, and training expenditures constitute a significant portion of our business costs, directly impacting financial performance, cash flow, and other financial metrics. Our professional workforce plays a crucial role in ensuring transportation safety, improving operational efficiency, enhancing service quality, optimizing resource allocation, and innovation as driver, ultimately creating long-term value for the company and its shareholders. From an impact perspective, employees play a critical role in maintaining the stability and safety of railway operations while supporting economic and social development. The professional skills, conduct, and emergency response capabilities of frontline workers directly shape public perceptions of the railway industry. Given the dual attributes of financial and societal impact, we are committed to establishing a full-cycle human resources management system that safeguards employee rights and aligns individual career development with corporate strategic goals, achieving synergistic economic and social benefits.

Governance

Our human resources management departments at the corporate and station levels are responsible for recruitment and placement, performance evaluation and compensation, training and development, institutional management, and corporate culture. Trade unions at all levels facilitate labor relations coordination through collective bargaining and agreements, ensuring the protection of employee rights and fostering harmonious labor relations.

Strategy

Our human resources strategy focuses on workforce development and supporting corporate reform and growth. Key initiatives include the development of a digital and intelligent human resources platform, strengthening the alignment of corporate and employee interests, enhancing professional talent reserves and training, implementing company-wide performance assessments and incentives, and standardizing job placement and evaluation processes. We are committed to legally and compliantly protecting employee rights while ensuring that organizational efficiency supports the long-term goal of high-quality railway development.

Impact, Risks, and Opportunities

To thoroughly assess and proactively respond to the actual and potential impacts of employees on our business operations, we have identified key risks and opportunities associated with workforce management.

Risk type	Description and impact	Timeframe		
Transition ris	Transition risks			
Policy and legal risks	We adhere to the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, and the Trade Union Law of the People's Republic of China, and the Regulation of Guangdong Province on the Payment of Wages, ensuring employee rights protection and legal compliance in labor management. Failure to comply with these regulations could result in administrative penalties, liability for damages, and other potential risks. Additionally, the Decision of the Standing Committee of the National People's Congress on Implementing the Gradual Delay of the Statutory Retirement Age, effective from January 1, 2025, may impact our labor costs, workforce age structure, career development planning, and safety management, presenting both risks and opportunities.	Medium to long term		
Market risks	Our human resources management faces various market risks. Failure to implement appropriate measures could lead to rising labor costs, skill shortages, loss of technical professionals, and labor disputes, negatively affecting financial performance, operational safety, and ESG ratings.	Medium to long term		
Physical risks				
Safety risks	We prioritize employee safety and strictly adhere to safety production standards. However, extreme weather conditions, unsafe work environments, violations of operational guidelines, and improper command may lead to railway accidents and casualties.	Short to medium term		
Health risks	Railway operations pose occupational health risks. We take proactive measures by arranging medical check-ups, providing labor protection, and implementing health management programs to safeguard employee well-being.	Medium to long term		

Opportunity	Description and impact	Timeframe
High-quality development	Establishing a shared destiny between the company and its employees, effectively safeguarding employee rights, enhances employees' sense of belonging and fulfillment, laying a solid foundation for high-quality corporate development.	Medium to long term
Career development	We have established a professional skills evaluation and certification system, strengthened the development of technical personnel, and enhanced talent recruitment and training, providing opportunities for employee career growth and overall workforce improvement.	Medium to long term

Indicators and Targets

As of December 31, 2024, GSRC had altogether 36,565 employees. See the table below for details:

Information Table of GSRC Employees

Item	2024	2023	Employee turnover rate (-) and increase rate (+) in 2024 compared with 2023 ^(Note)
Total number of employees	36,565	37,906	-3.54%
By gender			
- Male	27,857	28,509	-2.29%
- Female	8,708	9,397	-7.33%
By age			
- Below 30	7,876	8,861	-11.12%
- 31-40	12,341	11,395	8.30%
- 41-50	7,802	8,334	-6.38%
- Above 51	8,546	9,316	-8.27%
By education degree			
- Master's degree and above	168	161	4.35%
- Bachelor's degree	5,320	5,237	1.58%
- Junior college degree	17,248	16,895	2.09%
- Others (secondary technical school, senior high school, vocational-technical school, etc.)	13,829	15,613	-11.43%
By region			
- Shenzhen (location of employer)	3,561	3,489	2.06%
- Other regions (location of employer)	33,004	34,417	-4.11%
By specialty			
- Passenger and freight transport personnel	16,462	17,320	-4.95%
- Maintenance personnel	4,727	4,872	-2.98%
- Vehicle personnel	3,023	3,111	-2.83%
- Labor personnel	3,006	3,221	-6.67%
- Electric service personnel	1,915	1,815	5.51%
- Power and water supply personnel	2,292	2,216	3.43%
- Building construction personnel	1,262	1,274	-0.94%
- Staff of diversified operations and other subsidiaries	87	82	6.10%
- Technical and administrative staff	3,791	3,995	-5.11%
	1		1 0 1

Note: The turnover rate or growth rate was calculated by comparing the number of employees at the end of the year. The data might be affected by factors such as employee age growth, natural death, statutory retirement, and adjustment of production and operation.

