

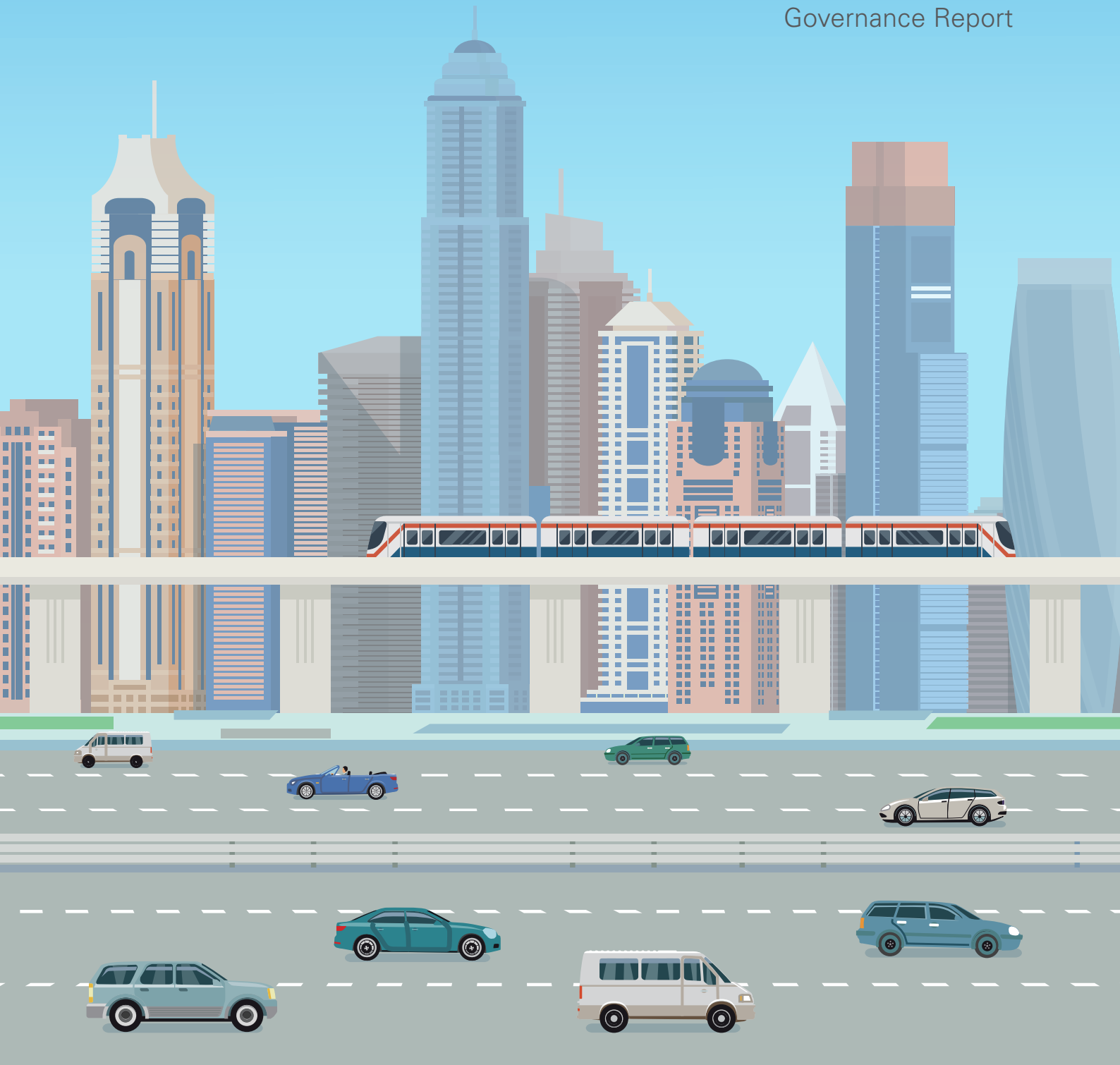
Qilu Expressway Company Limited 齊魯高速公路股份有限公司

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

Stock Code: 1576

2023

Environmental, Social and
Governance Report



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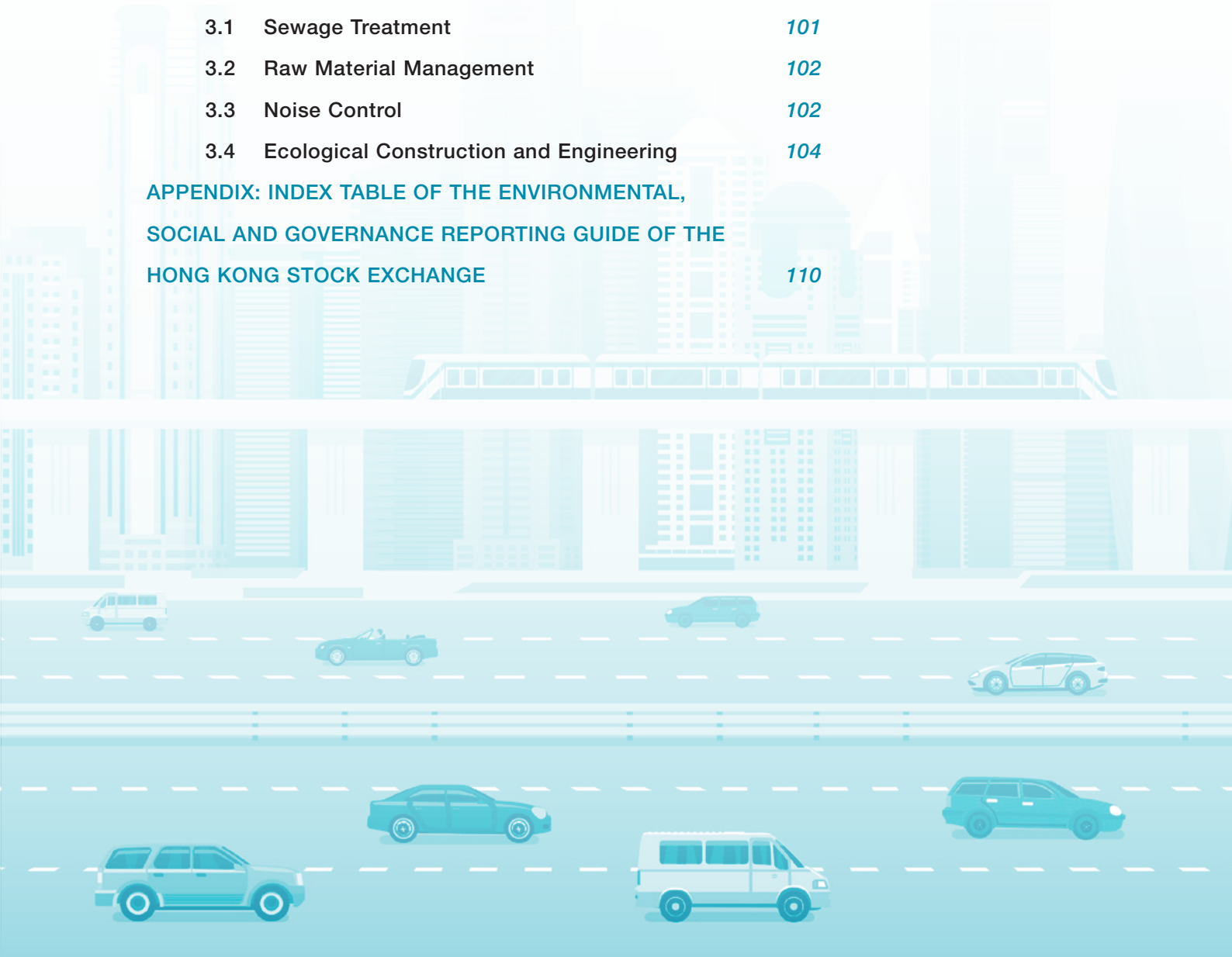
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ABOUT THIS REPORT

This report is the sixth Environmental, Social and Governance (“ESG”) report issued by Qilu Expressway Company Limited and its subsidiaries. This report mainly reports to all stakeholders on the Company’s progress in realising the concept of sustainable development and fulfilling our corporate social responsibilities.

REPORTING STANDARDS

This report is prepared in accordance with the Environmental, Social and Governance Reporting Guide (the “Guide”) as set out in Appendix C2 of the Rules Governing the Listing of Securities issued by The Stock Exchange of Hong Kong Limited (the “Stock Exchange”). This report has complied with all “mandatory disclosure requirements” and “comply or explain” provisions in the Guide, and the contents are in line with the reporting principles of “materiality”, “quantitative”, “balance” and “consistency” in the Guide. Readers may refer to the Appendix: Index of the Environmental, Social and Governance Reporting Guide of the Stock Exchange in this report for quick reference.

MATERIALITY	We have identified and disclosed material ESG factors and the criteria for their selection in this report. We have also identified and disclosed stakeholders’ engagement process and the results in the ESG report. The management has confirmed the results of the materiality assessment for this Year.
QUANTITATIVE	The Company has disclosed the statistical criteria, methods, calculation tools and sources of conversion factors for all applicable data in this report.
BALANCE	This report provides an unbiased picture of the Company’s performance during the Reporting Period to avoid selections, omissions, or presentation formats that may inappropriately influence a decision or judgement by its readers.
CONSISTENCY	Unless otherwise specified, the statistical methods and standards for the data disclosed in this report are consistent with those used in previous years. If there are any changes that may affect the comparison with previous reports, we will make clear explanations.

REPORTING SCOPE

This report sets out the overall performance of the business directly controlled by the Company in relation to sustainable development during the period from 1 January 2023 to 31 December 2023 (the “Year” or the “Reporting Period”).

ABOUT THIS REPORT

The environmental data disclosed in this report covers those that have been gathered from Qilu Expressway Company Limited, Jihe Operation and Management Centre (濟荷運管中心), Deshen Operation and Management Centre (德莘運管中心), R&E Project Office (改擴建項目辦)¹, Shandong Shunguang Industrial Development Company Limited (山東舜廣實業發展有限公司), Qilu Expressway (Hong Kong) Company Limited (齊魯高速(香港)有限公司), Shandong Gangtong Construction Co., Ltd. (山東港通建設有限公司), Qilu Expressway (Shandong) Assembly Co., Ltd (齊魯高速(山東)裝配有限公司). and Qilu Expressway (Shandong) Investment Management Company Limited (齊魯高速(山東)投資管理有限公司). In this report, “Qilu Expressway Company Limited” is referred to as “Qilu Expressway”, “the Company” and “we”, “Shandong Shunguang Industrial Development Company Limited” as “Shunguang Company” and “Shunguang”, “Shandong Gangtong Construction Co., Ltd.” as “Gangtong Company” and “Gangtong”, “Jinan Xinyue New Road Material Research and Development Company Limited” as “Xinyue”, “Qilu Expressway (Shandong) Assembly Co., Ltd.” as “Assembly Company”. For details of the Company’s corporate governance, please refer to the Corporate Governance Report section of this annual report.

DATA SOURCES AND RELIABILITY STATEMENTS

The data cited in this report are obtained from the Company’s official documents, statistical reports and financial reports, which have been reviewed by the Company. The cases disclosed in this report are obtained from the Company’s internal documents, statistical reports and relevant public information. The Board and all Directors of the Company undertake that there are no false representations, misleading statements or material omissions in this report, and are responsible for the authenticity, accuracy and completeness of its contents.

REPORTING LANGUAGE

This report is published electronically in both Chinese and English. If there is any discrepancy between the Chinese and English versions, the Chinese version shall prevail.

APPROVAL OF THE REPORT

This report has undergone internal review and was approved by the Board on 26 March 2024.

REPORT PUBLICATION AND FEEDBACK

The electronic version of the ESG Report is published on the HKEXnews’ website of the Stock Exchange (www.hkexnews.hk).

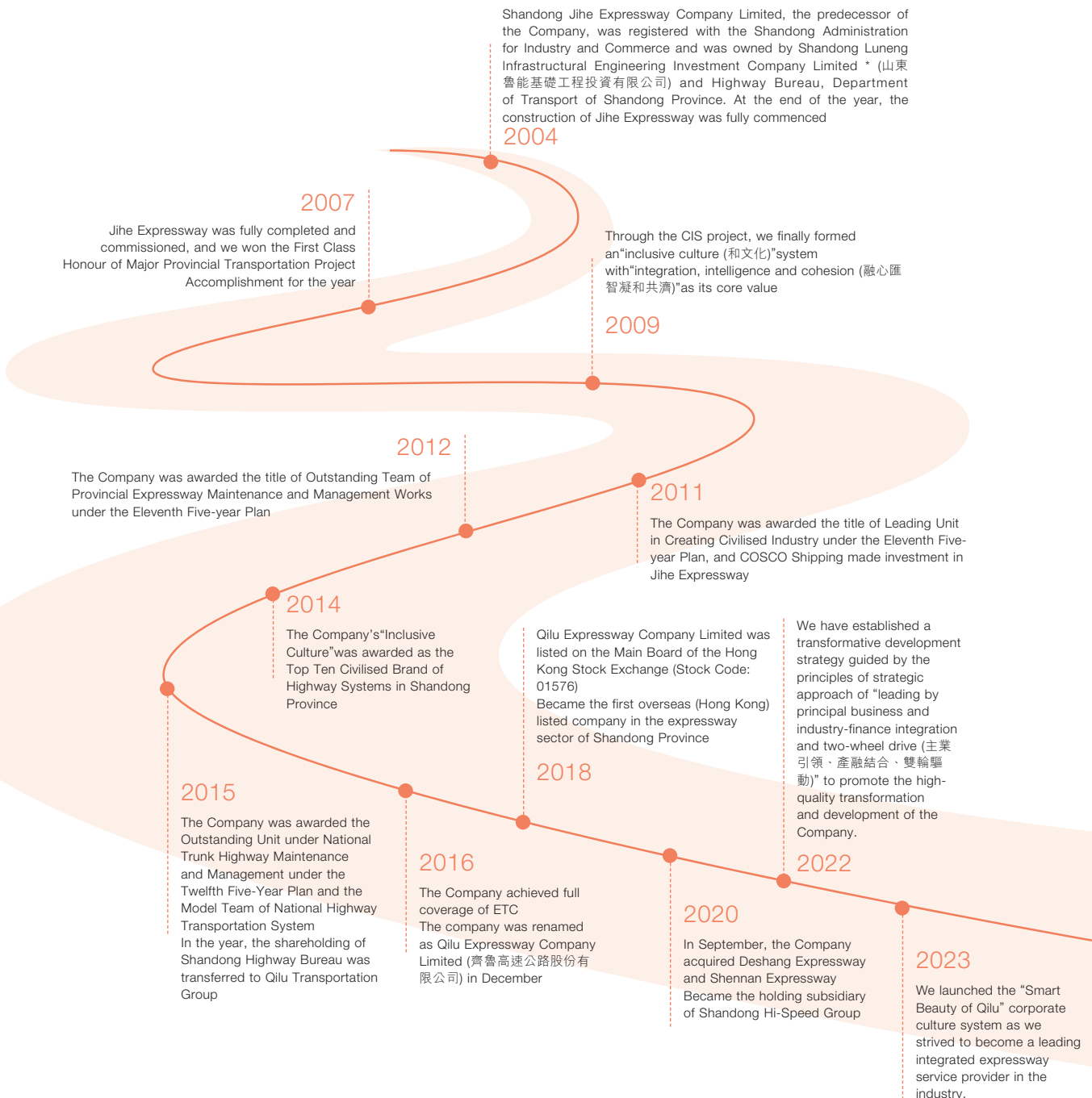
If you have any enquiries or suggestions on this report or the Company’s ESG matters, you are welcome to contact us through our official website.

Website: <http://www.qlecl.com/>

¹ During the Reporting Period, the Company actively developed the R&E project of Jihe Expressway. Due to business expansion, the relevant environmental key performance indicators (KPIs) were added to the scope of environmental data collection.

ABOUT QILU EXPRESSWAY

As a subsidiary of Shandong Hi-Speed Group Company Limited, Qilu Expressway Company Limited is a listed company in the expressway sector. We focus on investment, construction, operation and management in respect of transportation infrastructure. We are mainly responsible for the construction, maintenance, management and road operation of expressways such as Jihe Expressway (G35), the Deshang Expressway (G0321) (Liaocheng – Fan County section) and Shennan Expressway (S28), amounting to a combined length of 240.8 kilometers. Our business scope also involves the construction, maintenance, management and operation of highways, bridges, tunnels and supporting facilities; building decoration and renovation; technical consultation and services for road construction projects; processing and maintenance of construction machines; leasing of self-owned equipment; road rescue and obstacle removal services; construction and operation of ports, highways and waterways transportation; maintenance of highway information network, etc.



ABOUT QILU EXPRESSWAY

Since our establishment, we have successively won the following honours: First Class Honour of Major Provincial Transportation Project Accomplishment (2007) (全省交通重點工程立功競賽集體一等功), Leading Unit in Creating Civilised Industry under the Eleventh Five-year Plan (2011) (“十一·五”創建文明行業先進單位), Outstanding Team of Provincial Expressway Maintenance and Management Works under the Eleventh Five-year Plan (2012) (“十一·五”全省公路養護管理工作優秀集體), Top Ten Civilised Brand of Highway Systems in Shandong Province (2014) (山東省公路系統十大文化品牌), Outstanding Unit under National Trunk Highway Maintenance and Management under the Twelfth Five-Year Plan (2015) (“十二·五”全國幹線公路養護管理優秀單位), Model Team of National Highway Transportation System (2015) (全國公路交通系統“模範班組”), and Leading Team in the Transportation System of Shandong Province (2020) (山東省交通運輸系統先進集體).



For the Year, we have also been honoured with a number of awards. The Company's Pingyin toll station staff bookstore was named as "Shandong Transportation Staff Bookstore" (山東交通職工書屋) by the Shandong Transportation Workers Union, and Pingyin toll station was recognised as the 2022 Jinan Youth Work Safety Demonstration Post (濟南市青年安全生產示範崗) during the Reporting Period. The "Rose Women's Team" (玫瑰女子中隊) of Pingyin toll station was awarded the honorary title of "Civilised Female Employment" (巾幗文明崗). Shen County South Toll Station was awarded the honorary title of "Youth Command Team (青年突擊隊)" by the Liaocheng Municipal Committee of the Communist Youth League, and Jihe Operation and Management Centre was awarded in the "Refined Upgrading Activity of Traffic Safety Facilities (公路交通安全設施精細化提升活動)" by the Department of Transport of Shandong Province. Gangtong Company was awarded the title of "Civilised Unit of Jinan City in 2023 (2023 年度濟南市文明單位)". The Company won the Outstanding Organisation Award (優秀組織獎) in the "Revitalization Shandong by Skills Development (技能興魯)" Vocational Skills Competition and Smart Traffic Engineering Testing Skills Competition of Shandong Province, and the Third Prize of Shandong Province's Traffic Engineering Innovation and Entrepreneurship Competition. All of these represent recognition and praise for us. The Company recruited excellent employees, one of whom was awarded the title of Top Ten "Trustworthy Employees" (職工信賴的娘家人) in Shandong Province, one of whom was awarded the most beautiful "Chinese Female Road Worker" (中國路姐入圍個人). One individual received the second prize in the 2023 "Excellence Award (擷華獎)" Scenario-based Enterprise Microlecture Competition and one individual received the third prize in the 2023 Shandong Expressway Obstacle Clearance and Rescue Skills Competition. Moreover, three individuals were honored with the title of "Outstanding Individual in Construction of Safe Construction Sites (平安工地建設表現突出個人)" by the Department of Transport of Shandong Province, while one individual was recognized as the third session of "Most Beautiful Individual to Fight Against Drugs in Jining (濟寧最美禁毒人)".

ABOUT QILU EXPRESSWAY

OUR MISSION AND VISION

Smart Mobility

In the era of Internet of Everything, scientific and technological advancements are rapidly progressing, with smart transportation taking the lead in shaping the future. We will dedicate ourselves to devising smart expressway strategies, nurturing skilled professionals, and continuously enhancing the quality and technical expertise of our highway operation services. Through scientific and technological innovation, our aim is to revolutionize public travel by enabling smart mobility, embracing new ways of transportation.

A Brighter Future

We stay updated with current trends, striving for both economic efficiency and sustainable development. Our ongoing goal is to enhance the sense of accomplishment among our staff, generate returns for shareholders, and contribute value to the community. Moreover, we are committed to improving accessibility, happiness, and security for the public. By connecting beautiful cities, villages, and natural environments, our services empower individuals to live a better life and share a better future.

First-class Level

Our strategic objective is to attain a top-tier position. In the era of new strategies, we will persistently enhance the operational efficiency and social benefits of the Company. We will focus on improving decision-making and management efficiency, aiming to establish a first-class standard in management practices, capital utilization, scientific and technological innovation, service quality, and talent development. Simultaneously, we will make every endeavor to ensure that our level of efficiency, branding, modernization, and international presence becomes industry-leading.

Integrated Expressway Service Provider

In the new phase, our strategic objective is to concentrate on our core highway business while moderately diversifying our investments and expanding our operations. We aim to transform and upgrade from a toll collection-focused entity to a smart high-speed integrated service provider, incorporating the "road-vehicle-people-network" concept. By actively fulfilling our social responsibility, we have earned widespread respect within society. With a long-term vision, collective unity, and diligent efforts, we are committed to facilitating the high-quality development of the Company.

ABOUT QILU EXPRESSWAY

OUR DEVELOPMENT PRINCIPLES



Following the development principles of “prioritizing expressway as the foundation, utilizing capital as a tool, and emphasizing service as the priority,” the Company will explore new avenues, foster innovative models, and establish a fresh development pattern driven by both industrial and capital operation.

Expressway as the foundation

Highway operation has consistently served as the cornerstone of Qilu Expressway’s primary business. In the new strategic phase, our focus must revolve around the emerging dynamics of expressway development as the central direction. Horizontally, we aim to expand with careful precision, cultivating new avenues for growth. Vertically, we will extend along the industrial chain in a measured manner, while prudently pursuing diversified business development.

Capital as a tool

Leveraging the capital platform function of our listing, we consider capital as an accelerator. We will facilitate the symbiotic relationship between industrial development and capital financing, fortifying our investment and financing capabilities to effectively drive capital operations.

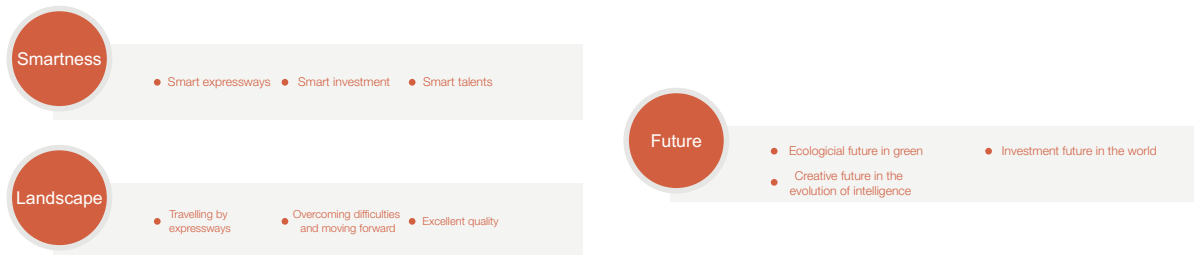
Service as the priority

The essence of expressway operation lies in the quality of service. In the era of smart expressways, long-term, high-quality operations and management services are paramount. Our objective is to strike a harmonious balance between people, vehicles, and roads, providing the public with sincere customer service. We aim to build an emotional exchange platform with our customers, fostering warm and genuine interactions to enhance the relationship between the Company and society. With utmost dedication, we will strive to establish Qilu Expressway as a renowned brand synonymous with top-notch service quality.

ABOUT QILU EXPRESSWAY

OUR ESG PHILOSOPHY AND CORE ACHIEVEMENTS

Qilu Expressway striving for smart landscape in the future



Qilu Expressway aims to provide a seamless, secure, comfortable, and harmonious experience on smart expressways. Our commitment to sustainable development goes hand in hand with our pursuit of high-quality progress. With a focus on cleanliness, environmental protection, vitality, and safety, Qilu Expressway steadfastly upholds the principles of green development. We strive to foster a new pattern of harmonious development among enterprises, individuals, and nature. Furthermore, Qilu Expressway embraces vitality and solidarity, seeking to make positive contributions to society with an open and inclusive mindset and a spirit of innovation. We prioritize sustainable development and adopt ESG strategies. Across different aspects, including the environment, talent, community, and operations, we incorporate ESG concepts and practices. Our aim is to embed the concept of sustainable development deeply within our business processes, address the concerns of various stakeholders, and make enduring contributions to both the industry and society.



ABOUT QILU EXPRESSWAY

HIGHLIGHTS AND ACHIEVEMENTS

In 2023, we made concerted efforts and worked tirelessly towards our goals.

Operation

Focusing on our core responsibilities and primary business, ensuring seamless operations throughout the year.



Integration

In November, the Company's photovoltaic projects in some road areas of Liaocheng were successfully connected to the power grid and commenced operation. These projects have a combined installed capacity of 8.2MW, representing a significant milestone in the Company's efforts to integrate transportation and green energy.



ABOUT QILU EXPRESSWAY

Transformation

Phase I of the Intelligent Transportation Industry Park was put into full operation, advancing the deepening and upgrading of industrial transformation.



Innovation

The energetic advancement and transformation of scientific research and innovation, by unleashing potentials, will spark the "new engine" of high-quality enterprise development.



CHAIRMAN STATEMENT

Entering the “14th Five-Year Plan” period, we actively participated in the construction of a transportation-strong province in the new era and a green, low-carbon and high-quality development pilot zone in Shandong with focus on strategic transformation and upgrading, accelerating development, comprehensively optimising business layout and development path, effectively improving operational vitality and management quality and efficiency, as well as significantly expanding asset scale and comprehensive strength. Jihe Expressway, the core asset, is about to usher in a qualitative leap. We are accelerating our progress towards the high-quality development goal of “better temperament, higher attractiveness, and greater vitality”, and strive to build a “four new” state-owned enterprise with “new development mode, new corporate governance, new operation mechanism and new layout structure”.

In 2023, we took the initiative to seek changes and made progress in transformation and upgrading. On the basis of comprehensive analysis of national policy opportunities, its own resource endowment and external market environment, we implemented the new transformation and development strategy of “leading the main business, integrating industry and finance, and driving growth with dual wheels”, highlighted the amplification of core resources in the main business of expressways, and established a new development pattern of “driving growth with dual wheels” of capital operation and industrial management, so as to start the transformation and upgrading of traditional road enterprises towards “first-class integrated service provider of expressways”.

In 2023, we made breakthroughs in development and optimised the industrial structure. The Qilu Expressway Smart Transportation Industrial Park commenced stable production, achieving production and profit for the same year. The project actively implemented the design concept of “energy conservation and emission reduction, high efficiency and stability, and green ecology” and integrated the application of new technologies such as the Internet of Things, big data and artificial intelligence, building a digital operation and management platform for the whole process, which better achieved multiple goals such as “improving production efficiency, reducing costs and increasing efficiency accurately, and integrating ecological industries”. In addition, we also focused on the upstream and downstream industries of expressways and implemented a high-standard, standardized layout of a number of industrial and financial investment projects, creating a new profit growth point for the Company’s high-quality development.

In 2023, we optimised our services and enhanced the service experience. Deepening the concept of “customer-centricity” and embracing the corporate mission of “creating a better road and experiencing a smarter future”, we highlighted intelligent upgrades and innovative operational models and made great efforts in scientific management and control, digital scheduling, precise rescue, quality service and other aspects. We continuously promoted the optimisation and strengthening of the main business, improved quality and efficiency, and made every effort to create a “safe, smooth and intelligent” high-speed traffic environment for the public.

In 2023, we innovatively pursued cross-sector integration and promoted the concept of “integration of transportation and tourism”. Leveraging the driving force and linkage role of expressways in the economic and social development of the regions along the route, we took meeting the needs of the public and serving the regional development as a breakthrough, innovatively implemented the “Expressway +” cross-border operation service model, and demonstrated the social responsibility of state-owned enterprises in providing high value-added services for drivers and passengers. Throughout the year, we signed 24 “Expressway+” agreements with scenic spots, hotels, and other units along the route, totaling 36 collaborative partners, thereby effectively bringing numerous value-added benefits to drivers and passengers, such as travel, accommodation, refueling, vehicle maintenance and rescue services.

CHAIRMAN STATEMENT

In 2023, we fulfilled our responsibilities and implemented low-carbon development. With a focus on implementing the national “dual carbon” strategy, we maximized the utilization of idle space resources such as highway ramps, slopes, and toll stations. We deployed distributed photovoltaic projects along the Deshang and Shennan Expressways to transform the expressways into “power stations”. At the end of 2023, some of our photovoltaic projects in certain road areas were successfully connected to the grid and put into operation, with a total installed capacity of 8.2MW. On this basis, we have also officially launched the distributed photovoltaic project along the Jihe Expressway, aiming to accelerate our progress towards creating the “first zero-carbon national expressway through renovation and expansion” throughout the year.

In 2023, we increased investment and strengthened technological innovation. We placed a strong emphasis on practical application and made vigorous efforts in technological innovation. Our research and development investment in 2023 doubled compared to the previous year by obtaining 1 invention patent, 5 utility model patents and 7 software copyrights, and 3 projects were selected into the second batch of technological innovation project plans in the province, reflecting that the new quality productivity with the characteristics of Qilu Expressway is being cultivated and expanded.

In 2023, we deepened our reform and enhanced our corporate value. We optimised and adjusted the organisational structure and the responsibilities of the headquarters, clarified the authority boundaries and business processes, and improved the institutional system construction and organisational structure design in a more scientific manner. At the same time, we completed and released the compliance management system, and comprehensively launched digital transformation, which realised the benign interaction and efficient operation between the headquarters and subsidiaries. Under the complementation and coordination of production and operation and safety and compliance, as well as the integration of management efficiency and business benefits, the Company’s long-term, efficient and healthy development gained strong support and assurance. In 2023, we also insisted on strengthening our brand and enhancing our value by successfully holding the first annual performance release conference and the first annual mid-term performance roadshow since the listing of the Company. We had more than 120 interactions with domestic and foreign investors, conveying the Company’s investment value to the global capital market.

In 2024, inheriting the entrepreneurial spirit of twenty years and setting sail into a new era of high-quality development, we will firmly establish our goal and vision of becoming “first-class integrated service provider of expressways” by accurately grasping the overall situation, actively devoting ourselves to the deepened and upgraded state-owned enterprise reform, and accelerating the innovative, open, green and low-carbon development. We will embark on a “green” path, strive for “new” endeavors and pursue a “smart” transformation, in order to comprehensively enhance the core functions and core competitiveness in “creating value for society, shareholders and staff”.

Qilu Expressway Company Limited

Wang Zhenjiang

Chairman

26 March 2024

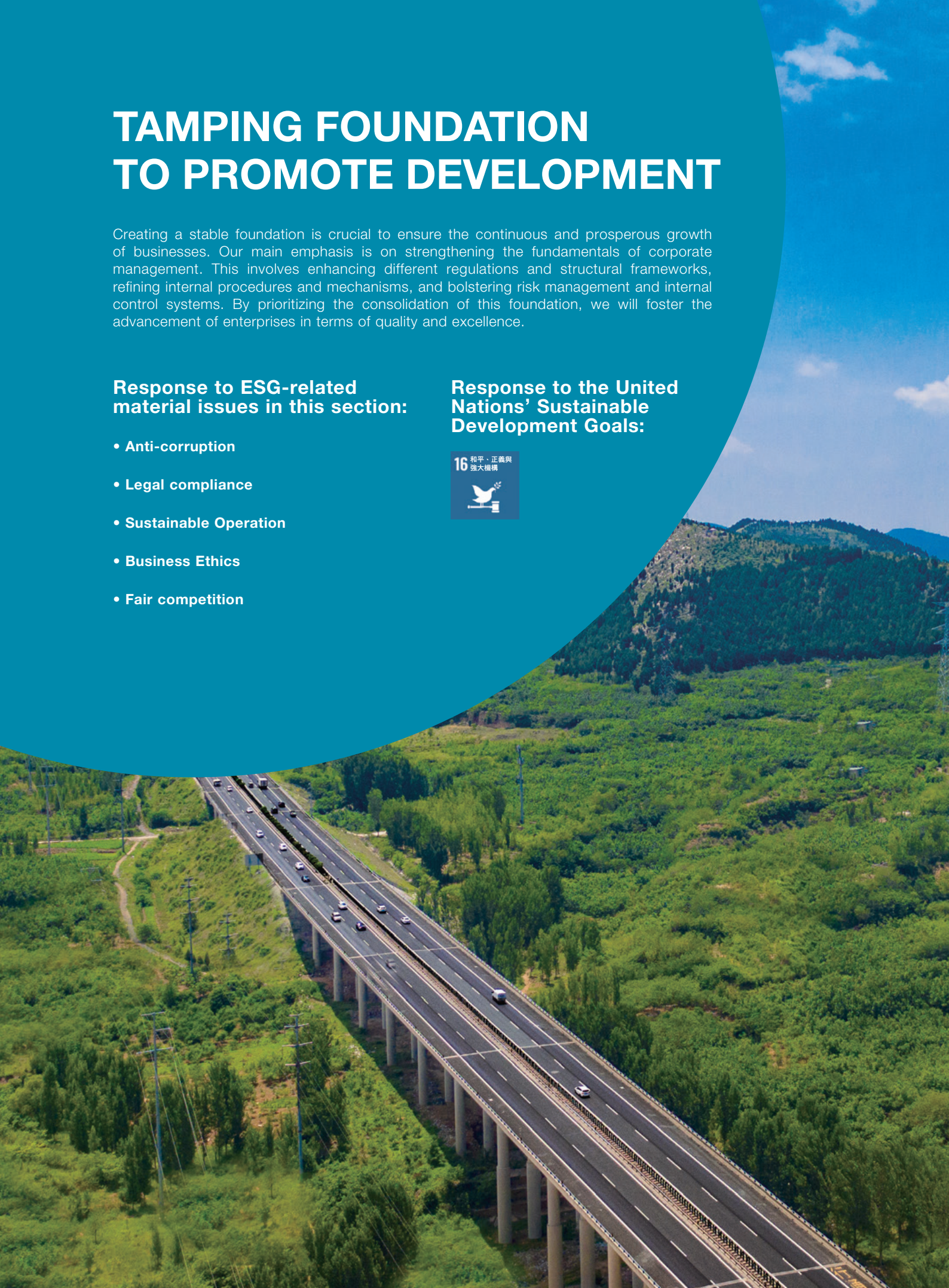
TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Creating a stable foundation is crucial to ensure the continuous and prosperous growth of businesses. Our main emphasis is on strengthening the fundamentals of corporate management. This involves enhancing different regulations and structural frameworks, refining internal procedures and mechanisms, and bolstering risk management and internal control systems. By prioritizing the consolidation of this foundation, we will foster the advancement of enterprises in terms of quality and excellence.

Response to ESG-related material issues in this section:

- Anti-corruption
- Legal compliance
- Sustainable Operation
- Business Ethics
- Fair competition

Response to the United Nations' Sustainable Development Goals:



I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

1. ESG GOVERNANCE

We acknowledge the importance of incorporating ESG principles into our operational strategies and day-to-day activities. We are mindful of the influence our operations have on the environment and society, as well as the interests of all stakeholders involved. Our dedication lies in seamlessly integrating the environmental, social, and governance (ESG) concept across all facets of our business operations, with the ultimate goal of attaining sustainable development. We always attach great importance to fulfilling our social responsibilities, effectively coordinate the Company's economic and social benefits, short-term interests and long-term interests, as well as our own development and social development, and strive to achieve the healthy and harmonious development between the Company and its employees, the Company and the society, and the Company and the environment.

▲ 1.1 Board Statement

The Company recognises the importance of Board leadership and participation to sustainable development and is committed to integrating ESG concepts into business operations. As the highest decision-making body, the Board is responsible for the Company's ESG strategy and reporting. In accordance with the requirements of the ESG Reporting Guide, the Board of Qilu Expressway formulates the Company's strategic ESG direction, sets targets and business development plans for the Company, monitors the performance of the senior management, and is responsible for corporate governance.

The Company attaches great importance to sustainability-related risks and important ESG issues. The Board is concerned about the update of the ESG issue pool, the priority of material issues and the results of materiality assessment. Under the leadership of the Board, the senior management is responsible for implementing the Company's strategies and business objectives. The Board has participated in the assessment of material ESG issues for the Year and conducted final approval and confirmation.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

The Company pays attention to environmental-related performance, and pays attention to sustainable development issues such as environmental protection, green construction, waste gas emissions, energy use, and combating climate change. During the Year, the Board has reviewed the Company's policies, strategies, material issues and environmental goals in relation to ESG management, and has committed to continuously monitoring the progress of the goals in the future, and formulating or updating corresponding measures as and when appropriate to promote the Company to further achieve its sustainable development goals.

▲ 1.2 ESG Management Structure

In order to further strengthen ESG management, the Company is optimising the ESG management structure and refining the operations of the ESG Working Group.

The ESG Working Group serves as the Company's governing body for managing ESG initiatives. Its responsibilities include implementing the decisions and arrangements of the Board, formulating the Company's ESG management mechanism and work plan, and improving the ESG management structure to ensure that ESG compliance requirements are met; coordinating and managing the Company's ESG work, including management improvement, tracking the completion of goals, preparation of ESG reports and ESG information disclosure; regularly identifying the Company's ESG-related risks, determining the degree of ESG risks, and formulating management policies and plans for various ESG risks.

ESG Task Force functions as the operational arm of the Company's ESG efforts. Its primary responsibilities involve daily ESG-related tasks, monitoring the Company's ESG rating and progress towards related goals. The ESG Office is responsible for devising the Company's ESG work plan, collecting daily and annual ESG data, conducting comprehensive assessments, and facilitating the preparation of ESG reports. The ESG Working Group office carries out ESG information disclosure, provides progress updates on the Company's ESG management, and fulfills assigned responsibilities by the ESG Working Group.

To facilitate efficient work, each subsidiary, department at the headquarters, and the R&E Project Office has designated an ESG working specialist to collaborate with the ESG Office in executing their respective tasks.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

▲ 1.3 Communication with Stakeholders

The Company places great importance on engaging with stakeholders and is dedicated to establishing regular communication channels with them. We actively listen to their expectations and requirements and strive to protect their interests. Based on the unique characteristics of our business and operations, we have identified key stakeholders, including shareholders and investors, government and regulatory authorities, employees, customers, communities, and non-governmental organizations. We have established diverse communication channels to maintain strong connections with these stakeholders. Our goal is to incorporate their opinions into the Company's ESG work and enhance our ESG management and decision-making. We maintain close contact with stakeholders through various effective methods such as email, interviews, phone calls, meetings, questionnaire surveys, training sessions, stakeholder meetings, and corporate information disclosure. By doing so, we stay informed about the expectations and suggestions of all parties involved.





Case: Holding the 2022 Annual Results Conference in Hong Kong

On 28 March, the Company held its 2022 annual results conference in Hong Kong and released its 2022 annual results to the global market through live webcast. Wang Zhenjiang, Chairman of the Company, gave a speech on behalf of the management of the Company, and detailed the overall operation of the Company in 2022 in terms of financial analysis, business review and prospects. The management of the Company gave an on-site reply to the concerns of market investors and analysts regarding the Company's development potential, business layout, dividend policy, financial instrument innovation, the R&E project of Jihe Expressway and ESG governance.






I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

The table below sets forth the significant concerns raised by various stakeholder groups during the Reporting Period:

Stakeholders	Communication Channels	Concerns on ESG issues
 Shareholders/ Investors	Fulfilling obligations for disclosing statutory information Organizing activities to exchange performance updates Regularly publishing reports and results announcements	Corporate governance regulations Steady performance growth Sustainability
 Customers	Making a commitment to service quality Establishing a hotline for communication Conducting surveys to measure customer satisfaction	Product quality stability Customer service and communication Protection of information and privacy
 Employees	Establishing democratic committees at all levels Convening meetings with employee representatives for reporting Facilitating various employee training programs and activities Setting up a complaint and feedback mailbox	Safeguarding basic rights and interests Career development attainment Salary and welfare growth Diversity and equal opportunity
 Partners	Conducting bidding meetings Sharing management expertise and technical standards Engaging in negotiations and daily meetings for cooperation Providing training sessions for partners Holding daily meetings for business exchange	Fair and transparent procurement Win-win cooperation

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Stakeholders	Communication Channels	Concerns on ESG issues
 Community	Initiating dialogue with local communities Conducting visits and exchanges with the community Carrying out social and environmental evaluations of projects Promoting knowledge dissemination and education Improving the disclosure of information	Employment growth Community environment protection Community economy boost Respect for community culture and traditions
 Government and Regulatory Authorities	Sharing corporate experience Paying attention to social feedback Establishing strategic partnerships with government authorities Participating in symposiums and forums	Promotion of harmonious economic and social development Leadership role of brand and technology Tax payment in accordance with the law Anti-corruption
 Non-Governmental Organizations	Sharing corporate experience Engaging in relevant activities Promoting business communication	Improvement of sustainable management Fulfillment of social responsibilities, including poverty alleviation and environmental protection

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

▲ 1.4 Materiality Assessment

The Company regularly reviews and evaluates the key ESG issues related to the Company, and reviews their impact on the Company and stakeholders. During the Year, the Company conducted an internal assessment on the materiality of ESG issues based on the following materiality assessment process, and used the results as the basis for the preparation of this report.