Recruitment and Training

GSRC recruited 1,145 new graduates in 2023, including 32 students who have master's degrees or above, 159 undergraduates, and 954 junior college graduates. In 2024, GSRC terminated and canceled the labor contracts of 62 employees, accounting for 0.17% of the total number of employees of GSRC. GSRC has never employ any child labor or forced labor.

During the reporting period, GSRC had a total of 97 full-time vocational education management personnel, provided various types of vocational training for 811,485 person-times in 2024. The training expenditure was about RMB74.44 million. The relevant training was carried out in accordance with production safety, vocational skills qualifications, job needs, and career development plans, without statistics on the number of people and class hours by gender.

Training category	Number of instances of participation		
Training category	2024	2023	
Training on safety regulations	216,565	191,236	
Off-job training for main types of driving work	13,444	18,508	
Qualification training	8,870	8,145	
Factory leader training	1,989	2,684	
Technical competition and post training	268,281	271,335	
Continuing education	9,948	13,094	
Miscellaneous	292,388	280,440	
Total	811,485	785,442	

Training Table in GSRC

Training Schedule for GSRC Administrator in 2024

Category of personnel	Number (person)	Average number of training hours (h)
Senior managers of GSRC	7	143
Leaders of railway sections	162	163
Other middle-level managers	1,661	142

Honors Received by Groups of GSRC in 2024 (National Railway and Provincial/Ministerial Level)

Team	Affiliated unit	Honor awarded	
Guangshen Railway Company Limited	Headquarters	2024 Shenzhen Top 500 Enterprises	
Party Branch of Xiamen-Shenzhen EMU First Crew Team	Guangzhou-Kowloon Train Onboard Service Division	National Advanced Railway Party Organization	
Party Committee of Guangzhou Carriage Maintenance Division for Passenger Train	Guangzhou Carriage Maintenance Division for Passenger Train		
Party Committee of South Guangzhou High-Speed Track Maintenance Division	South Guangzhou High-Speed Track Maintenance Division		
Party Committee of Guangzhou Telecommunication and Signal Depot	Guangzhou Telecommunication and Signal Depot		
Youth League Branch of Beijing-Guangzhou EMU Second Crew Team	Guangzhou-Kowloon Train Onboard Service Division	National Railway "May Fourth" Red Flag Youth League Branch	
Youth League Branch of Guangzhou Depot Workshop QC Team	Guangzhou Carriage Maintenance Division for Passenger Train		
Youth League Branch of Guangzhou East Passenger Transport Workshop	Stations in Guangzhou		
Youth League Branch of Guangzhou South High-Speed Railway Signal Workshop	Guangzhou Telecommunication and Signal Depot		
Youth League Branch of Foshan West High-Speed Railway Track Workshop	South Guangzhou High-Speed Track Maintenance Division		
Dongguan East Passenger Service Crew Team, Group 7	Guangzhou Carriage Maintenance Division for Passenger Train	Advanced Collective of National Railway Spring Festival Duty Competition	

Team	Affiliated unit	Honor awarded	
Beijing-Guangzhou EMU Third Crew Team, Group 2	Guangzhou-Kowloon Train Onboard Service Division	National Railway Youth Safety Production Demonstration Post	
South Guangzhou High-Speed Track Maintenance Division	South Guangzhou High-Speed Track Maintenance Division	National Railway Advanced Collective for Flood	
Stations in South Guangzhou	Stations in South Guangzhou	Prevention Work	
Guangzhou-Kowloon Train Onboard Service Division	Guangzhou-Kowloon Train Onboard Service Division		
Guangzhou Mini Service Division for Railway Station	Guangzhou Mini Service Division for Railway Station		
Guangzhou Telecommunication and Signal Depot	Guangzhou Telecommunication and Signal Depot		
Guangzhou Railway Building Maintenance Division	Guangzhou Railway Building Maintenance Division		
Guangzhou Train Driving and Maintenance Division	Guangzhou Train Driving and Maintenance Division	National Railway Benchmark Station Section	
Shenzhen Railway OCS & Power Supply Maintenance Division	Shenzhen Railway OCS & Power Supply Maintenance Division		
Guangzhou Railway OCS & Power Supply Maintenance Division	Guangzhou Railway OCS & Power Supply Maintenance Division		
South Guangzhou High-Speed Track Maintenance Division	South Guangzhou High-Speed Track Maintenance Division		
Guangzhou Train Onboard Service Division	Guangzhou Train Onboard Service Division	Guangdong Province "May	
Guangzhou Mini Service Division for Railway Station	Guangzhou Mini Service Division for Railway Station	1st" Labor Award Certificate	
Dalang Railway Logistics Sales Department	Guangzhou-Shenzhen Railway Logistics Center	Guangdong Province Worker	
Yingchunhua Customer Service Team of Shenzhen North Onboard Service Workshop	Stations in Shenzhen	Guangdong Province Worke Pioneer	