Collection and identification of ESG issues

We consider various factors to identify ESG issues in accordance with the requirements of the ESG Reporting Guide, including compliance with national policies, referencing the materiality issue database of the Sustainability Accounting Standards Board (SASB) in the United States, analyzing industry trends in the expressway sector, conducting peer comparisons, aligning with the Company's future development plans, in tandem with prioritising the concerns of stakeholders.



Materiality Assessment and Confirmation

Based on the above analysis, the identified issues are divided into three categories, namely environmental, social and governance, and internal materiality assessment is conducted



Verification of Assessment Results

Senior management and ESG Working Group of the Company review and confirm the evaluation results

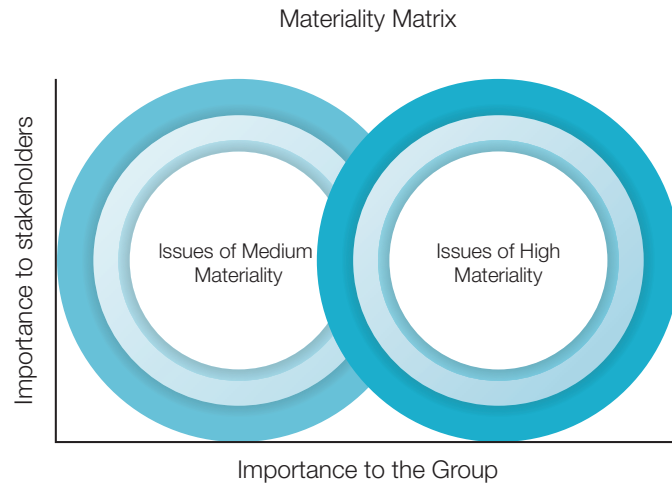
I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

▲ 1.5 Results of Materiality Assessment

The Company identified a total of 27 ESG issues, including 9 environmental issues, 13 social issues and 5 governance issues. This report will be disclosed in detail with reference to the results of the materiality assessment.

Issues of High Materiality	Issues of Medium Materiality
Emissions	Noise management
Use of resources	Waste Management
The environment and natural resources	Supply Chain Management
Energy conservation and consumption reduction	Technological innovation
Impact of climate change on business	Charity
Water resources management	Sustainable Operation
Low-carbon operation	
Customer service and communication	
Product responsibility	
Privacy and information security	
Smooth road traffic	
Labour standards	
Community investment	
Health and safety	
Development and training	
Employment	
Employee benefits	
Anti-corruption	
Legal compliance	
Fair competition	
Business Ethics	

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT



I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

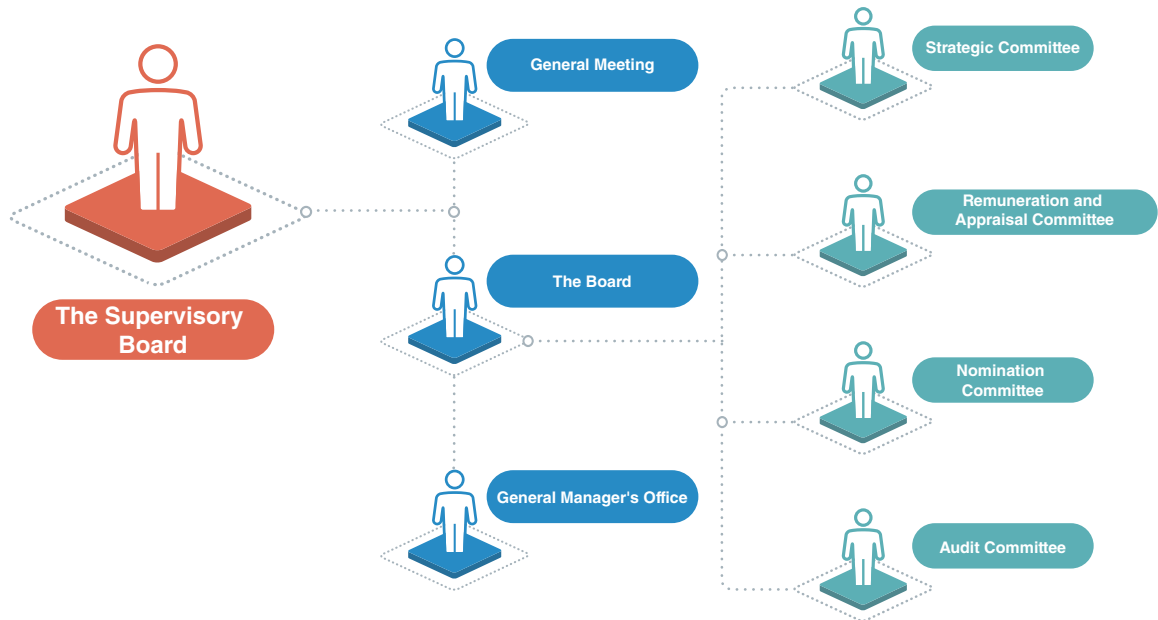
2. ENSURING STABLE GOVERNANCE

Qilu Expressway is dedicated to establishing a stable and enduring governance structure. We outline decision-making bodies and functional departments at every level, adhering to the Company's system and implementing impartial and well-defined internal guidelines through governance regulations. Simultaneously, we enhance coordination and control across all procedures, reinforce integrity building, and prioritize the review and enhancement of operational processes. We uphold principles of openness and transparency, maintaining a steadfast commitment to compliance and continuously strengthening internal supervision. We actively promote administrative accountability within the organization.

▲ 2.1 Corporate Governance Structure

Qilu Expressway has implemented a robust compliance mechanism to oversee and report the Company's compliance. We have established a governance structure that encompasses the legal rights and responsibilities, transparent power allocation, coordinated operations, and effective checks and balances among various entities, including the general meeting, the party committee, the Board, the management, and the supervisory board. Besides, the business departments at the headquarter of the Company are divided into 10 functional departments, namely the General Office, the Party-related Work Department, the Discipline Inspection Committee Office, the Human Resources Department, the Securities Investment Department, the Enterprise Management Department, the Planning and Finance Department, the Audit and Legal Department, the Operation Department and the Safety Management Department, with clear division of labour and sound and clear functions, and all departments operate efficiently under the unified leadership of the management. In our operations, we strictly adhere to the Company Law of the People's Republic of China 《中華人民共和國公司法》, the Securities Law of the People's Republic of China 《中華人民共和國證券法》, the Code of Corporate Governance for Listed Companies 《上市公司治理準則》, and other applicable laws, regulations, and normative documents. We devised the Articles of Association and other relevant corporate frameworks, delineating the responsibilities, authorities, procedural rules, and working procedures of the general meeting, Board of Directors, Board of Supervisors and the management. This was done to ensure a clear separation of powers and responsibilities, streamlined operations, and effective control and balances among the various governing bodies responsible for authority, decision-making, execution, and supervision. The Company remains committed to rigorous and standardized governance practices. We are continuously enhancing our corporate governance structure to effectively address any emerging challenges that may arise.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT



Corporate Governance Structure

In 2023, the Company conducted one annual general meeting and one extraordinary general meeting, during which all proposed resolutions were considered and approved. Additionally, a total of seven Board meetings were convened, addressing various important matters such as the Board's work report for 2022, Profit Distribution and Dividend Declaration Plan for 2022, 2022 Annual Results Announcement, the nomination of director candidates for the third session of the Board of directors, the election of chairman of the third session of the Board of directors; the successful completion of the re-election of the members of the Board of directors, the reelection of the members of the board of supervisors and the appointment of a new senior management team.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT


▲ 2.2 Compliance and Risk Management

Compliance Management

During the Year, Qilu Expressway thoroughly implemented the Company's work requirements of "deepening and improving compliance management", continued to enhance the development of our compliance management system, and promoted the construction of the compliance management system of subsidiaries by levels and categories.



During the Year, the Company made significant efforts to enhance its compliance system through the following measures:

-  Revising the Compliance Management Measures 《合規管理辦法》 and integrating discipline inspection and supervision into the existing compliance system;
-  Developing 14 management measures including the Operation Rules of the Compliance Management System (Trial) 《合規管理體系運行規則(試行)》, and revising and improving six management measures including the Compliance Management Measures 《合規管理辦法》, which further improved the Company's compliance-handling process and established a strong foundation for future compliance initiatives; and
-  Conducting a meticulous review of our business operations, conducting thorough risk assessments, and carefully determining the level of risk, compliance obligations, and responsible parties. As a result, we identified a total of 406 compliance risks across 18 business areas. Based on the nature and potential consequences of these risks, we further identified 55 critical risks, forming a Compliance Bottom Line List.

The Company's management placed significant emphasis on compliance work. Following the initial establishment of the compliance system, the Company remained proactive and swiftly delineated two crucial areas (investment and bulk trade) in line with the principle of "comprehensive coverage and key highlights (全面覆蓋、重點突出)" outlined in the compliance management measures. The Company thoroughly sorted out compliance risks within these business domains and developed the Special Guidelines for Bulk Trade Business (Trial) 《大宗貿易業務專項指引(試行)》 and the Special Guidelines for Investment Business (Trial) 《投資業務專項指引(試行)》, which serve as a reference for the Company's compliance efforts in these areas.

In alignment with the "construction by hierarchy and category" approach outlined in the Opinions on Further Strengthening Compliance Management 《關於進一步加強合規管理工作的意見》 of the Company, we conducted a thorough assessment of five subsidiaries to establish their compliance systems. We carefully analyzed the specific business circumstances of each subsidiary, set customized objectives, and implemented targeted work plans accordingly. By the end of 2023, all five subsidiaries had successfully established Compliance Committees, devised and disseminated the Compliance Risk Lists and the Compliance Bottom Line Lists tailored to their unique business characteristics. Additionally, three subsidiaries formulated and issued the Compliance Management Measures. As a result, these five subsidiaries have made significant progress in developing their compliance systems.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Risk Management

We have established a risk management process by upholding legal compliance as the fundamental. Through enhanced supervision, we continuously identify potential hazards to establish a robust defense against risks.

- Following the guiding principle of “coordinated and promotion, classified management, independent implementation, and integrated operation (統籌推進、分類管理、自主實施、整合運行)”, the Company has developed a risk management system and a risk classification list. After extensive communication and confirmation with various departments, we have initially identified 180 risk points across five areas: strategy, operations, finance, law, and market. This has laid the foundation for the initial establishment of the risk management system.
- The original Risk Assessment Management System of the Company underwent revisions, and the Risk Management Measures were formulated and issued. These initiatives have provided a solid institutional framework for the orderly development of risk management in the future.

We actively identify and manage various risks associated with our business, including environmental and social risks. Further details on relevant emergency plans, measures, and practices will be disclosed in subsequent sections.



Case: Litigation Trainings for Legal personnel



I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

During the Year, we provided legal education to enhance our proficiency in legal matters. A total of 14 training sessions on law advocacy were organized, consisting of four general law sessions and six specialized law sessions. Additionally, we self-organized two sessions on specialized law and two sessions on general law. Notably, the Company arranged a seminar on criminal compliance risks for all employees and a seminar on legal dispute cases specifically for legal personnel within our subsidiaries, both of which produced positive outcomes.

Information Disclosure

Qilu Expressway upholds transparency by providing information on ESG performance and policies. We strictly adhere to the relevant provisions outlined in the Administrative Measures for the Information Disclosure of Listed Companies 《上市公司信息披露管理辦法》 and the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited 《香港聯合交易所有限公司證券上市規則》, and fulfill our legal obligations regarding information disclosure, ensuring the accuracy, authenticity, and completeness of the disclosed information. We prioritize the timely and fair disclosure of information, avoiding any false, misleading statements, or significant omissions. In 2023, the Company issued a total of 51 announcements.

▲ 2.3 Integrity and Compliance with Law

Anti-Corruption system

Qilu Expressway places significant emphasis on integrity and business ethics, maintaining a steadfast commitment to nurturing a long-lasting culture of integrity. We have implemented an anti-corruption system, which focuses on ethical conduct and the fulfillment of duties and responsibilities. We also established a robust “mega supervision” system that consolidates various oversight initiatives within the Company, which fosters a comprehensive, collaborative, and efficient internal supervision framework, enabling the integration and mutual reinforcement of targeted supervision, functional supervision, and democratic supervision. We also conducts diverse integrity awareness campaigns and educational initiatives, thereby cultivating a culture of integrity and strengthening the penetration of integrity education. Through various measures, we strive to foster a mutually accountable environment to establish effective reporting channels and handling mechanisms, while safeguarding the rights and interests of whistleblowers. Additionally, we actively focus on fraud prevention in our management practices. We hope to instill a culture of transparency and fairness throughout our operations.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

We strictly abide by the Oversight Law of the People's Republic of China 《中華人民共和國監察法》, the Working Rules for the Supervision and Disciplinary Enforcement of Discipline Inspection Authorities 《紀律檢查機關監督執紀工作規則》, the Law of the People's Republic of China on Administrative Discipline for Public Officials 《中華人民共和國公職人員政務處分法》 and other laws and regulations, and formulate a series of relevant systems, such as the Discipline Inspection Suggestion System of Qilu Expressway Company Limited 《齊魯高速公路股份有限公司紀律檢查建議制度》, the Committee Integrity Dialogue System of Qilu Expressway Company Limited Committee 《中共齊魯高速公路股份有限公司委員會廉政談話制度》, the Discussion and Establishment of "First Issue" System for the Discipline Committee of Qilu Expressway Company Limited 《中共齊魯高速公路股份有限公司紀律檢查委員會紀委會議制“第一議題”制度》, and the Collective Learning System of Discipline Committee of Qilu Expressway Company Limited 《中共齊魯高速公路股份有限公司紀委集中學習制度》.

We establish a coordination group which is responsible for overseeing the construction of Party conduct, clean governance, and anti-corruption efforts. The primary responsibilities of this group include:

- Reporting any emerging or ongoing issues, as well as violations of laws and regulations, identified during supervision, inspections, and daily management;
- Sharing experiences and practices in effective supervision, analyzing the root causes of problems, and providing suggestions for system revision and improvement.

As a general practice, the coordination group holds quarterly meetings and convenes as needed to facilitate communication and coordination between the Discipline Committee and the departments responsible for business management. In 2023, the Company had no significant anti-corruption violations that impacted its operations.

To ensure standardized operations and the limitation of power, the Discipline Inspection Committee Office of the Company categorizes power-related matters into various domains, such as handling problem clues, conducting inspections, enforcing disciplinary actions, responding to opinions on Party conduct and clean governance, reviewing cases, accepting complaints, and proposing discipline inspection measures. Each office carries out its respective duties and assumes specific responsibilities to strengthen integrity risk prevention and control. The Discipline Inspection Committee Office regulates the handling of various issues through a clearly defined power operation flowchart.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

- **Designated personnel responsible for addressing potential issues**

- Work Scope: verify the identities of whistleblowers and subjects, the main details and nature of the reported issues, complete the “Form for Approval of Addressing Issues” (《問題線索處置呈批表》), register the case number, and provide suggestions for addressing the issues.
- Basis: referring to the provisions in Article 2, Article 4, Article 6, Article 8, Article 9, and Article 10 of the Articles
- Timeline: Within 5 working days

- **Head of the Discipline Inspection Committee Office**

- Work scope: Review the conformity of the Form for Approval of addressing issues and the applicability of suggestions.
- Basis: Basis: referring to the provisions in Article 2, Article 4, Article 8, Article 9, Article 11 of the Articles
- Timeline: Within 1 working day

- **Secretary of Discipline Inspection Committee**

- Work scope: Review and approve the suggestions on addressing issues.
- Basis: referring to the provisions in Article 8, Article 9 and Article 11 of the Articles
- Timeline: Within 3 working days

- **Secretary of the Party Committee**

- Work scope: review and approve the suggestions on addressing issues related to middle-level personnel directly managed by the Party Committee of the Company
- Basis: referring to the provisions in Article 11 of the Articles
- Timeline: Within 3 working days

Resolution Process Flowchart of Potential Issues

Anti-Corruption Trainings

We conduct regular anti-corruption training sessions for all employees to enhance their understanding and adherence to anti-corruption requirements in critical risk areas. In 2023, the Company’s Discipline Inspection Committee arranged a comprehensive series of integrity education and anti-corruption trainings. Throughout the Year, a total of 15 directors participated in anti-corruption training, totaling 10 hours of training duration. Additionally, The number of attendees for the anti-corruption training sessions was 450, accumulating a total of 20 training hours.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

 **Case: Strengthening the integrity education of young cadres and arranging trips to the Anti-corruption Education Base (廉政教育基地) of Jinan Procuratorate**



 **Case: Providing Integrity education on a quarterly basis**



I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Financial Risk Control

The Company is dedicated to strengthening the foundation of its systems and enhancing the development of the financial control system. In 2023, the Company successfully revised and implemented four systems, including receivables management and centralized fund management. These revisions further standardized and improved the Company's financial management, enhancing the efficiency and transparency of its financial operations.

The Planning and Finance Department of the Company conducted targeted inspections to assess the quality of accounting records in 2023, through which it comprehensively reviewed the subsidiaries' management status and identified existing issues related to system construction, accounting practices, and file management. It provided effective recommendations for rectification, increased awareness among subsidiaries about the importance of financial information quality, and established clear work standards, with the aim of ensuring the quality of information remains manageable.

We continued to enhance our financial internal control management, focusing on the management and control of financial accounting right from the source. In accordance with relevant regulations of the Company, we conducted comprehensive reviews to ensure the authenticity and effectiveness of original accounting vouchers. Our aim was to ensure that the content and elements of the vouchers were complete, and that proper approval procedures were followed. Vouchers that did not meet the requirements were not accepted. Expenditures were strictly handled in accordance with the approval procedures, and costs and expenses were centrally managed to ensure adherence to the prescribed scope. We maintained a principle of separating incompatible positions, assigning different personnel to roles in various stages, thus establishing a mechanism of mutual control and balances. Designated individuals regularly reviewed and sorted out the information and permissions of personnel accessing the financial accounting software. Passwords for the financial software were regularly updated. Dedicated personnel were responsible for backing up and storing server data separately to ensure the security and stability of financial data.

We accelerated the construction of a centralized fund management system and implemented a model of "unified management and hierarchical authorization" to achieve visualized fund management. Throughout the Year, we successfully completed integration of ERP with seven banks, covering a total of 25 bank accounts across 8 subsidiaries, excluding Hong Kong companies. This achieved an ERP integration rate of 43.10%, further enhancing fund management visibility. Additionally, we strengthened financial sharing management and control, leveraging modern information technology and specialized divisions of labor. We improved the business scenarios and approval processes for shared receipts, provided systematic training for financial information system administrators, and training on automated management for monthly breakdown of highway operations and fixed asset modules. These efforts contributed to the establishment of a standardized business processing model. By centralizing the management and control of information, we successfully mitigated financial risks related to resource diversification.

I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Case: Organised tax management training

To strengthen tax management, the Planning and Finance Department formulated relevant topics and organized tax training in July, which covered various policies related to Golden Tax Phase IV, comprehensive digital electronic invoices and tickets, primary analysis of tax agreements, financial statements, tax risk analysis, and external non-trade payments. These initiatives enhanced the financial personnel's understanding of new business requirements and ensured compliance with new systems and standards. In August, the Company organized discussions on common issues in final accounts audits and provided interpretations of tax policies for 2022. This facilitated a timely understanding of the latest tax policies, risk alerts, and improved monitoring of tax-related risk events, ultimately strengthening tax risk prevention and control efforts.







I. TAMPING FOUNDATION TO PROMOTE DEVELOPMENT

Whistleblowing Procedures

The Company has made improvements to its integrity reporting procedures and actively supported measures to address internal corruption, malpractice, and neglect of duty. To facilitate integrity reporting, the Discipline Inspection Committee Office of the Company has established a dedicated bulletin board, which displays information such as the reporting hotline, QR code, email address, and mailing address for whistleblowing, while ensuring the confidentiality of whistleblowers' identities. Additionally, the Discipline Inspection Committee Office regularly arranges subordinate departments to review the effectiveness of the reporting procedures.

In compliance with the Working Rules for the Supervision and Disciplinary Enforcement of the Discipline Inspection Authorities of the Communist Party of China 《中國共產黨紀律檢查機關監督執紀工作規則》, the Provisions on the Supervision and Law Enforcement of the Supervision Authorities 《監察機關監督執法工作規定》, the Measures for the Management and Addressing of Issues of the Discipline Inspection Committee and the Supervision Committee of Shandong Province (Trial) 《山東省紀委監委機關問題線索管理處置工作辦法(試行)》 and other relevant regulations, the Company has developed the handling rules for whistleblowing to govern the management and addressing of issues within the Discipline Inspection Committee and the Supervision Committee Office of the Company. If any Party organization or Party members under the Company's Party Committee violate Party discipline or engage in neglect of duty, and if the Company's management personnel at all levels who exercise powers are suspected of involvement in illegal activities or job-related crimes, relevant information and materials such as letters, call and visit records, online reports, text, data, audiovisual content, and other materials will be taken seriously. The responsible individuals will be held accountable and subjected to appropriate disciplinary measures.

The Company's integrity reporting channels are as follows:

- 
Report hotline: 0531-87207051
- 
Email: qlgsgfjw@163.com
- 
Address: Room 2311, Building A3-4, Hanyu Jingu, Longao North Road, High-tech Zone, Jinan
- 
Postal Code: 250101

PURSuing ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

We remain focused on enhancing the quality of our road infrastructure. As traffic volume continues to increase, there is a growing need for enhanced transportation accessibility. We are dedicated to enhancing our operational capabilities to create a seamless and efficient traffic environment. Our aim is to deliver high-quality road services that meet rigorous standards, ensuring a convenient, safe, and comfortable driving experience. We aspire to collaborate with our customers in cultivating a new era of transportation and embracing a promising future together.

Response to ESG-related material issues in this section:

- Customer service and communication
- Product Responsibility
- Privacy and information security
- Smooth traffic flow
- Technological innovation
- Health and Safety

Response to the United Nations' Sustainable Development Goals:



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

1. ENSURING TRANSPORTATION QUALITY

We have been committed to enhancing road quality. We fully recognize the high standard demand for smooth operations of roads and toll stations. Our primary focus remains on cultivating a seamless traffic environment and diligently delivering top-notch road services to the general public. Through bolstering our operational capabilities, we aim to facilitate a smooth, secure, and pleasurable driving experience for the public.

▲ 1.1 Smooth Road Operation

Operation and Dispatch

The Company places significant emphasis on ensuring smooth road conditions and improves traffic command and dispatch to enhance public safety during travel. Our dispatch Centre effectively fulfills its role in providing command, diligently monitoring road operations, and promptly responding to emergencies. We implement comprehensive supervision of emergency handling, closely scrutinizing the accuracy of information received and reported, and issuing specific instructions to rectify any inaccuracies, unreasonable analyses, delays in handling, or irregular operations. Additionally, we enhance emergency scheduling levels to ensure timely deployment of rescue facilities and equipment. Major emergencies receive heightened attention, with meteorological warnings and road network information analyzed for early identification of significant events related to production safety, natural disasters, and traffic disruptions. We issue timely early warnings and collaborate closely with relevant departments and offices based on the severity of the situation. We meticulously adhere to regulations in collecting, processing, and reporting information. In the event of a major or emergency situation, we promptly report to the Company's operation and dispatch Centre, providing updates by telephone within five minutes. We maintain regular reporting every 30 minutes, adjusting as the situation progresses, and conduct unified command in accordance with relevant requirements.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



Case: Qilu Expressway took proactive measures for snow removal, ensuring smooth traffic flow

On 14 January 2023, various regions in Shandong experienced the first snowfall of the year. The expressways managed by Qilu Expressway encountered varying degrees of snow accumulation and freezing. In response, all departments within the Company promptly activated an early warning and response system, efficiently deployed personnel and machinery to conduct extensive snow removal operations, including the application of snow removers and the clearance of snow from the road surface. These efforts aimed to minimize the adverse impacts of inclement weather on road traffic, prioritizing the creation of a secure and smooth expressway environment for both drivers and passengers.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Establishment of Working Mechanism among Road Chiefs (路長)

Within each of the Company's operation and management Centres, a working mechanism among road chiefs has been devised. The responsibilities of road chiefs (路長), section chiefs (段長), and grid chiefs (網格長) have been reasonably allocated based on specific requirements, resulting in a seamless and coordinated functioning among these roles, with clearly defined responsibilities that align with the corresponding individuals. The mechanism outlines various duties, grid management approach, information consolidation, scheduling and handling procedures, and other relevant aspects of the crossroad the working mechanism among road chiefs.

- **Road Chiefs**

Road chiefs are the individuals in charge of the operation and management Centres and bear full responsibility for maintaining road conditions, ensuring road accessibility, overseeing electrical and mechanical operations and maintenance, managing safety of toll stations, and exercising operational command and dispatch within respective areas under their management. They are also responsible for facilitating effective collaboration among various departments. Additionally, they handle external communication and coordination with high-speed traffic police, local traffic police, and neighboring transport management units.

- **Section Chiefs**

Section chiefs are as deputy directors (or directors, depending on the specific circumstances) within each operation and management Centre, who are accountable for identifying, dispatching, monitoring, and addressing incidents that impact road appearance, road safety, and various emergencies within respective areas under their management. They further divide the managed areas into multiple grids, defining the scope of responsibilities for grid chiefs to ensure smooth coordination and avoid any overlap or gaps.

- **Grid Chiefs**

Grid chiefs, who hold middle management positions within each operation and management Centre, assume the role of effectively following up on and implementing inspections and the resolution of irregular events within respective areas under their management. They oversee the execution of planned inspections, analyze and summarize any issues identified during the inspection process, and promptly provide feedback to the responsible departments for rectification and treatment. This continuous improvement process aims to enhance the effectiveness of inspections.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Management of High Traffic Flow

In compliance with regulations such as the Measures for the Administration of Road Operation on Major Festivals and Holidays 《重大節假日道路運營保障管理辦法》, the Work Plan for Smooth Operation of Expressways during the Spring Festival in 2023 《2023 年春運高速公路運營保障工作方案》, and the Comprehensive Emergency Plan for Accidents due to Highway Traffic Blockage 《高速公路交通堵塞突發事件綜合應急預案》, each operation and management Centre is committed to swiftly and effectively responding to potential high traffic flow, traffic congestion and accidents during the Spring Festival period. A comprehensive security plan has been devised to facilitate uninterrupted traffic flow, emphasizing the consolidation of responsibilities by all units and meticulous implementation of prescribed measures. With a focus on the specific operation, emergency materials, equipment, and facilities have been provisioned by each operation and management Centre based on their respective production and operational conditions. Furthermore, all units have tailored the smooth operation plan to their own situations through a “one policy for one station” approach, conducting comprehensive emergency drills prior to the Spring Festival. The continuous reinforcement of free segregated lanes during holidays remains a priority, providing a robust assurance for the orderly and secure operation throughout the festive season.

The Company proactively deploys resources and conducts pre-holiday deployment meetings to ensure smooth operations. With meticulous attention to detail, we thoroughly investigated potential safety hazards and implemented practical and comprehensive measures to serve the public. Regular emergency drills are organized in our daily operations to prevent congestion, ensure the effective implementation of emergency plans, enhance cooperation mechanisms, and elevate the level of emergency management and response in congested situations. Additionally, we prioritize command and dispatch operations, closely monitoring weather and traffic changes on major routes. Through active collaboration and coordination with highway traffic police and road administration departments, we carry out diversion of traffic, dispatch obstacle clearance teams and equipment to minimize traffic congestion and effectively mitigated the impact of emergencies or losses. Our utmost efforts are dedicated to ensuring the safety of critical nodes and roads during significant holidays such as the Spring Festival, Labour Day, and National Day.

Road Alert System

We have strengthened our monitoring of the road network, utilizing the “smart brain (智慧大腦)” platform for frequent monitoring of key road sections and critical periods. Through the utilization of high-definition video platforms and other tools, we effectively monitor real-time road network operations. During the Year, we utilized the “Smart Brain” platform to disseminate 14,774 messages, effectively enhancing the convenience and safety of road travel for drivers and passengers. Furthermore, we leverage data analytics to ensure the stable functioning of the road network monitoring platform. This allows us to forecast holiday traffic volume, analyze road network operation data, and propose appropriate measures based on real-time changes in road network operations. The Company has equipped road safety alert equipment, which significantly reduces the impact of adverse weather conditions on expressways. Our early alert system utilizes roadside devices to provide timely reminders to vehicles, issuing advance warnings before inclement weather strikes. This enables travelers to adopt preemptive safe driving measures, ensuring the safety of both roads and vehicles.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Case: Jihe Operation and Management Centre ensuring smooth transportation during the Spring Festival regardless of inclement weather conditions

Starting from the afternoon of 4 February, snowfall occurred along Jihe Expressway, posing a risk of icy roads during the night and early morning hours. The Centre exerted utmost efforts to carry out snow removal, prevent accidents, and facilitate uninterrupted traffic flow, ensuring safe and orderly transportation throughout the Spring Festival.

- Prior to the Spring Festival travel rush, Jihe Operation and Management Centre proactively anticipated heavy snowfall, stocked ample snow melting agents and anti-skid sand mixtures, and made timely arrangements to respond to the inclement weather along key road sections of the expressway.
- The Centre enhanced its snow removal and anti-skid emergency plan. A dedicated meeting was held to address specific concerns, thoroughly discuss challenges related to snow removal and skid prevention, and develop effective response measures to eliminate potential risks.
- Emphasis was placed on efficient and organized snow removal operations. Through coordination with the Maintenance Centre and the Operation and Dispatching Centre, the Centre leveraged periods of weakened rain and snow, employed a full-effort approach, maintained continuous machinery operation with shift duties for personnel, and reduced the likelihood of icing. A strategy focusing on large-scale equipment, supplemented by manual and small-scale equipment, was implemented to overcome various obstacles and ensure efficient snow removal and skid protection.
- The monitoring function of the road network's efficiency was fully utilized, and guidance campaigns were conducted. The Operation and Dispatching Centre effectively monitored real-time road network operations, promptly and accurately disseminated travel information via the smart brain platform and road information boards, and implemented multiple measures to guide and serve the public in traveling rationally and safely.
- Smooth communication channels were maintained through strengthened coordination with traffic police, road administration departments, and rescue units. Whole-process supervision of snow removal and skid prevention work was implemented, ensuring precise and efficient command and dispatch. This maximized obstacle clearance and rescue operations while preventing large-scale and prolonged traffic congestion incidents. The public was advised to adjust their travel plans or mode of transportation accordingly. During the snowfall, drivers and passengers were reminded through expressway digital information boards to exercise caution, reduce speed, and drive safely.

A total of 290.2 tonnes of solid snow melting agents and 27 tonnes of liquid snow melting agents were utilized during this snowfall period, resulting in no snow accumulation or icing along the entire expressway. Jihe Expressway maintained smooth operations, guaranteeing the safety of drivers and passengers throughout their journeys.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

▲ 1.2 Road Quality Management and Maintenance

The Company is committed to putting quality first in daily work, making unremitting efforts to continuously improve road quality and safety, and providing customers with better experience and services. We uphold the people-oriented and users-first concepts, fulfil the “serving the public better” and “safer, smoother, more efficient and more harmonious” requirements by further refining its maintenance management, safeguarding public interests and ensuring user satisfaction.

We have formulated the Maintenance and Management Measures of Qilu Expressway Company Limited Expressway 《齊魯高速公路股份有限公司高速公路養護管理辦法》. The scope and content of maintenance include maintenance and repair of roadbed, road surfaces, bridges, culverts, tunnels, route crossings, traffic engineering and facilities along the route, greening management and conservation of water and soil within the land area, as well as emergency response to natural disasters and maintenance emergencies such as flood control, typhoon prevention, snow removal and skid prevention. By implementing the concept of “full life cycle and precise maintenance”, coupled with daily inspection and investigation, regular testing and evaluation and analysis, we strengthen the application of scientific decision-making results, develop medium and long-term maintenance plans, establish a maintenance project pool, and implement dynamic management practices.

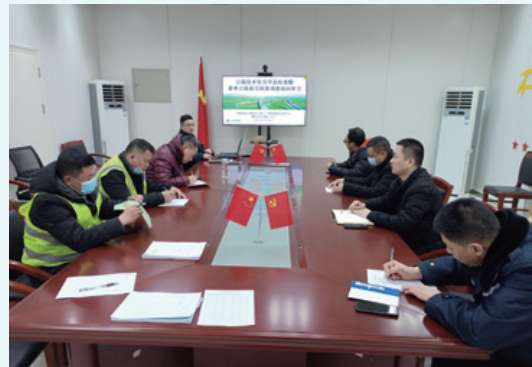
The maintenance and safety management of expressways includes various aspects, including the implementation of a safety accountability system, safety management of daily maintenance operations, safety management of large and medium-sized maintenance operations, safety management of bridges, safety management under special conditions, safety management of maintenance machinery and equipment, emergency management, and electricity consumption, fire prevention and theft prevention related to expressway maintenance work.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



Case: Deshen Operation and Management Centre carried out a walking survey on road conditions in Spring.

Deshen Operation and Management Centre organised and established a designated investigation team to carry out a walking survey on road conditions in Spring 2023, and conducted an all-round and systematic “physical examination” on the road sections under its management. Before the start of the walking survey, the survey personnel were trained on the standards of the Highway Technical Condition Assessment 《公路技術狀況評定》 to ensure their familiarity with the data collection and calculation methods. The survey was led by the Maintenance and Obstacle Clearance Sub-Centre, with the cooperation of the maintenance and construction units, and five investigation teams were set up. Based on the actual situation of the road sections under its management, in accordance with the principle of “walking to identify issues and classifying recorded hazards”, the “sweeping” inspection was conducted on the road surfaces, roadbed, bridges, culverts, road safety ancillary facilities along the route through a combination of visual inspection and on-site measurement of tools. The investigation team conducted a comprehensive investigation of various hazards in the area, such as the cracks of road surfaces, damages to hard shoulder and slope, damages to road safety facilities, and the bridge and culvert structures, and recorded the location, type, degree, quantity and other information of the hazards in detail, so as to achieve the on-site recording of original data and categorized filing of hazards, providing scientific data support for the daily maintenance work and dedicated projects in 2023.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

When conducting maintenance work on expressways, we strictly follow the requirements of the Road Traffic Signs and Markings 《道路交通標誌和標線》 and the Road Maintenance and Safety Operation Regulations 《公路養護安全作業規程》 issued by the Ministry of Transport. The Company has established the Supervision and Assessment System for Expressway Maintenance and Management 《高速公路養護管理督導考核制度》 to implement supervision and assessment for maintenance and management by class. The Operation Division of the Company takes on the responsibility of comprehensive supervision and assessment of maintenance work carried out by the Operation and Management Centres. They conduct regular monthly random inspections, as well as periodic inspections as needed. The Operation and Management Centres themselves are fully accountable for the daily supervision, inspection, and assessment of the expressway maintenance projects under their management. We implement the concept of refined maintenance, striving to improve the quality management of maintenance work in accordance with the Technical Standards for Highway Maintenance 《公路養護技術規範》. Additionally, we have established and continuously enhance measures for quality inspection, rewards, and penalties. We also diligently supervise and inspect the original records and complete quality evaluation forms for various construction projects.

Furthermore, we have developed the Bridge Maintenance and Management Measures of Qilu Expressway Company Limited Expressway 《齊魯高速公路股份有限公司高速公路橋樑養護管理辦法》. These measures ensure the maintenance and management of bridges to guarantee their safe operation. Our approach follows the principle of “prioritizing prevention, combining prevention and control measures, implementing scientific maintenance practices, ensuring safety and durability, and promoting smooth operation”. We dedicate our efforts to the maintenance, management, and operation of bridges, aiming to maintain their excellent technical conditions and ensure their safe functioning. During the Year, we implemented comprehensive and targeted initiatives to enhance road maintenance and operational safety. By organizing specialized meetings, conducting on-site safety inspections, and providing training, we continuously improved the dedication, maintenance expertise, and safety standards of our front-line maintenance team. As a result, we successfully achieved the objective of zero safety accidents in maintenance operations.



Case: New Maintenance Technique of Deshen Operation and Management Centre

Deshen Operation and Management Centre uses multiplex organic hydraulicity materials for filled construction in the highway bridge head jump areas to restore the uneven levelling layer, followed by the application of a micrometer to create a sealed surface layer with high resistance. It is specifically designed to address hazards caused by uneven settlement of the roadbed, with depths ranging from 2 to 10 centimeters. The construction process is efficient, with layer-by-layer implementation based on the depth of the issue, requiring a mere 2 hours of maintenance per layer. Consequently, traffic can swiftly resume, minimizing the impact of the construction on transportation.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

We have intensified our efforts to manage and control R&E project of Jihe Expressway. Working collaboratively with the expressway traffic police, traffic law enforcement authorities, operation and management center, project office, and participating construction units, we have implemented a comprehensive working mechanism that “prioritizes safety, smoothness, and construction.” By implementing refined plans for traffic management and control, as well as implementing higher standards for temporary traffic safety facilities and surveillance equipment, we have effectively ensured the successful execution of traffic mitigation and control measures, closing sections of local roads for blasting, dismantling and closing footbridges, and facilitating traffic diversion throughout the Year. To further improve the awareness of quality to all employees and enhance the management of project quality, the Company actively conducted various quality initiatives, including the “Month of Improving Construction Quality of Structures and Addressing Quality-related Issues,” “Construction of Model Project,” and “Month of Quality” across the country, and provided dedicated technical trainings on roadbed and road surfaces. We strictly adhered to third-party and unannounced inspection, covering all stages from raw materials to roadbed, bridge culverts, and road surfaces. We implemented a meticulous approach in terms of raw materials of road surfaces and bridge expansion joints, adopting the principle of “inspecting each vehicle and ensuring inspections of each expansion joint”. In collaboration with third-party sampling inspections, we promptly addressed any identified issues through necessary corrective actions or rework. Furthermore, we implemented various advanced construction techniques to enhance project quality, which included standout methods such as ultra-retarded “ultra-high pressure water flow (超高壓水射流)”, the application of “water capacity (水能力)” maintenance film, the use of corrugated pipe positioning scales, and ensuring the compatibility of cement and admixtures.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



Case: R&E projects of Jihe Expressway

In response to the rapid economic and social development in the recent years, Jihe Expressway has been operating beyond its intended capacity as a two-way four-lane expressway. To address this, it has become imperative to upgrade it into a two-way eight-lane expressway. The R&E project has been designated as a major construction endeavor in Shandong Province's "14th Five-Year Plan" and Strong Transportation Province Construction initiative. The estimated investment for this extensive project is approximately RMB18.6 billion, encompassing a distance of 152.7 kilometers. The construction period has been approved for 36 months, and the expressway is designed to support a speed limit of 120 kilometers per hour. Given the substantial scale and regional coverage of this project, Qilu Expressway has identified four key research directions: "ensuring road and bridge stability, enhancing road surface durability, promoting construction safety, and fostering low-carbon and intelligent solutions." In collaboration with Shandong University and other scientific research institutions, we have undertaken research and implemented various topics, including the Engineering Technology Research on Variable Section Shotcrete Composite Pile Based on Material Structural Design 《基於材料結構設計一體化的變截面漿噴複合樁工程技術研究》 and the Research on New Technology in Utilizing Driven Piles composed of Waste Materials to Control Differentiated Settlement between New and Old Roadbeds in the R&E Project of the Expressway 《改擴建高速公路廢棄物預製樁控制新舊路基差異沉降新技術研究》. These endeavors aim to address the critical and challenging aspects of construction and maintenance, ultimately achieving improved quality and cost reduction.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

The Company has obtained quality management system certification to ensure that our construction and engineering meet quality standards and regulatory requirements. We will continue to strive to improve the quality management system and provide customers with higher quality services.



“Three in one” Certificate

▲ 1.3 Fairness of Toll Collection

The Company attaches great importance to ensuring fair toll collection and is committed to providing customers with fair and equal services. The Company has formulated the Toll Collection, Operation and Management Measures of Qilu Expressway Company Limited (Trial) (《齐鲁高速公路股份有限公司收费运营管理辦法(試行)》), Measures for Processing Complaints about Charge Service of Qilu Expressway Company Limited (《齐鲁高速公路股份有限公司收费服务投诉处理辦法》), the Toll Service Complaint Handling Form (《收费服务投诉处理單》), the Toll Service Complaint Handling Measures (《收费服务投诉处理辦法》), the Toll Operation Inspection and Assessment Measures (《收费运营稽查考核辦法》), the Ticket Payment Card Management Measures (《票款卡管理辦法》) and other toll collection related regulations. We strictly abide by the Management Measures for Toll-exempt Vehicles Under the Toll Free Policy (《政策性减免車輛管理辦法》), implementing state and provincial regulations on toll-exempt vehicles and maintaining standardized management to effectively implement preferential policies and service measures.