Honors Received by Individuals of GSRC in 2024 (National Railway and Provincial/Ministerial Level)

Individual	Affiliated unit	Honor awarded	
Yang Xuetong	Guangzhou-Kowloon Train Onboard Service Division	National "May 1st" Labor Medal	
Zhong Zhenkun, Zhang Cheng, Zhao Yun	Guangzhou-Kowloon Train Onboard Service Division		
Chen Ziqi, Zhou Wei	Stations in Guangzhou		
He Minliang, Xiong Guangyue	Guangzhou Train Driving and Maintenance Division	Railway Federation "Locomotive Medal"	
Xian Qunjian, Qian Qilong	Stations in South Guangzhou		
Li Jiayu	Guangzhou Carriage Maintenance Division for Passenger Train		
Yang Jianlan	Guangzhou Railway Building Maintenance Division	National Railway Outstanding Communist Party Member	
Liu Liheng	Stations in Shenzhen	Communist rarty Member	

Individual	Affiliated unit	Honor awarded	
Zhao Xinhong	Guangzhou Train Driving and Maintenance Division		
Zou Fang	Stations in South Guangzhou	National Railway Outstanding Party	
Wang Youfa	Guangzhou Train Driving and Maintenance Division	Worker	
Li Yuan	Stations in Shenzhen		
Wang Jinwei	Guangzhou Mini Service Division for Railway Station		
Chen Lingyan	Stations in Guangzhou	National Railway Technical Expert	
Li Mingquan	Guangzhou Telecommunication and Signal Depot		
Peng Lei, Zhou Sainan, Tian Dongyang	Guangzhou Train Onboard Service Division		
Zuo Yang	Guangzhou Railway Building Maintenance Division		
He Linhui, Xu Xin, Li Peilong, Yang Yu	Guangzhou Carriage Maintenance Division for Passenger Train		
Zhao Mengtong, Chen Ziqi, Yang Junjie, Du Chuan'guang	Stations in Guangzhou	National Railway Youth Post Expert	
Zhang Yiming, Zhang Ye, He Yanbin	Guangzhou Telecommunication and Signal Depot		
Qiu Qinhao, Luo Xiong, Chen Fa, Chen Huaqiang, Chen Wensun, Guan Fengpei	North Guangzhou Carriage Maintenance Division for Cargo Train		
Sun Song	North Guangzhou Carriage Maintenance Division for Cargo Train	National Railway Outstanding Communist Youth League Member	
Xu Zhijie	Guangzhou Train Driving and Maintenance Division	Communist Touth League Member	
Fu Hetong	Guangzhou Train Onboard Service Division	National Railway Outstanding Youth	
Dai Wuyang	Guangzhou Train Driving and Maintenance Division	League Cadre	
Li Xukai	North Guangzhou Carriage Maintenance Division for Cargo Train	National Railway "Ni Hong Medal" ²	
Yu Zhuolin	Guangzhou-Kowloon Train Onboard Service Division		
Li Hongkun	Guangzhou Carriage Maintenance Division for Passenger Train	National Railway Outstanding Individual of Spring Festival Duty Competition	
Hu Cong	Stations in Guangzhou		
Wen Tao	Guangzhou Telecommunication and		

 $^{^{2}\,}$ Honorary title named after Ni Hong, an advanced figure in China Railway

Individual	Affiliated unit	Honor awarded	
	Signal Depot		
Li Chang	Guangzhou Train Driving and Maintenance Division		
Huang Mingxiao	Guangzhou Train Onboard Service Division		
Gao Jing	Guangzhou Train Onboard Service Division		
Chen Genglong	Guangzhou Telecommunication and Signal Depot	Guangdong Province "May 1st" Labor Medal	
Zhong Miao	Stations in South Guangzhou		
Chen Xiangyun, He Yu	Guangzhou Train Driving and Maintenance Division		
Liu Dehong	Guangzhou Telecommunication and Signal Depot	First Prize of National "Red Flag Cup" Team Leader Contest Semifinal	
Gao Hairui	North Guangzhou Carriage Maintenance Division for Cargo Train	Third Prize - Award for Best Work Style of National "Red Flag Cup" Team Leader Contest Semifinal Team Leader Contest Semifinals	

Compensation Package

We uphold the philosophy of "development relies on employees, serves employees, and shares development outcomes with employees". We have established a scientifically sound compensation policy that links labor remuneration with economic benefits, labor efficiency, and individual performance, ensuring that total employee compensation is effectively tied to company performance. We prioritize employee rights protection, signing both collective and individual labor contracts, ensuring compliance with social insurance and housing fund policies, and providing benefits such as enterprise annuities and supplementary medical insurance. We also guarantee fair treatment regarding job promotions, working hours, equal opportunities, diversity, anti-discrimination measures, leave policies, and other employee welfare programs.