In order to combat evasion, we regularly conduct business exchange meetings to share experience and practises in a timely manner, facilitating learning and timely communication with and supervision of toll stations with slower work progress. In addition, the Company actively coordinated with traffic police, public security and other law enforcement departments and associated units to share information on suspected vehicles involved in various fields and across cities to prevent complaints and public dissatisfaction due to repeated compensation.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

In line with provincial and company requirements, we prioritize measures to prevent toll evasion and enhance security to ensure seamless operations during holiday periods. We thoroughly investigate and penalize vehicles that do not meet the toll-exemption criteria, offer on-site guidance and intercept vehicles, promptly address any toll omissions, and maintain comprehensive toll recovery records. Each operation and management center meticulously scrutinizes abnormal data from the departmental or provincial inspection and assessment platform, providing timely feedback and business supervision to each toll station. We conduct regular reviews of provincial and operational platform tickets at each toll station and place particular emphasis on inspecting large trucks with irregular tolls, thereby enhancing the effectiveness of our inspections. Additionally, the Company consistently evaluates the lessons learned from evasion investigations and penalties, implements various investigation and punishment measures, and upholds a favorable charging environment.

The Company strictly implements beneficiary policies such as green channels and free toll during holidays. Toll stations strengthen on-duty efforts, optimize handling procedures for special conditions, conduct emergency drills, and enhance control over over-limit transport vehicles. Vehicles found to be overloaded or posing safety risks are barred from entering the expressway.

During the Year, the Company implemented the national “green channel” and toll-exemption for agricultural machinery with operations service across the region and other policies for the benefit of the public, resulting in 1,081,461 free trips, amounting to RMB101,679,500. This includes the toll exemption policy for small passenger cars during holidays, which facilitated 1,007,372 free trips throughout the Year (including Spring Festival, Pure Brightness Festival, Labour Day, and National Day).

▲ 1.4 Service Optimisation

Adhering to the concept of service first, the Company wholeheartedly serves public customers and makes every effort to build a refined service brand of Qilu Expressway. We standardize the operation service quality through the Measures for Toll Operation Management of Qilu Expressway Company Limited (Trial) 《齊魯高速公路股份有限公司收費運營管理辦法(試行)》, and incorporate the service quality into the job training and performance assessment of relevant staff to further deepen the service quality management.

We strengthened refined services and convenient services, and made every effort to ensure the fast passage of green channel and “Three Summer” agricultural vehicles working across regions. The Company strictly implemented the national policy of benefiting farmers and reducing emissions, increased the efforts to ensure smooth traffic, and continued to provide refined services. During the “Three Summer” and “Autumn Harvest” period, all toll stations under its administration were set up cross-district machine reception service stations and special channels to fully ensure the efficient passage of green traffic and agricultural machinery transportation vehicles for “Three Summer” and “Autumn Harvest” production.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

We have always adhered to the principle of “customer-oriented” and are committed to providing customers with high-quality services. We will continue to be committed to providing customers with high-quality products and services, and continuously improve our own technology and capabilities to meet customers’ needs and expectations.

Deshen Operation and Management Centre



- To set up convenient service points at toll stations, equipped with drinking water, vehicle repairing tools, external drugs and other materials, and provide convenient services for drivers and passengers at any time;
- During major holidays and extreme weather, emergency food such as instant noodles, ham sausage and congee for stranded passengers will be distributed free of charge as soon as possible;
- Jointly with the Culture and Tourism Bureau of Liaocheng City, the Company carried out the “Hospitality in Shandong • Talk to express your feelings” activity to improve the popularity and reputation of the “Smart and Beauty of Qilu” cultural brand;
- Further extending the scope of services by transforming volunteer service stations, using idle posts to create convenient service booths, and introducing intelligent container pick-up;
- To add ETC temporary outlets and convenient service cabins at 4 toll stations, which effectively improved the pass rate of ETC at toll stations.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Jihe Operation and Management Centre



“Digitalization” empowers transformation and upgrading. Jihe Operation and Management Centre carries out “cloud toll collection” system training and practical exercises for all employees, and prepares for the opening and operation of “cloud toll stations”. With the opening and operation of Jiexiang West, Xiaoli, Changqing University City and Pingyin toll stations, the Company has adopted “data cloudification”, “business cloudification” and “service cloudification”, realizing the perfect transformation and upgrading to standardization, automation and intelligence, and effectively improving traffic efficiency and the travel experience of drivers and passengers.



The “Expressway +” value-added services have been further expanded. In the face of the impact of the reconstruction and expansion of the Jihe Expressway, the Jihe Operation and Management Centre has been under pressure and actively grasped, deepened the “Expressway +” value-added service mechanism, and signed contracts with a number of entities along the expressway, including scenic spots, hotels and gas stations. The drivers and passengers can enjoy preferential treatment such as travel, catering, accommodation, refueling and accommodation at toll stations under the administration of the Jihe Expressway. In 2023, the Jihe Operation and Management Centre signed a total of 14 “expressway +” value-added service cooperation agreements, which promoted the two-way trip to expressway operation and cooperative industries, and achieved win-win results in improving corporate benefits, serving the public and promoting local development.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



Create a characteristic toll collection service brand. In order to thoroughly implement the concept of diversified, characteristic and brand-oriented expressway operation services, and fully demonstrate the driving role of “demonstration benchmark toll stations”, Pingyin toll station of Jihe Operation and Management Centre integrated the characteristics of the rose culture of Pingyin County, innovatively created the service brand of “Rose Girls Squadron” toll station, and designed the brand mascot “Meimei” of toll station. We carried out publicity and promotion during the “Rose Culture and Art Festival” in Pingyin County, which improved the social image of the toll station and further polished the brand of “Lean Jihe, High-efficiency Qilu”.



From 1 March to 31 October, the business training of “skills improvement, value adding and efficiency creation” with four phases was carried out. The training focused on internal lecturers and supplemented by external lecturers, highlighted the benchmarking learning concept of “going out and bringing in”, realized the simultaneous promotion of toll collection business knowledge training and civilized service training, with 189 front-line employees completed full-coverage training. A total of 16 excellent lecturers and 21 excellent trainees were selected for the four phases of training sessions, creating a good internal learning atmosphere of “comparing, learning, catching up and surpassing”.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Customer Satisfaction

The Company requires each operation and management centre to conduct satisfaction surveys for drivers and passengers every year, in the form of questionnaires, and generally conducts online satisfaction questionnaires in the form of scanning QR codes. Generally, each toll station is required to conduct quarterly surveys. In 2023, the satisfaction of drivers and passengers of the Jihe Operation and Management Centre is 99.85%, the satisfaction of drivers and passengers of the Liaocheng Deshen Operation and Management Centre is 99.4%, and the overall satisfaction of the Company is of $\geq 99.6\%$.

Complaints Handling Methods

The Company attaches great importance to the quality of services and makes every effort to ensure the safe operation of expressways and high-quality customer services.

Qilu Expressway has set up a 24-hour service hotline as follows:

Company: 0531-87367988

Jihe Operation and Management Centre: 0531-87367878

Deshen Operation and Management Centre: 0635-722011

In addition, the information, complaints and consulting services were provided by the Company to consumers:

- Through the information board of the main line of roads and the type F intelligence board of toll stations, we provided information such as smooth traffic of roads and real-time weather conditions of the closure of toll stations for drivers and passengers.
- The Company has set up a toll bulletin board at each toll station to publicise the toll years and toll standards. Public consultation and complaint telephone numbers are also available.

In the face of complaints, the Company, in accordance with the Measures for Toll Service Complaint Handling of Qilu Expressway Company Limited, reviewed the name, licence plate number, complaint content, and the process of the complainant in detail, and recorded the problems and contact information required to be solved. Complaints would be transferred to the corresponding operation and management centre, which would be required to reply 1-3 working days to strive for the satisfaction of the complainant, and the Toll Service Complaint Handling Form would be filled out. If the complaint is forwarded by the higher-level unit, the written feedback to the higher-level according to the time limit after the handling would be completed. Dispatch centres at all levels are responsible for sampling the satisfaction of complainants. During the Reporting Period, the Company accepted a total number of 62 complaints, which were 100% solved.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

2. OPERATIONAL SAFETY AND STANDARDS

We put safety first in production, operation and management. We have improved various safety management rules, strictly implemented standard operation specifications, and focused on operation monitoring and early warning. We attach great importance to potential risks and are committed to actively responding to risks and updating countermeasures in a timely manner. We continuously optimize and improve the operational safety and standardization system. To bring safety experience to the Company, drivers and staff.

▲ 2.1 Safe Production and Management

Safety System Standardization

The Company deepened the construction of special system for safe production. We have strictly comply with the Law of the People's Republic of China on Work Safety 《中華人民共和國安全生產法》, the Law of the People's Republic of China on Road Traffic Safety 《中華人民共和國道路交通安全法》 and the Regulations on the Principal Responsibility of Production and Operation Entities 《生產經營單位主體責任制規定》 of Shandong Province and other relevant laws, regulations and requirements., and have formulated a series of safety systems such as the "Safety Production, Supervision and Management Practices" 《安全生產監督管理辦法》, the "Safety Production Management Examination Reward and Punishment Practices" 《安全生產管理考核獎懲辦法》, the "Safety Production Whistleblowing Reward and Punishment Practices" 《安全生產舉報獎懲辦法》, the "Risk Source Identification List" 《風險源辨識清單》, the "Job Safety Manual" 《崗位安全說明書》, the "Operation Procedures" 《操作規程》, the "Management Practices for Stocking Up of Emergency Supplies" 《應急物資儲備管理辦法》, the "Safety Fund Management Practices" 《安全經費管理辦法》, the "Management Practices for Road Operation Safety" 《道路運營安全管理辦法》, the "Office Building Fire Safety System" 《辦公樓消防安全制度》, the "Management Practices for Expressway Maintenance Safety" 《高速公路養護安全管理辦法》 and "Guide to Contingency Plans" 《應急預案匯編》.

We improved the safety production responsibility system and signed the 2023 safety production responsibility statement by February this Year. We continuously improve the list of production safety responsibility system for all employees. If there are personnel adjustment in each unit, it is necessary to immediately update the production safety responsibility statement and job safety statement. All employees of the Company have signed the safety production responsibility statement and formulated the assessment standards. By the end of February this year, according to the Measures for Rewards and Punishments for Work Safety Management Assessment 《安全生產管理考核獎懲辦法》, the Company organized the assessment, rewards and punishments for the implementation of work safety responsibilities at all levels of each unit, and strictly implemented the dual responsibilities of one position to achieve closed-loop management of work safety. We carefully analyzed the problems found in the assessment process, investigated the defects and summed up the experience to further improve the safety production responsibility assessment system. The Measures for Production Safety Management clearly regulates the emergency management of production safety, and clarifies the relevant requirements for emergency rescue and disposal. The accident investigation mechanism is clarified for the reporting, investigation and handling of production safety accidents.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Hidden Hazard Examination

During the Year, in accordance with the decisions and arrangements of the provincial party committee and the provincial government, we focused on the Company's work arrangements. Adhering to the principle of safety first and prevention first, we coordinated development and safety, continued to promote management improvement and paid close attention to the implementation of production safety responsibilities and measures. We also solidly carried out special rectification of major hidden dangers in production safety, further strengthened the safety supervision and the investigation and management of hidden dangers in the fields of expressway operation, construction, mining and fire protection, continuously improved the intrinsic safety level, and provided a good safety environment for the Company's high-quality development. The Company has formulated and implemented the Measures for the Administration of Work Safety in accordance with the Regulations on Work Safety of Shandong Province《山東省安全生產條例》, the Provisions on the Main Responsibility of Production Safety of Production and Operation Units in Shandong Province《山東省生產經營單位安全生產主體責任規定》, the Measures for the Supervision and Administration of Work Safety of Shandong Hi-Speed Company Limited《山東高速公司有限公司安全生產監督管理辦法》 and other relevant regulations and higher-level documents.

During the Year, we continued to improve the special hidden hazard examination list and comprehensive hidden hazard examination list for fire protection, vehicles and drivers, toll collection, maintenance, road property protection, special operations, construction, non-coal mines, etc., and comprehensively checked the hidden hazard examination list item by item by level and category, and dynamically updated the list of repeated hidden hazard management. The main persons in charge of the Company and each subordinated unit shall lead teams to inspect and investigate work safety at least once a quarter, supervise and inspect work safety, and eliminate hidden hazard of work safety accidents in a timely manner. We carried out special rectification activities for the safety of hazardous operations. We comprehensively improved the management and control level of hazardous operations such as fire operations, high-altitude operations, lifting operations, blasting operations, limited space, and temporary electricity consumption in terms of training, system establishment, inspection, and hidden danger rectification to ensure production safety. The Company and each subordinated unit conduct safety inspections at least once a month to timely identify potential safety hazards and urge the implementation of rectification measures. We strengthened the training of the risk and hidden hazard pool, improved the ability of employees to identify hidden hazards, continued to promote the use of app“Snapshot” (隨手拍) for hidden hazard-related purpose, and continued to strengthen the participation of all employees in the investigation and management of hidden hazards.

At the same time, we invest in safe production funds. We require all units to ensure that they have the necessary capital investment for production safety conditions, and the investment in production safety is included in the annual production and operation plan and financial budget. By the end of March this year, we require all units to submit the production safety budget for the year through the production safety platform. We continue to improve the system of withdrawal and use of production safety fees. We insist that the special funds for production safety funds shall be used exclusively, and shall not be used for other purposes. We sort out and check the ledger for the use of production safety funds every six months.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Technology Facilitating Safety

We explore a new model of “Internet + safe production” to create smart construction sites. We have built a “Cloud Smart Management” information supervision platform to standardise personnel safety behaviour through intelligent monitoring. By adopting smart site management, hidden danger investigation and management, real-name personnel management, environmental monitoring, we incorporated all construction sites with greater risks into monitoring to ensure construction safety. We developed a real-name morning meeting service system, applied intelligent electronic patrol system, electronic fence + safety system, intelligent safety helmet system and Beidou positioning system, while developing and applying the automatic windproof system of gantry cranes, intelligent safety supervision service system, real-time monitoring system for deep water-related foundation pits. We also used information sensing technology and embedded technology for tower cranes, monitored the whole process of equipment operation and personnel operation, and identified safety risks and hidden dangers in a timely manner. Committed to application of the science and technology, we promoted safe production and high-quality development through technology empowerment.

Carrying out Safety Training

We regularly carry out safety training and make full use of new technologies such as safety experience halls, multimedia safety training toolboxes, VR experience safety education equipment, and safety education and training assessment systems to promote safety education and training, which have achieved good results. We pay attention to the training of safety skills, and comprehensively improve the level of safety skills of employees by organising safety knowledge competitions, safety skills competitions, scenario interactive experiential safety training and other forms, so as to continuously promote the construction of the Company’s safety culture and create a strong safety atmosphere.

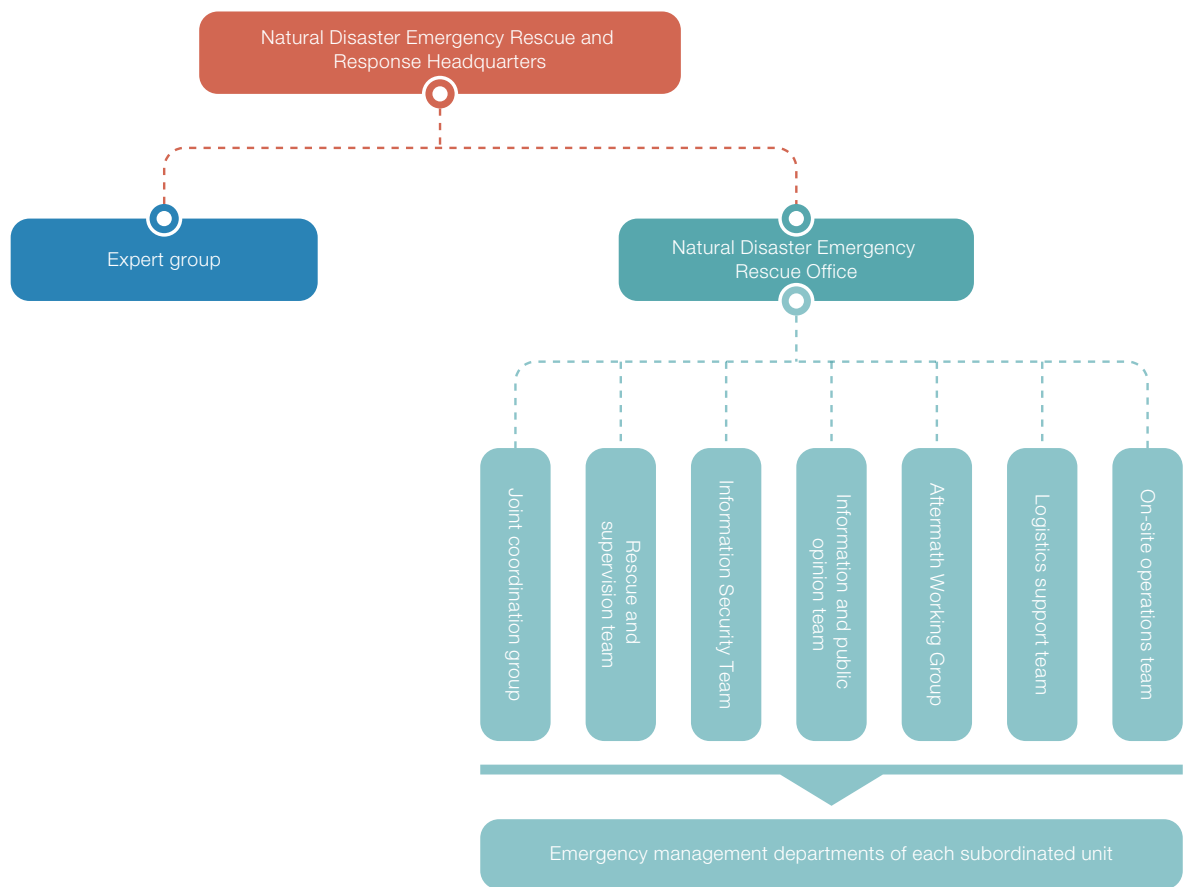
▲ 2.2 Emergencies and Contingency Plans

The Company strictly comply with the Law of the People’s Republic of China on Work Safety 《中華人民共和國安全生產法》, the Emergency Response Law of the People’s Republic of China 《中華人民共和國突發事件應對法》, the Guidelines for the Preparation of Emergency Plans for Production Safety Accidents of Production and Operation Units (GBT 29639 2020) 《生產經營單位生產安全事故應急預案編製導則》 (GBT 29639 2020)), the Regulations on Highway Safety Protection 《公路安全保護條例》, and the Ministry of Transport of the People’s Republic of China’s Emergency Plan for Highway Transportation Emergencies 《公路交通突發事件應急預案》, the Comprehensive Emergency Plan for Natural Disaster Emergencies of Shandong Hi-Speed Company Limited 《山東高速公司有限公司自然災害突發事件綜合應急預案》 and the relevant regulations of the Company and the Company’s safety management. According to the above laws and regulations, we have formulated the Emergency Plan for Natural Disaster Emergencies 《自然災害突發事件應急預案》, the Special Work Plan for Snow Removal and Anti-skid on Expressways 《高速公路除雪防滑專項工作預案》 and other emergency response and rescue plans.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

We have established an emergency organization system to respond to the emergency rescue management of expressways, expressway construction projects and other business areas managed by the Company’s provincial subordinated units in the event of various major natural disaster emergencies (meteorological disasters such as typhoons, heavy snow and heavy rains, flood disasters such as floods, geological disasters such as landslides, landslides and mudslides, earthquakes and marine disasters).

Natural Disaster Emergency Organization System Chart



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

According to the emergency response plan, we will first analyse the risk of accidents. According to the impact of natural disaster events on the operation of expressways, expressway construction projects and other business areas at the time of occurrence, it is divided into four levels, namely Level I (particularly material event), Level II (material event), Level III (major event) and Level IV (general event). We have established a natural disaster emergency rescue and disposal headquarters, which is led by the chairman or general manager.

We strictly comply with the Emergency Response Law of the People's Republic of China 《中華人民共和國突發事件應對法》, the Regulations on Highway Safety Protection 《公路安全保護條例》 and other laws and regulations, as well as the Ministry of Transport of the People's Republic of China's Emergency Plan for Highway Transportation Emergencies (中華人民共和國交通運輸部《公路交通突發事件應急預案》), the Measures for Flood Control Early Warning Response of Shandong Transportation System 《山東省交通系統防汛預警響應辦法》, the Comprehensive Emergency Plan for Natural Disaster Emergencies of Shandong Hi-Speed Company Limited 《山東高速公路有限公司自然災害突發事件綜合應急預案》, and the relevant provisions of the Company and the Company's safety management. We have formulated the Special Work Plan for Flood Control and Rescue of Expressways 《高速公路防汛搶險專項工作預案》 to cope with the flood control, rescue, landslide and landslide work of the expressways under the Company's management. In the plan, we first conduct a flood control and rescue risk analysis on expressways, and we have also established a flood control and rescue leading group.



Case: Jihe Operation and Management Centre organised flood control emergency drills

In May, in order to achieve good performance in the emergency management of flood control and rescue of expressways, we established a prevention-oriented, frequent, unified and efficient emergency management mechanism and improved the emergency response capability of flood control and rescue. We also controlled and minimized the adverse impact of rainfall and flood on traffic, and minimized the traffic interruption, vehicle and personnel retention, casualties and property losses caused by rainfall and flood, the operation and management centre of Jihe carried out emergency drills for flood control and rescue according to the actual situation of the Jihe Operation and Management Centre.



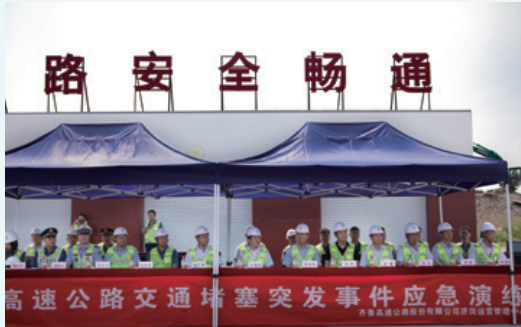
Through this drill, we further improved our ability to respond to flood emergencies and the awareness of disaster prevention and disaster avoidance. Once a disaster occurs, we can quickly and orderly rescue, minimize the losses caused by floods, and maintain the safety of the lives and properties of drivers and passengers. In the event of heavy rainfall and flood emergencies, we can quickly, efficiently and orderly rescue and disaster relief, and ensure smooth roads and emergency rescue and disaster relief.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE



Case: Qilu Expressway carried out an emergency drill for traffic blockage emergencies.

The drill simulated a real rescue site where a truck rollovered on the main line blocking 2 km of the road. During the drill, under the coordination and command of the emergency headquarters, all functional teams worked closely to conduct a comprehensive drill on emergency response, issuance of early warning, information reporting, emergency support, on-site disposal, traffic recovery and other links, and achieved great success. The drill effectively exercised the emergency rescue team's ability to deal with emergencies in a fast, accurate and stable manner, and reflected the work style of "unified leadership, classified management, hierarchical responsibility, top-down linkage, parallel operation, scientific and efficient" of Qilu Expressway's emergency management.



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

3. MOVING FORWARD WITH INTELLIGENCE

▲ 3.1 Information and Data Security

The Company attaches great importance to information security and customer privacy protection, and strictly abides by national laws and regulations to ensure the integrity of business information. We have formulated the Measures for the Administration of the Operation and Usage of Information Electromechanical Systems 《信息機電系統運行使用管理辦法》, the Measures for the Administration of Software 《軟件管理辦法》, Measures for the Administration of Network Security 《網絡安全工作管理辦法》, the 6S Management Standards for Information Electromechanical Systems 《信息機電系統 6S 管理規範》, the Measures for the Administration of the Protection of Highway Properties and Road Network Operation (Trial) 《高速公路路產保護及路網運行管理辦法(試行)》, etc., to carry out security management and preventive measures against information security risks, and regulate the access to specific data and information, network security and internal network security:



- We make full use of network security equipment to provide information security protection for portal websites, OA systems, and office networks;
- We scan and timely patch system vulnerabilities with the leakage scanning equipment on a regular basis;
- The Company's office network, portal website and OA system all passed the information security level 2 protection assessment;
- The internal network area of the Company is isolated, and the network intranets between different functions, physical areas and functional areas cannot be interconnected.

The Company's customer information is stored in the private toll collection network, which is physically isolated from other networks; Data analysis involving customer information is carried out in special servers on the intranet, and only macro statistical data is extracted. There were no complaints or information security incidents during the Reporting Period.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

▲ 3.2 Innovative Application

The Company's scientific and technological innovation work adheres to the principles of overall planning, classified implementation, focus on transformation and pursuit of effectiveness. In the planning stage, the Company formulates strategic plans and goals for technological innovation based on national technological policies, industry development trends and its own actual situation. At the implementation stage, each functional department or subordinated unit carries out scientific and technological research and development according to the actual production, as the implementation party of specific projects, and is responsible for the organisation, implementation and fund management of scientific and technological projects. At the same time, we pay attention to the transformation and promotion of innovation achievements, transform scientific and technological innovation achievements into productivity, and promote the development of the Company's business. In the process of implementing scientific and technological projects, we strictly abide by relevant national scientific and technological regulations, policies, technical standards and norms, and have formulated a series of management measures and processes to ensure scientific, systematic, standardised and institutionalised project management.

We have formulated the Measures for the Management of Scientific and Technological Projects of Qilu Expressway Company Limited 《齊魯高速公路股份有限公司科技項目管理辦法》, which clarifies the specific requirements and procedures for the declaration, project approval review, implementation management, fund management, and results acceptance of scientific and technological projects. We established a sound project management system and clarified the responsibilities and work processes of each department to ensure the smooth implementation of the project. Our technology projects mainly include innovative research projects and application promotion projects.

During the Year, we focused on the main responsibility and main business, and carried out research and development with the completion of the scientific and technological investment indicators issued by the Company as the core task.

We achieved 100% achievement rate in scientific research completion. We have completed the establishment of four scientific and technological projects, including the Research and Development of Mine Slope Stability and Environmental Digital Monitoring Technology 《礦山邊坡穩定性及環境數字化監測技術的研發》. We obtained a number of scientific and technological achievements, including 1 patent, 3 utility models, 7 software copyrights. We had one project of reconstruction and expansion selected into the Company's science and technology plan, and 3 projects of assembly company selected into the second batch of technological innovation project plan of the Provincial Department of Industry and Information Technology. One project of reconstruction and expansion was awarded the third prize of the Provincial Traffic Engineering Innovation and Entrepreneurship Competition.

During the Year, the Company organized and carried out digital transformation, improved daily operation efficiency and reduced operating costs through information technology. We assisted in the construction, management, maintenance, operation and service of expressways with intelligence, and assisted in the decision-making of the Company's leaders with digitalization. Relying on digital special projects, the Company would carry out research on image intelligent analysis, big model, big data analysis and forecast, green energy application and other topics, and strive to play a practical and visible role in green and low-carbon, intelligent operation, intelligent maintenance, command and decision-making and other aspects.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Case: Fully complete the half-length electromechanical and electrical construction of the R&E project for the safe and smooth intelligent expressway in Jihe

On 22 December, the R&E project of the Jihe Expressway with half-length mechanical and electrical construction was fully completed. As the annual key task of construction, the project focuses on promoting the integration and application of new technologies, new equipment and new systems to create a “safe, smooth and intelligent” expressway and provide a better travel experience for the public.

Building multi-source intelligent three-dimensional video monitoring facilities



Improving the release of collaborative information on road sections and actively ensuring safety



Digital and intelligent transformation and upgrading of toll stations



II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Case: The first “cloud toll station” of Qilu Expressway was officially opened to traffic.

The brand-new Jiexiang West toll station adopts a thin island expansion lane, which has been upgraded from the original “3 entry and 3 exit” to “5 entry and 5 exit”, and simultaneously optimizes the location and ramp layout of the toll station area, significantly relieving the congestion at the entrance and exit and improving the traffic efficiency. The toll station adopts the “cloud, edge and end” integrated collaborative structure, integrates several advanced technologies such as “narrow island of toll lanes, mechanical and electrical equipment integration, and self-service intelligent lanes”, and introduces “ramp pre-trading, intelligent lane equipment and cloud toll collection system”. The traffic guarantee capacity, passenger travel experience, operation and management level, transaction efficiency and safety can be effectively improved, while reducing construction and operation costs. Adhering to the new direction of expressway operation of “light-weight station construction, less human-oriented lanes, inducing intelligence, humanized services, and cloud-based application”, the continuous upgrading of digitalization will comprehensively empower toll operation to reduce burden and improve efficiency.



Case: “Paper-to-electronic” promotion and application

Qilu Expressway successfully completed the electronic upgrade and transformation of the third batch of manual toll lanes of toll stations. So far, all toll stations under the Company have fully completed the promotion and application of “paper-to-electronic”. After the implementation of “paper-to-electronic” conversion, it can effectively reduce the length of stranding of vehicles in the lanes, reduce the congestion of toll stations, improve the traffic efficiency of manual toll lanes, and improve the travel experience of the public. In the next step, Qilu Expressway will continue to improve its intelligent management level and continue to provide high-quality travel services to the public.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

Intellectual Property Management

The Company attaches great importance to the management of corporate intellectual property rights. We understand that intellectual property rights are the core competitiveness of enterprises. The Company carries out intellectual property management and achievement transformation through the Measures for the Management of Scientific and Technological Projects of Qilu Expressway Company Limited Management. The Company adopts a filing system for the management of intellectual property rights. Patents, copyrights, technical secrets and other intellectual property rights involving material interests of the Company are directly managed by the Company. The patents, copyrights, technical secrets and other intellectual property rights of the subordinated units are managed by the subordinated units and filed with the Company. If the technical secrets are leaked, the technical achievements are transferred without authorization, the technical achievements are transferred in disguised form, or the Company's intellectual property rights are damaged in other ways such as technical guidance, the corresponding legal responsibilities shall be investigated in accordance with the relevant national intellectual property laws and judicial interpretations.

During the Year, the Company obtained 1 invention patent, 5 utility model patents and 7 software copyrights. 3 projects were selected into the second batch of technological innovation project plans in the province.

▲ 3.3 Publicity Management

We uphold the principles of truthfulness, objectivity and accuracy in the promotion of business information. We strictly comply with the Advertisement Law of the People's Republic of China 《中華人民共和國廣告法》, the Contract Law of the People's Republic of China 《中華人民共和國合同法》 and the Highway Law of the People's Republic of China 《中華人民共和國公路法》. We standardise the procedures and standards of information disclosure, ensure the timeliness and accuracy of information disclosure, and avoid any false and misleading product descriptions to deceive customers. We have formulated the Trademark Licensing Agreement 《商標使用許可協議》, the "Rules and Regulations of Shandong Shunguang Industrial Development Company Limited" 《山東舜廣實業發展有限公司規章制度》 and the "Advertising Management System of Shandong Shunguang Industrial Development Company Limited" 《山東舜廣實業發展有限公司廣告管理制度》.

During the Year, we continued to strengthen the stability of letters and visits, focused on the construction of four aspects, including moving the gate forward, hidden hazard examination, plan formulation and capacity improvement, paid close attention to key areas and key issues, properly handled incoming calls of hotline such as 12345 and 96659, and successfully resolved online public opinions and visits, so as to avoid "big trouble" caused by "small problems" in a timely manner.

II. PURSUING ENHANCED TRANSPORTATION ACCESSIBILITY FOR THE FUTURE

During the Year, the Company increase the quantity and quality of publication both internally and externally. We published about 500 articles in the Company's media, and successively carried out a series of special reports such as "Youth Civilization", "Success in the Second Half of the Year", "R&E Project Tour", "Benchmarking Improvement", "Final Battle in the Fourth Quarter" and "A snapshot of the week". We focused on writing special articles such as "thematic education", "traffic integration" and "smart transportation industrial park". The Company has published more than 100 pieces of information on external media including the Company, COSCO Shipping (Hong Kong) and dzwww.com (大眾網), and has published one article and four highlights of experience in the Company's "High Speed Communication". In particular, more efforts were made to promote the second round of comprehensive transformation around the reconstruction and expansion, and the news articles written were published in mainstream media in more than 20 provinces and cities such as Dazhong Daily 《大眾日報》, which were well received by the society.

We also revised the Company's administrative measures for news publicity. The number of followers of the Company's WeChat official account has greatly enlarged, and the reading volume of articles has increased significantly. The Company launched the revised and optimized design of the website, and has now completed the verification and filing of new access by the Ministry of Industry and Information Technology of the People's Republic of China. It was officially launched in early January. We strengthen brand image publicity and take the lead in completing image improvement projects such as the installation of company logo in the west of the headquarters office building and the intelligent transportation industrial park, and the upgrading and transformation of elevator room meeting rooms. The Company completed the special research and interview of the Company's enterprise brand improvement project.

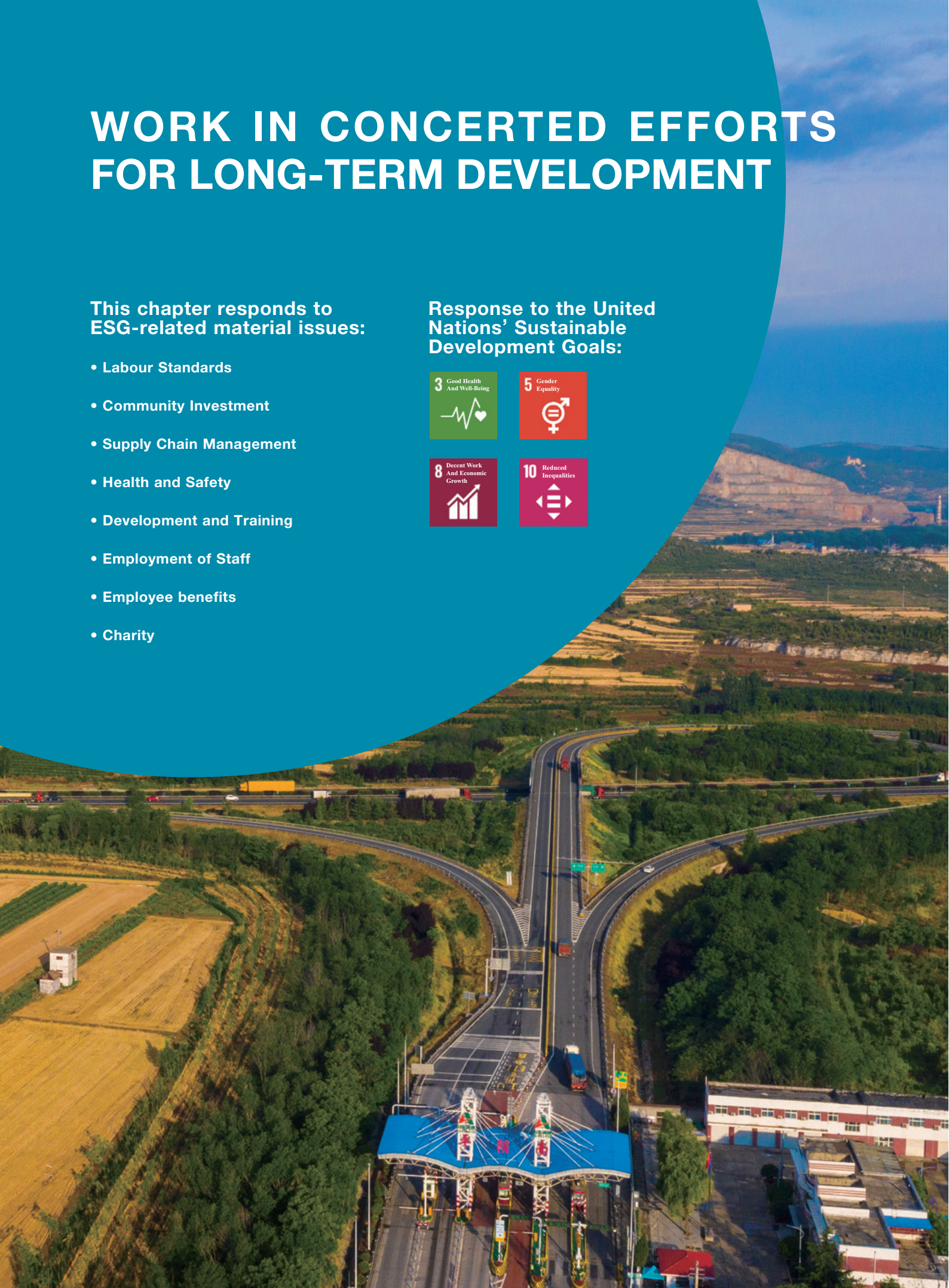
During the Year, there were no incidents of non-compliance with relevant laws and regulations that have a significant impact on the Company relating to advertising and trademarks in the course of operation.

WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

This chapter responds to ESG-related material issues:

- Labour Standards
- Community Investment
- Supply Chain Management
- Health and Safety
- Development and Training
- Employment of Staff
- Employee benefits
- Charity

Response to the United Nations' Sustainable Development Goals:



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

1. EMPLOYEE MANAGEMENT AND CARE

We uphold the concept of “people-oriented” and value every employee. We pay attention to talent management and actively realise the effective allocation of human resources. We respect and protect the rights and interests of employees, and also care for the growth of employees. We are committed to creating a harmonious working environment, enhancing cohesion, and achieving sustainable, healthy and common development.

▲ 1.1 Employment Principles

The Company attaches great importance to standardised employment and is committed to continuously improving the employment system. The Company strictly complies with the Labour Law of the People’s Republic of China 《中華人民共和國勞動法》, the Labour Contract Law of the People’s Republic of China 《中華人民共和國勞動合同法》, the Social Insurance Law of the People’s Republic of China 《中華人民共和國社會保險法》, the Interim Provisions on Payment of Wages 《工資支付暫行規定》, the Provisions on the Prohibition of Using Child Labor 《禁止使用童工規定》, the Regulations of the State Council on Working Hours of Employees 《國務院關於職工工作時間的規定》 and other laws and regulations related to labour and employment.

At the same time, we have formulated the Measures for Administration of Open Recruitment of Employees 《員工公開招聘管理辦法》 to create a fair, equitable, inclusive and diversified recruitment process and fully guarantee the employment norms. We advocate equal employment and recruit employees in accordance with the principles of “openness, equality, competition and merit”, and comprehensively consider whether the candidates’ academic qualifications, work experience and skills meet the job requirements. We fully implement open recruitment, which is mainly divided into social recruitment, campus recruitment and internal recruitment. During the recruitment process, we ensure the openness of information, process and results. The Company does not treat applicants differently because of their gender, age, nationality, religion, family status, colour or other legally protected categories. The human resources department conducts comprehensive inspections and reviews on the qualifications, qualities, capabilities, performance and integrity of candidates who have passed the examinations. While conducting inspections, we prevent child labour and other forms of illegal labour. All of our employees are recruited under the age of 18 or above.

We sign labour contracts with hired personnel in accordance with the law, handle relevant procedures in accordance with the regulations, implement relevant benefits for hired personnel, clarify terms such as wages, benefits and dismissals, and implement a standard working hour system to eliminate forced labour and exploitation of labour. Any violations will be handled in accordance with the law. In strict accordance with the Company’s “Management Practices for Flexible Employment Recruitment and Dismissal 《員工能進能出管理辦法》”, the Company implements the probation assessment requirements. If an employee passes the probation assessment, he/she will be employed. If an employee fails the probation assessment, he/she will be terminated. The Company shall strictly implement the management regulations for all employees such as performance appraisal and violation of rules and disciplines, and terminate the labour contract for those who are incompetent for their positions.

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

During the Reporting Period, the Company did not violate any applicable laws and regulations related to compensation and dismissal, recruitment and promotion, working hours, equal opportunities, diversity, anti-discrimination, and prevention of child labour or forced labour, and did not find any child labour or forced labour in the Company.

As of 31 December 2023, the Company had a total of 696 employees, 261 of them are female, representing approximately 37.5% of the total number of employees. During the Reporting Period, the Company had 15 new employees. All of them have undergone strict and compliant screening and assessment.

Indicators		2023 Statistics (person)
Total number of employees		696
Number of Employees by Gender	Female	261
	Male	435
Number of Employees by Employment Type	Full-time employees ²	696
Number of Employees by Age Group	Aged below 30	47
	Aged 30-50	585
	Aged above 50	64
Number of Employees by Region	North China	696
	Other regions	0

² All employees are full-time employees

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

During the Reporting Period, the Company lost 6 employees, with a low total turnover rate of only 0.86%.

Indicators		2023 Statistics (person)
Employee turnover rate		6
Number of Turnover Employees by Gender	Female	0
	Male	6
Number of Turnover Employees by Employment Type	Full-time employees	6
Number of Turnover Employees by Age Group	Aged below 36	0
	Aged 36-55	0
	Aged above 55	6
Number of Turnover Employees by Region	North China	6
	Other regions	0

▲ 1.2 Talent Management

The Company attaches great importance to talent management, and is committed to establishing a fair and reasonable remuneration system oriented by business objectives, and providing employees with competitive remuneration and benefits to attract and retain outstanding talents. In accordance with the requirements of national and local laws and regulations, the Company has formulated the Human Resources Management System 《人力資源管理制度》, the Remuneration Management Practices 《薪酬管理辦法》, the Performance Evaluation Management Practices 《績效考核管理辦法》, the Attendance Management Practices 《考勤管理辦法》, Penalties for Breach of Discipline and Regulations by Employees 《職工違紀違規行為處分規定》, and the Measures for Remuneration and Performance of Leaders of Subordinated Units 《權屬單位領導人員薪酬和績效管理辦法》.