Employee Care

We implement various initiatives to improve employees' working and living conditions, fostering a shared destiny between the company and employees.

(1) We enforce the *Employee Health Management Action Plan (2023-2025)*, conducting health check-ups, enhancing high-risk employee health management, and organizing wellness, psychological health, and first-aid training sessions.

(2) We invest in workplace safety infrastructure, improve working environments, and enhance labor safety through technology such as drone-based rail inspections, intelligent vehicle inspection systems, and remote video surveillance to reduce labor intensity and improve safety.

(3) We accelerate the development of smart employee dormitories and apartments, introducing digital management systems for single-occupancy dormitories. Our Baiyun Crew Apartment project provides a "one-stop" living community with access

to banks, supermarkets, barbershops, and medical services for employee convenience.

(4) We improve cafeteria services by introducing innovative meal supply models and digital payment systems. The Guangzhou Railway Building Maintenance Division manages 62 employee cafeterias, serving an average of 12,000 employees daily.

(5) We organize employee cultural and sports activities, including National Day choir competitions, "Unity and Struggle" speech contests, sports competitions, hiking events, and art exhibitions.

(6) We visited and extended support to 6,025 employees in need and used the railway industry assistance and relief fund to support 4,381 employees.

25 Social contributions and rural revitalization

We enhance the stability, continuity and predictability of cash dividends, and actively support rural revitalization and public welfare initiatives, aligning these efforts with our core railway operations to promote sustainable economic and social development. While these activities do not have a major financial impact on company performance, they play a crucial role in fostering economic and social progress within our service regions.

During the reporting period, we successfully implemented the 2023 annual cash dividend, distributing a cash dividend of RMB0.07 per share (before tax), totaling approximately RMB496 million. Since our listing in 1996, we have implemented 25 annual cash dividends, with a total cash dividend distribution of RMB12.8 billion, resulting in a payout ratio of 64.3%.

We support rural revitalization efforts by dispatching three assistance personnel to Longjing Town in Qingyuan City and Lianjiang in Zhanjiang, with a total investment of RMB1.2 million. Additionally, we have installed charity vending machines at key passenger stations to expand sales channels for agricultural products. During the reporting period, we purchased RMB2.2 million worth of agricultural goods such as rice, cooking oil, and heat-relief supplies to support rural communities.

We actively participated in public welfare initiatives, conducting railway safety, fire prevention, environmental protection, health, and legal awareness campaigns in communities, schools, stations, and onboard trains. We organized approximately 14,000 volunteer activities, including passenger assistance, environmental cleaning, and agricultural support. Two of our employees were recognized as National Railway Outstanding Volunteers. Our employees donated approximately RMB1.82 million to the railway industry assistance and relief fund, along with other charitable donations of approximately RMB45,000.

Appendix

Sustainability Topic Index

Dimension	No.	Торіс	Corresponding chapter
Environmental	1	Response to climate change	VI.19
	2	Pollutant emissions	VI.20
	3	Waste management	VI.20
	4	Ecosystem and biodiversity protection	VI.20
	5	Environmental compliance management	VI.20
	6	Energy utilization	VI.21
	7	Water resource utilization	VI.20
	8	Circular economy	VI.22
Social	9	Rural revitalization	VII.25
	10	Social contribution	VII.25
	11	Innovation as driver	VI.23
	12	Technology ethics	V.18
	13	Supply chain security	V.16
	14	Equal treatment of SMEs	IV.13
	15	Product and service safety & quality	V.15
	16	Data security and customer privacy protection	V.17
	17	Employees	VII.24
Sustainable governance	18	Due diligence	II.05
	19	Stakeholder communication	IV.11
	20	Anti-commercial bribe and anti-corruption	IV.12
	21	Anti-unfair competition	IV.14

Key Performance Table

Indicators	2022	2023	2024
Total assets (RMB100 million)	370.41	372.35	365.67
Operating income (RMB100 million)	199.43	261.95	270.90
Net profit attributable to parent (RMB100 million)	-19.95	10.58	10.60
Basic earnings per share (RMB/share)	-0.28	0.15	0.15
Comprehensive energy consumption (tce)	126,709.62	141,879.89	148,276.74