The Company has established a sound incentive mechanism through the Remuneration Management Practices 《薪酬管理辦法》 to form a scientific and reasonable distribution system and protect the legitimate rights and interests of employees. We always adhere to the principles of distribution according to work, distribution according to responsibilities, distribution according to contribution, salary based on post, salary change based on post, and equal pay for the same position. We set salary distribution and salary management based on the combination of post responsibility and work performance. In addition to basic salary, the remuneration composition of middle-level and below employees is also set up with post salary, performance salary, overtime salary, allowances and subsidies, benefits and other rewards to motivate employees. At the same time, we have also established the Chairman's Career Fund to reward collectives or individuals who have excelled in terms of profit contribution, technological innovation, striving for excellence, and overcoming challenges.

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

The Company actively strives to create a good career development space for employees. We have developed a sound and strict promotion system, and evaluate employees annually in accordance with the relevant management documents of the Rank Management Measures 《職級管理辦法》 and the Performance Evaluation Management Practices 《績效考核管理辦法》. The evaluation results are used as the basic basis for employee promotion. The Company's employee assessment encompasses key performance indicators related to task performance, attitude, and factors that contribute to adding points and deducting points in the assessment system. The Company upholds the principle of aligning assessment results with process evaluation. We closely link the assessment results with the remuneration of employees in the assessment department, and take it as the basis for improving the management of the assessment department and give full play to the guiding role of assessment.

In accordance with national policies and regulations, the Company complies with the employee social security plan and housing provident fund plan, and makes unified contributions to basic pension insurance, basic medical insurance (maternity insurance), unemployment insurance, work-related injury insurance and housing provident fund for eligible employees. In addition, the Company also provides employees with enterprise annuity and supplementary medical insurance, and provides employees with protection through the Corporate Annuity Plan of Qilu Expressway Company Limited and the Supplementary Medical Insurance Plan of Qilu Expressway Company Limited. In accordance with the relevant national policies and regulations, employees are entitled to paid annual leave, maternity leave, marriage leave, funeral leave, personal leave, sick leave and other holidays in accordance with the law to maintain the work-life balance of employees.



The Company convened held the once-in-every-four-terms meeting

On 14 December, the Company held the once-in-every-four-terms meeting of the employee (member) congress, collected 14 proposals and signed collective contracts.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

▲ 1.3 Employee Growth

We understand that the development of employees is crucial to the sustainable development of the Company, and we have always attached great importance to the cultivation of employees. We promote the growth and development of employees from various aspects such as employee training, new employee integration and employee activities.

Employee Training

Every year, the Company formulates an annual training plan according to the business development needs and the training needs of each department. According to the requirements of the training section of the Company's Human Resources Management System, each department and office of the headquarters and each subsidiary put forward the training needs and budget at the end of each year. After review and approval, the human resources department will uniformly prepare the training plan for the next year and arrange and supervise the implementation. The training set up by the Company mainly covers new employee training, party affairs training, corporate governance training, job training, safety training, management ability training, etc. The training forms are combined online and offline, and the training covers grass-roots employees, management, ownership units, etc. The human resources department arranges various training activities according to the annual training plan and keeps relevant records. In addition, we regularly invite external instructors to provide us with training on specific topics to improve our specific capabilities and corresponding management skills.

During the Reporting Period, the Company carried out a total of 190 training sessions, covering 100% of employees of the Company, comprehensively improving the leadership of managers and the skills, general capabilities and corporate culture of employees in various departments.

Indicators		2023 Statistics (%)
Percentage of employees trained during the year ³		100
Percentage of employees trained by gender	Female	100
	Male	100
Percentage of employees trained by employment category	Full-time employees	100
	Part-time employees	/

³ Calculation method: percentage of employees trained in the relevant category = TH(x)/E(x), TH(x) = number of employees trained in the specific category, E(x) = number of employees in the specific category

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

Indicators		2023 Statistics (hours)
Average training hours of employees ⁴		100
Average training hours of employees by gender	Female	241
	Male	225
Average training hours of employees by employment category	Full-time employees	232
	Part-time employees	/



Case: “Speaking on my Business” micro-class activity

The micro-class activity is a new mode of teaching and training that Qilu Expressway focuses on the operation of its main business, takes improving the ability and quality of employees as the key point, and takes “comprehensiveness, comprehensiveness and practicability” as the starting point. On May 31, the Company carried out the first phase of the micro-class activity of “Speaking on my Business” in 2023 at the Changqing toll station. Eight participants seriously prepared lessons around the interpretation of the national green communication policy, plugging and evasion, and over-limit management, lectured on the professional knowledge and practical experience accumulated in front-line positions over the years, and taught practical and useful work skills. A total of 30 employees attended the lessons on site, and other employees attended the lessons through videos.



⁴ Calculation method: Average training hours of employees of the relevant category = TH(x)/E(x), TH(x) = Total training hours of employees of the specific category, E(x) = Number of employees of the specific category

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



Case study: The Jihe Operation and Management Centre held a training course on improving capabilities “Gathering Strength and Empowering Progress”

In order to improve the comprehensive quality and performance ability of cadres and employees in an all-round way, from 6 to 16 June, the Jihe Operation and Management Centre held a training course on “Gathering Strength and Empowering Progress”, with more than 300 cadres and employees participating in the training. The training invited experts and professors from Shandong University to give lectures and set up a total of 14 special courses, covering the 20 spirit of the Party, the development of state-owned enterprise reform and the construction of the Party, smart expressways, maintenance and innovation technology, safety management, financial management, news writing, business etiquette and other fields. The training highlighted the “three combinations” of policy theory and business knowledge, method path and situation law, classroom teaching and interactive communication, and the course content closely followed the actual situation of work, with strong pertinence and practicality.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

Case: The Jihe Operation and Management Centre held business training of “skills enhancement, adding value and efficiency improvement”

From 12 to 14 September, the fourth toll collection business training of “skills enhancement, adding value-added and efficiency improvement” of the Jihe Operation Centre was carried out simultaneously at the Changqing toll station and Dongping toll station, with more than 30 trainees participating in the training. Based on the current situation of toll collection operation and the learning and improvement needs of employees, the training highlighted the benchmarking learning concept of “going out and bringing in”, and adopted a combination of internal and external lecturers, the content mainly covers toll collection business knowledge and civilized service training. The four training sessions covered all employees of 189 front-line employees, and 16 excellent lecturers and 21 excellent trainees were selected.



New Employee Integration

We attach great importance to the rapid integration of new employees, which is important to the growth of employees and the operation of the enterprise. We organize trainings for new employees and seminars for new employees.



Training for New Employees

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



Orientation Meeting for New Employee

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

Employee Activities

The Company pays close attention to the mental health of employees and enhances team cohesion by organising various employee activities. During the Reporting Period, all departments of the Company organized their own team building activities and organized employees to celebrate the festival together to enhance the emotions among employees.

On 28 April 2023, Qilu Expressway held the singing competition “Striving for the Future of Qilu in the New Era” (“奮進新時代齊魯行未來”) and the art performance of the May 4th Youth Day. The whole performance was self-led and self-performed by the Company’s employees, integrating the two themes of “corporate culture” and “young employees”, and through the wonderful interpretation of 10 programmes in the form of chorus, singing and dance, poetry recitation, and Beijing Opera’s singles, singing the Company’s anthem, praise the youth, showing the charm, and concentrating on promoting the Company’s high-quality development to a new journey.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

Our corporate culture promotes a healthy and positive attitude among our employees. From September to October 2023, the Company held the “Smart and Beauty of Qilu, OurHome” walking activity. We enriched the spare time of employees, strengthened the publicity and implementation of corporate culture, and advocated a healthy lifestyle. The Corporate Management Department designed the route for the event and set prizes.



▲ 1.4 Health and Safety Assurance

The Company is committed to providing a safe and healthy working environment for employees. We strictly comply with the Law of the People’s Republic of China on the Prevention and Control of Occupational Diseases 《中華人民共和國職業病防治法》, the Law of the People’s Republic of China on Work Safety 《中華人民共和國安全生產法》, the Labour Law of the People’s Republic of China 《中華人民共和國勞動法》, Measures for the Administration of Occupational Health Examination 《職業健康檢查管理辦法》, the Regulations on Work-Related Injury Insurance 《工傷保險條例》 and other laws and regulations. We have formulated a series of policies and procedures on health and work safety, such as the Safety Operating Procedures of Qilu Expressway, the Safety Management System and the Fire Management System. Based on the actual situation, the Company has formulated the contents to ensure the health and safety of employees, such as the safety statement of each position and the safety responsibility letter signed by all employees at each level. At the same time, according to the Company’s standardised document of “quality, environment, occupational health and safety management”, we regularly identify hazard sources and environmental factors to control risk factors.

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

During the Reporting Period, the Company did not violate any relevant laws and regulations relating to providing a safe working environment and protecting employees from occupational hazards. In the past three years (including the Reporting Period), the Company had no work-related fatalities.

2021-2023 work-related injury data of Qilu Expressway

Year	2021	2022	2023	Unit
Work-related fatalities	0	0	0	Person
Work-related fatality rate	0	0	0	%
Number of working days lost due to work	47	259	295	Days
Number of work-related injuries	1	2	1	Person

We manage the work of production safety, special equipment and personnel operation, fire safety, safety risk detection and management and on-site safety risk inspection, as well as distribute labor protection supplies and safety protective equipment to employees and conduct physical health examinations for all employees of the Company every year to ensure the health and safety of employees. The Company has obtained the three-standards-in-one system certification, of which the occupational health and safety management system certification is as follows.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

We pay attention to production safety and implement safety education and training. During the Year, the Safety Management Department carried out 7 training sessions on production safety. For different objects, we set different themes and priorities, give full play to the role of training, and strive to enhance the safety awareness of all employees, so as to protect the health and safety of employees.

In January this year, we conducted the first safety production training for the persons in charge of the safety management departments and safety production management personnel of the Company and its subsidiaries, mainly focusing on the concept of safety development, the key points of safety after the festival, and the foundation of safety management.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

In April, we carried out training on job safety instructions and provided explanation on job safety instructions, and interpret relevant laws and regulations regarding the special rectification activities for the safety production management personnel of all departments of the Company's headquarters, including the Work Safety Law 《安全生產法》, the Regulations on Work Safety of Shandong Province 《山東省安全生產條例》, the Provisions on the Main Responsibility of Production Safety of Production and Operation Units in Shandong Province 《山東省生產經營單位安全生產主體責任規定》, and the Measures for the Administration of Hazardous Work Reports of Enterprises in Shandong Province 《山東省企業危險作業報告管理辦法》.



To ensure the health and safety of our employees, we conduct fire safety training and fire drills. During the Year, we carried out fire safety training and fire-fighting and emergency evacuation drills under the theme of “We all can work safely and cope with emergencies” in June 2023 in response to the “Work Safety Month” activity. Through the drills, employees’ awareness of fire safety was further enhanced, and their ability to master fire escape skills and respond to emergencies was improved.

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



Case: The Company organized fire safety training and emergency drills

In order to further improve the “four capabilities” of fire safety, master fire-fighting and emergency evacuation plans and fire safety knowledge, strengthen the ability of all employees to put out initial fires, reduce the loss and harm caused by fire accidents, and ensure the safety of employees’ lives and properties, in accordance with the requirements of the Company’s 2023 “Work Safety Month” Activity Implementation Plan, on 21 June, the Company’s headquarters organized a fire safety training and fire-fighting and emergency evacuation drill activity of “We all can work safely and cope with emergencies”.



Case study: The “Safety Production Youth First” activity

In order to further enhance the safety awareness of young employees, during the 22nd National Work Safety Month, Pingyin toll station carried out a series of activities with the theme of “We all can work safely and cope with emergencies”. At the same time, the Company held a mobilization meeting for the “Work Safety Month” activity, organized young employees to study the spirit of the 20th National Congress of the Communist Party of China and General Secretary Xi Jinping’s important remarks on safety production, especially the safety red line, so that young employees can build a strong awareness of safety red line from the ideological perspective.



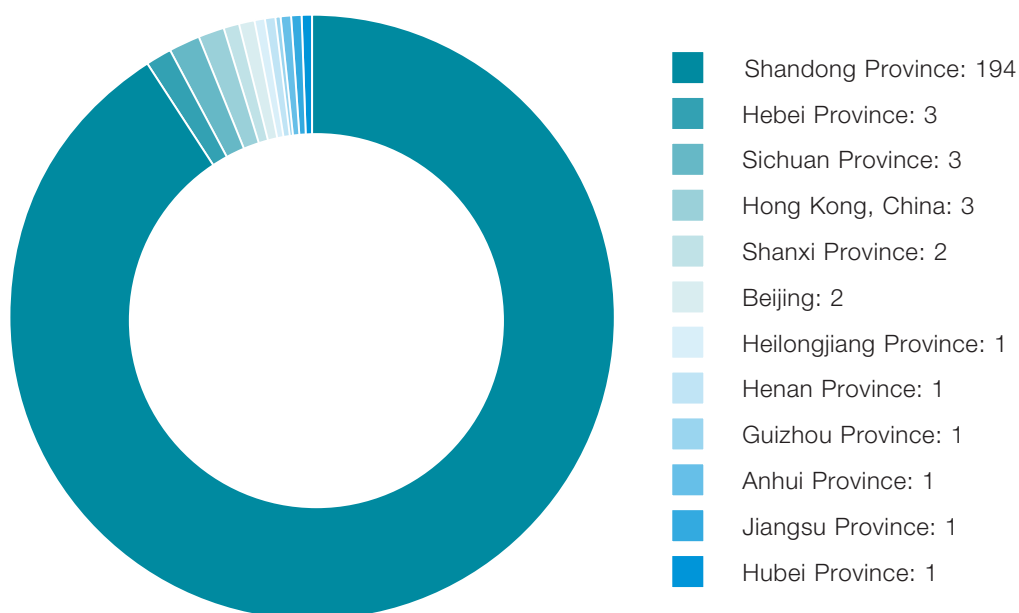
III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

2. RESPONSIBLE SUPPLY CHAIN

The Company is committed to working closely with suppliers to jointly promote the sustainable development of the industry. We strictly comply with the Law of the People's Republic of China on Bid Invitation and Bidding 《中華人民共和國招標投標法》, the Regulation on the Implementation of the Bidding Law of the People's Republic of China 《中華人民共和國招標投標法實施條例》 and other relevant laws and regulations. We have formulated detailed internal rules and regulations, such as the Supplier Management Principles 《供應商管理原則》, the Tendering and Procurement Management Practices 《招標採購管理辦法》, the Contract Management Practices 《合同管理辦法》 and the Contractor Performance Evaluation Management Practices 《合同承包商履約評價管理辦法》, to clarify the procurement process and the supplier evaluation, audit and approval process, and ensure the quality of supply and services.

The Company has formulated the Supplier Management Principles 《供應商管理原則》. For procurement projects that meet the scope and standards, the Company adheres to the principles of openness, fairness, justice and good faith, and determines them through public bidding, negotiation, negotiation, etc. Meanwhile, the Company has formed tendering and procurement monitoring group to oversee the tendering and bidding work. For the bidding and procurement process of engineering construction projects, specific requirements on the safety, quality and environmental protection of suppliers are put forward in the bidding documents, including the daily supervision of migrant workers' wages (labour costs), rules and regulations on safety production management, safety inspection procedures and construction safety management requirements, as well as instructions from supervisors on safety work. In terms of environmental protection, contractors must strictly comply with relevant national laws and regulations on environmental protection and relevant industry standards, and make clear provisions in reducing construction noise, suppressing dust and avoiding polluting water bodies.

During the Reporting Period, the Company's business involved a total of 213 suppliers, of which the number of suppliers who implemented the qualified supplier management regulations and related practises was as follows:



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

After the service period of a supplier, we will evaluate the supplier. According to the Contractor Performance Management Practices (《合同承包商履約管理辦法》), we will evaluate the project implementation process in terms of project management, contract implementation, financial status, technical level, facilities and equipment, delivery and acceptance evaluation, etc. We will also evaluate whether the management of property owners and contractors is rigorous, whether the products, services, project quality and construction period provided comply with the national and industrial technical specifications and whether they comply with the contract, and whether there are safety liability accidents and integrity responsibility incidents. We will conduct qualitative and quantitative evaluations.

Engineering projects are subject to regular performance inspections in accordance with the Assessment Standards for Reliability Performance of Highway Construction sCompanies (《公路施工企業信用行為評定標準》) and the opinions of the supervision units are collected. After the on-site performance inspection, the enterprise management department collects and summarizes the performance inspection information and issues a performance inspection report. If the evaluation outcome of the long-term contract units determined through non-tendering method is excellent, the Company would continue to cooperate with them. and renew the contract. If violations of disciplines and laws, major safety liability accidents, integrity accidents, and major quality accidents are found, they would be blacklisted and no longer carry out any tendering activities.

III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

3. SOCIAL SERVICES AND CONTRIBUTIONS

We focus on the expressway business and understand that the Company shoulders significant social responsibilities. We uphold the original intention of giving back to the community and actively participate in and support various public welfare undertakings. We encourage employees to participate in volunteer services and give back to all walks of life. We will continue to expand the coverage of public welfare and fulfil our social responsibility with practical actions. During the Reporting Period, the Company invested more than RMB120,000 and accumulated more than 780 hours of social activities.

▲ 3.1 Volunteer Activities



The Youth Volunteer Service Team of Pingyin Toll Station carried out the activity of “Youth Blood Donation”

On 23 February, the youth volunteer service team of Pingyin toll station went to the Shandong Provincial Blood Centre to carry out the activity of “Youth Blood Donation”. At the activity site, under the guidance of the staff, young volunteers consulted and filled in the form, took a health checkup and carried out on-site blood collection in an orderly manner. In this activity, there were not only the “veteran” who donated blood for many times, but also the “newbie” who joined the voluntary blood donation team for the first time. Everyone carried forward the spirit of “voluntary blood donation, noble glorious”, contributed 21 treatment volume of platelet in just over a few hours, ignited new hope of life with his own hot blood, conveyed positive social energy with selfless dedication, and fully demonstrated the social responsibility of the youth civilization team of Pingyin toll station.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



The first “Youth Volunteer Service Base” of Jihe Operation and Management Centre was inaugurated

On 3 August, Pingyin Toll Station of Jihe Operation and Management Centre and the Provincial Blood Centre held the signing ceremony of the Youth Volunteer Service Base and the inauguration ceremony of the Youth Volunteer Service Post. After the ceremony, the staff of the Jihe Operation and Management Centre carried out the 15th group blood donation activity this year, and a total of 11 colleagues donated 17 treatment volume of platelet. For the first three quarters, the staff of Jihe Operation and Management Centre has organized 16 group blood donation activities in the Changqing University City Blood Donation House, with a total of 109 people donating 177 treatment volume. Since July, 6 young volunteers from Pingyin toll station have volunteered at the foundation site for more than 200 hours. The establishment of this youth volunteer service base is a vivid practice for the cadres and employees of the Jihe Operation and Management Centre to actively fulfil their social responsibilities. In the next step, based on the characteristics of the industry, the Jihe Operation and Management Centre will gather the power of young people, expand the service team, and unite and lead young volunteers to contribute to the high-quality development of the enterprise and the construction of a harmonious society.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



Pingyin toll station carried out the volunteer service activity of “Warming the Old’s Heart”

In order to vigorously promote the volunteer spirit of “dedication, friendship, mutual help and progress”, recently, on the occasion of the 38th International Volunteer Day, Pingyin toll station organized young volunteers to go to the Guangrong Hospital of Pingyin County to carry out the volunteer service activity of “Warming the Old’s Heart”. During the activity, young volunteers cleaned up in the Guang Rong Hospital, sorted out beds for the elderly and talked with the elderly. They reminded the elderly to keep warm in the cold. Every time the century-old lady Ms. Zhang saw us, she would show a warm and happy smile. In the next step, Pingyin toll station will continue to inherit traditional virtues, continue to carry out civilized practice volunteer service activities such as caring for the elderly, and lead young employees to show the new trend of civilization in the new era.



▲ 3.2 Community Construction



The Party branch of the Assembly Company carried out the party day activity with the theme of “sending warmth in the Spring Festival with Party members taking the lead”

On the occasion of the Spring Festival, the Party branch of the assembly company carried out the Party day activity with the theme of “sending warmth in the Spring Festival with Party members taking the lead”. Through various activities such as collective study of Party members, decoration of windows, cleaning of courtyards and visits to people in need, the Company created a strong atmosphere to celebrate the Spring Festival, and conveyed the warmth of the festival to the staff and the elderly in rural areas. Members from the Party branch visited the elderly in Ximapu Village, Ancheng Town, Pingyin County. They learned about their living condition and difficulties in detail, and sent them necessities such as oil, noodles to send them warmth on behalf of the Company.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT

The Youth helping college entrance examination students

Based on the actual business situation, Pingyin toll station fully considered the needs of candidates, set up a “special vehicle lane for candidates of the college entrance examination”, further improved the vehicle congestion prevention plan of toll stations, and arranged key operation staff to work on duty to ensure that the candidates’ vehicles can quickly pass the toll station without any time delay. It also set up a “caring station” near the toll plaza and the college entrance examination centres to provide the candidates with free mineral water, medicated oil and other cooling items. Youth volunteers from toll stations spontaneously set up a dedicated fleet to send the candidates to the examination centres. There is an eye-catching logo with a statement “guarding the college entrance examination candidates in the name of youth” on each vehicle. Candidates can take the ride for free with their examination admission cards, so that the candidates and their families can experience considerate services.

In this volunteer activity, young volunteers conveyed their care for college students with practical actions, fully demonstrating their sense of responsibility and responsibility as a state-owned enterprise to serve the public and contribute to the society. In the next step, Pingyin toll station will continue to enrich and civilizes the service content, extend the service connotation, adhere to the principle of “Serving the people practically”, and continue to promote the deep and practical education of Xi Jinping’s Thought on Socialism with Chinese Characteristics for a New Era.



III. WORK IN CONCERTED EFFORTS FOR LONG-TERM DEVELOPMENT



Caring for the old Party members

On the occasion of the 1st July, the Party branch of Shennan Toll Station, in accordance with the work requirements of “double reporting”, cooperated with the town government of Xuzhuang to organize and carry out the activity of the 1st July Party Day with the theme of “Caring for the old Party members”. At the beginning of the activity, all Party members came to the Party service centre of Zhanglou Village, Xuzhuang Town, and showed caring to 10 old Party members who have made outstanding contributions and have been playing a pioneering role in the village and town in recent years. They listened to the exemplary deeds of old Party members one by one, and visited the home of old Party members, and sent rice, noodles, oil and other items to them. They shared the original intention of entering the Party and carried out a meaningful mission transmission.



TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

This chapter responds to ESG-related material issues:

- Emissions
- Use of Resources
- The Environment and Natural Resources
- Energy Saving and Consumption Reduction
- Impact of climate change on business
- Waste Management
- Noise management
- Water resources management
- Low-carbon operation

Response to the United Nations' Sustainable Development Goals:



IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

1. LOW-CARBON OPERATION

The Company has always been committed to achieving green operations and integrating the concept of environmental protection into daily operations. Guided by the national “Double Carbon” goal, we adhere to the concept of green development. We take effective emission reduction measures and attach importance to Energy Saving and emission reduction. We encourage the concept of green and low-carbon development to be rooted in all departments. We strictly comply with the Circular Economy Promotion Law of the People’s Republic of China 《中華人民共和國循環經濟促進法》, the Energy Conservation Law of the People’s Republic of China 《中華人民共和國節約能源法》, the Measures for Energy Conservation Review of Fixed Asset Investment Projects 《(固定資產投資項目節能審查辦法)》, the Measures for Energy Conservation Supervision 《(節能監察辦法)》, the Measures for the Administration of Industrial Energy Conservation 《工業節能管理辦法》, the Measures for the Administration of Energy Conservation of Major Energy-Consuming Entities 《重點用能單位能源管理辦法》 and other relevant laws and regulations, and implemented the Measures for the Operation and Management Assessment of Quality, Environment and Occupational Health and Safety Management System 《質量、環境與職業健康安全管理体系運行管理考核辦法》. We continuously optimize energy conservation, improve resource utilisation rate, meet emission standards and respond to climate change. We actively promote Energy Saving and emission reduction, and strive to reduce the impact of the Company’s operations on the environment.

During the Reporting Period, the Company has not violated any relevant environmental protection laws, has not caused any major accidents affecting the environment and natural resources, and has not received any penalty or litigation notice involving environmental aspects.

During the Year, we have conducted a review on the Company’s environmental performance. We have focused on the implementation of various environmental protection measures and the effectiveness of low-carbon operations. During the Year, the scope of environmental data collection has expanded, and our business operations have steadily improved. The energy consumption density and waste consumption intensity increased as compared to last year, while the water consumption intensity and greenhouse gas emission intensity remained relatively stable.

During the Year, the Company has established directional goals for the entire Group in terms of energy use efficiency, water use efficiency, waste reduction, and greenhouse gas emission. Based on the data of the year, we aim to maintain or gradually reduce the intensity of energy consumption, water resource usage, greenhouse gas emissions, and waste generation. We will continue to implement targeted energy-saving and emission reduction measures, monitor the progress of our objectives and conduct regular reviews on such objectives to achieve our goal of low-carbon operations.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

▲ 1.1 Green Technology Development

In recent years, Qilu Expressway has thoroughly implemented the major national strategic decision of “carbon peaking and carbon neutrality goals”, followed the development trend of clean energy and made full use of idle space resources such as highway ramps, slopes and toll stations. We cooperated with Shandong Hi-Speed Energy Development Company, vigorously practised the Company’s new energy model of “expressway + photovoltaic”, actively deployed distributed photovoltaic projects along the Deshang and Shennan Expressways, and realized the transformation of “expressway” into “power stations”. In particular, in response to the key and difficult points in the process of engineering construction, the Company’s Deshen Operation and Management Centre and Shunguang Industrial, closely coordinated and made breakthroughs, and “pressed the shortcut key” for the efficient and steady progress of the projects to ensure that the construction tasks were completed on schedule.



Case: Deepening the integration of transportation and energy into the photovoltaic projects of Qilu Expressway in Liaocheng Successfully connected to the grid

In November, some of the road area photovoltaic projects of Qilu Expressway in Liaocheng have been successfully connected to the grid and put into operation, with a total installed capacity of 8.2MW, marking the “Victory in the first battle” of Qilu Expressway’s exploration and layout of new energy business, marking a key step in the integration of transportation and green energy.



IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

In the next step, Qilu Expressway will continue to deeply explore the development model of “integration of transportation and energy”, strengthen cooperation with relevant units of the Company, accelerate the layout and construction of photovoltaic and other new energy businesses, and make every effort to promote “achieving green through light” of expressways and industrial parks, so as to actively help achieve “carbon peak, carbon neutrality”.

▲ 1.2 Energy Saving and Consumption Reduction

In response to important national policies such as “carbon neutrality, carbon peak”, the Company is committed to mitigating the impact of global warming risks. The Company conducts statistical analysis of resource and energy consumption data every six months and implements operation supervision and inspection for targets and indicators of resource and energy consumption. We are committed to reducing emissions during our operations for low-carbon business.

Energy and other resources consumed by the Company include: gasoline, diesel, coal gas, natural gas and electricity. Gasoline and diesel are mainly used for motor vehicles, a small amount of diesel is used for power generation, natural gas is used for canteens, coal gas is mainly used for catering in the staff canteen of the renovation and expansion project, and electricity is mainly used for the Company’s office and equipment operation.

Volume and intensity of energy consumption of the Company

Type	2023	2022	Unit
Electricity	8,036,298.46	7,967,439.3	kilowatt-hours
Gasoline	162.22	84.22	tonnes
Diesel	155.41	78.01	tonnes
Coal gas	4,500.00	/	liter
Natural gas	1,258,763.00	399,894.00	Standard cubic metres
Total energy consumption volume	25,499,244.74	1,682,129.62	kilowatt-hours
Total energy consumption intensity	36,636.85	2,427.32	kilowatt-hours/person

- Notes: 1. Comprehensive energy consumption is calculated according to the national standard conversion factor of the General Rules for Calculation of Integrated Energy Consumption 《綜合能耗計算通則》(GB/T 2589-2020) based on the consumption volume of gasoline, diesel, natural gas and electricity.
2. The scope of environmental data disclosure during the Reporting Period includes new renovation and expansion project based on 2022.
3. Coal gas is a new type of energy consumption this year.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

In order to protect natural resources and minimize the impact on the environment, we have implemented a number of electricity-saving measures in the office area and promoted employees' awareness of energy conservation. The measures are as follows:

- Official vehicles should be strictly used, disallowed the use of official vehicles within the city, and advocate sharing of vehicles, green travel or public transport.
- Air conditioning should be strictly used to avoid long-term idling, and turned off in time after leaving for more than half an hour.
- The electrical appliances with lower energy efficiency in the canteens and the stove with large gas consumption were replaced to save the gas volume.
- Save electricity, use energy-saving electrical appliances (LED lights) and turn off computers idle for two hours, so as to achieve "power interruption by people leaving the office"
- Turn off the lights, water dispensers, printers, air conditioners, etc. in the office before leaving work;
- Light-up corridor lights at intervals, and special personnel are responsible for checking the turning off of corridor lights on each floor before leaving work every day.
- Holding video conferences to reduce gasoline consumption for commuting.



Case: Jihe Operation and Management Centre launched the energy-saving publicity week

The period from 10 to 16 July was the 33rd National Energy Conservation Publicity Week, the Jihe Operation and Management Centre carried out the theme activity of "Joining Hands for Energy Saving and Carbon Reduction".

- All units hanging banners of "Joining Hands for Energy Conservation Saving and Carbon Reduction" and "actively responding to climate change to promote green and low-carbon development". The Changqing University City toll station publicized Energy Saving and emission reduction slogans through electronic display screens, and all units posted up the conservation proposals. Some units organized environmental protection science knowledge popularization and publicity activities, calling on employees to actively respond to energy conservation initiatives and practise the consumption and lifestyle of energy and resources conservation.
- All units carry out energy shortage experience, such as actively participating in water-saving activities, not turning on the lighting facilities of the entrance hall and corridor of the office building, not turning on or reducing the lighting of offices and meeting rooms, and suspending the use of air conditioners in the office area. We standardize the size of lunch, not to waste the food, and actively develop scientific and healthy eating habits. We advocate green travel activities, the majority of cadres and employees practised special activities such as walking within 1 km, cycling within 3 km, and taking public transportation within 5 km to guide everyone to experience energy shortage and practise green and low-carbon lifestyle.
- All units of the Jihe Operation and Management Centre produced short videos on energy-saving tips to promote energy-saving awareness to employees, and advocate everyone to practise green and low-carbon lifestyles and create an energy-saving and healthy living environment.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT



Case: Assembly Company Carrying out Energy-saving Technological Renovations

- Reasonable selection of energy-saving equipment to effectively control energy consumption at the source of equipment. For example, we try to select high-performance automated equipment for production equipment, so as to reduce the waste rate and rework rate, improve product quality, and thus greatly improve energy utilization efficiency. We select energy-efficient lamps in electrical design. We use prescribed energy-saving products for all equipment.
- In the design of process devices, all equipment with large load changes are designed to achieve the purpose of energy conservation, and energy-saving equipment is used to adjust output power, so that the equipment is in the best operation and energy-saving state.
- The heating process of the project is carried out by combining electric heating and natural gas thermal oil furnaces according to the needs, so as to reduce energy consumption and improve energy utilization efficiency. The flue gas preheating of the thermal oil furnace is recycled to preheat the air, reduce the exhaust temperature, and improve the boiler heat efficiency.
- The equipment models used in the project are selected according to the design institute and with reference to years of industry production experience, all of which are energy-saving and efficient equipment with high energy efficiency level. The main equipment for each production process in the project design is allocated according to the needs of the production scale to ensure that the equipment is in an efficient working area during normal operation.

▲ 1.3 Use of Water Resources

The Company deeply recognises the importance of water resources to the sustainable development of the Company. We advocate employees to form a resource-saving working culture, and urge all employees to establish water-saving awareness and jointly reduce water consumption. The water resources used by the Company mainly include domestic water and drinking water. The water sources are all from the municipal pipe network. During the Reporting Period, the Company did not have any problem in obtaining water sources.

Water consumption volume and intensity of the Company

Type	2023	2022	Unit
Total water consumption volume	71,815	66,752	m ³
Total water consumption intensity	103.18	96.32	m ³ /person

In 2023, the Company's total water consumption was 71,815 cubic metres, and the overall water consumption intensity remained relatively stable compared to the previous year.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

We have adopted a number of measures to promote water-saving habits among employees, and at the same time, we have adopted a series of management measures to save water resources. The measures are as follows:

- We save water and post “save water” slogans at water use nodes.
- We turn off the faucet tightly after use, wash vegetables and dishwashes with rice washes, and collect wastewater from washing clothes for toilet flushing, etc.
- Managers regularly check the use of water and electricity facilities in the building, and repair them in a timely manner if there is any damage to them to reduce waste.
- The Company regularly summarises the internal water consumption, continues to promote effective water-saving measures, and implements the inspection of water-saving work.
- We make water-saving slogans and banners, and post and hang them in the area to create a good water-saving atmosphere. At the same time, a special column for water conservation was opened on the bulletin board to promote and educate water conservation
- The Company manages water use rules for equipment in each region. The water pipes of the cooking stoves in the canteen shall be closed in time when not in use, and shall not be kept open at all times.
- At canteens, water is used on a qualitative and quantitative basis according to the properties of raw materials for processing. Unused running water is carried with containers. Water mains connected to the cooking ranges are required to be timely turned off when not in use, and are not allowed to keep open all the time. There is no round-off water in the storage tanks.
- When the steamer is not in use, it is necessary to turn off the water source in time and release the excess water in the container as much as possible. Running water is not allowed to be used for defrosting frozen and chilled raw materials. The volume of water used for cleaning in the operation area should be appropriate.
- When cleaning dining areas, employees are required not to wash the floor with water directly but use the mop instead.

In addition, the Company has set up water balance monitoring to further improve the utilization rate of water resources and scientifically manage water resources.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

▲ 1.4 Treatment of Solid Waste

The Company's waste is mainly divided into hazardous waste and non-hazardous waste. Among them, hazardous waste includes waste toner cartridges, waste ink cartridges, waste lamps and waste batteries generated in the office process, and non-hazardous waste mainly includes paper and domestic waste. For hazardous wastes such as waste toner cartridges and waste ink cartridges, the Company adopts unified recycling measures. For domestic waste, including kitchen emissions, the Company handed over to the property management company for treatment.

During the Year, the use of solid waste of the Company is as follows:

Type		2023	2022	Unit
Hazardous waste generation	Spent activated carbon	806	800	kg ⁵
	Toner cartridges	202	162	kg
	Ink cartridges	40	20	kg
	Fluorescent lamps	76	80	kg
	Batteries	35.01	50.47	kg
	Total quantity	1,159.01	1,112.47	kg
	Total Intensity of hazardous waste generation	1.67	1.61	kg/person
Non-hazardous waste generation	Paper	8,461	4,520	kg
	Domestic waste	75,200	30,050	kg
	Kitchen waste	6,648	3,600	kg
	Total quantity	90,309	38,170	kg
	Total Intensity of non-hazardous waste generation	129.75	55.08	kg/person

⁵ The unit of last year's data has been revised to kilograms this year.

For the disposal of non-hazardous waste, we have waste separation and recycling bins or other applicable facilities for recycling or further treatment. We will continue to strive to reduce the generation of waste and the impact on the environment in order to achieve the goal of sustainable development.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

Office supplies such as paper are consumed in the office process. We are committed to reducing waste generation at source, and we use the OA system for paperless office. When printing documents is required, we encourage our staff to print on both sides to save paper. In addition, we also encourage employees to use electronic communication methods such as emails and chat tools to reduce the use of paper letters. We will continue to adopt these measures to achieve the goals of waste reduction and resource recycling.

The main non-hazardous wastes of Gangtong Company are domestic waste, construction waste and waste. The construction waste and waste generated during the construction process are uniformly transported to the waste soil site designated by the government. During the construction, the Company always attaches great importance to environmental protection, strictly abides by the six hundred percent standards for construction sites in Jinan, with full coverage of muck materials, utilization of fog cannons for soil and stone construction water vehicles, full closure of transport vehicles, full enclosure of all qualified construction sites, hardening and sprinkling of construction roads, and full cleaning of vehicles entering and leaving the factory. The garbage cleaned up from the central isolation belt and side ditch of the expressway is handed over to the environmental sanitation department for centralized treatment. After adopting the above measures, the solid waste generated by the projects of Gangtong Co. can basically achieve the 100% safety disposal goal, and basically have no impact on the surrounding environment.

The waste generated by the canteen operated by Shunguang Company is mainly kitchen waste, which is divided into waste generated from raw material rough processing and slop water waste, all of which are non-hazardous waste. A dedicated staff is assigned to handle kitchen waste disposal, timely remove kitchen waste, implement classified management, handle separately, and clear the day of production. Kitchen waste generated in each operation room is sorted and stored in the respective trash cans, and the trash cans must be cleaned and transported in a timely manner. The waste generated from the rough processing of food raw materials (such as vegetable leaves, roots, animals' internal organs, fur and other waste materials) is disposed of as domestic waste, i.e., waste trash is poured into the trash cans with lids, and slop water waste (food residues, meals, vegetables, soup, pots, samples, etc.) is dumped into special slop water trash cans and transported to the garbage station for transfer and disposal by sanitation workers. Appropriate measures are taken to prevent the waste from flying around the way when transporting the waste. The trash cans must be kept clean in their exterior, without obvious nasal stigma and odour, and there are bags in the trash cans in the operation room. It is strictly prohibited to discharge kitchen waste directly into sewers, backflow into public toilets and other domestic waste collection facilities.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

▲ 1.5 Management of Air Emissions

The Company's greenhouse gas emissions are divided into direct emissions (Scope 1) and indirect emissions (Scope 2). Scope 1 refers to Direct GHG emissions from sources owned or controlled by the Company. Scope 2 refers to greenhouse gas emissions indirectly caused by power generation, heating and cooling or steam purchased by the Company.

The Company's exhaust gas emissions mainly come from the combustion of gasoline and diesel in official vehicles and construction vehicles, and the direct greenhouse gas, sulphur dioxide, nitrogen oxide and particulate matter emissions caused by the combustion of natural gas in canteens. Indirect greenhouse gas emissions are caused by electricity consumed in office processes, equipment operation and heating, as well as waste gas emissions involved in the machinery and equipment of Gangtong Company and Assembly Company.

During the Reporting Period, the greenhouse gas emissions of the Company were as follows:

Type	2023	2022	Unit
Sulphur dioxide	91.03	148.2	kg
Nitrogen oxides	2,666.73	154	kg
Volatile Organic Compound	50.1	49.8	kg
Direct greenhouse gas emissions (Scope 1)	3,978.87	1,267.33	tonnes carbon dioxide equivalent (tCO ₂ e)
Indirect greenhouse gas emissions (Scope 2)	4,268.66	4,860.93	tonnes carbon dioxide equivalent (tCO ₂ e)
Total greenhouse gas emissions (Scope 1 and 2)	8,247.53	6,128.26	tonnes carbon dioxide equivalent (tCO ₂ e)
Intensity of greenhouse gas emissions	0.015	0.02	tCO ₂ e/RMB ten thousand

Notes: 1. The data for the two years in the report follows the formula for calculating GHG emissions of environmental key performance indicators in the Stock Exchange's ESG Reporting Guide in order to compare the annual GHG emissions of the issuer.

2. The increase in nitrogen oxides during this year is mainly attributed to the growth in vehicle usage and the addition of data from newly involved Assembly Company.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

The Company strictly implements the Management Practices of Qilu Expressway Company Limited for the Vehicles and Drivers 《齊魯高速公路股份有限公司車輛及駕駛人員管理辦法》, which mainly reduces fuel and electricity consumption by managing official vehicles, thereby reducing direct greenhouse gas and exhaust emissions.

The particulate matter generated in the production process of the mixing plant constructed by Gangtong Company is mainly generated during the feeding process. The Company adopts the fully enclosed water stabilisation production line with spray and dust removal equipment, which is uniformly handed over to the environmental protection department for acceptance and meets the qualified standards. The exhaust equipment has been included in the exhaust pollution prevention and control management system of non-road mobile machinery in Jinan City, and the filing number has been obtained. The vehicle body has been coded and installed with positioning, and the environmental protection department has realised remote monitoring. According to the heavy pollution weather warning notice issued by the environmental protection department, the unit strictly implements the mechanical working hours during the warning period. The emission level follows the National 2 or National 3 emission standards for exhaust pollution from non-road mobile machinery. We replace of small and medium-sized construction tools from fuel-powered to electric tools. We select regular fuel suppliers for construction machinery fuel to ensure oil quality and quantity and phase out old machinery.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

2. COPING WITH CLIMATE CHANGE

Climate change is a serious and growing threat to the well-being of human beings and the health of the planet. Being in the transportation industry, the Company is well aware of the impact of climate change and extreme weather on the business that the Company operates. The Company actively responds to the national “Double Carbon” goal, practises the sustainable development concept of green and low-carbon operation, and actively responds to climate change, so as to minimize the risks caused by climate change, including traffic accidents, employee casualties, construction effects, secondary disasters, etc. The risk control of climate change has been included in the daily management. We are fully aware that climate change may have a potential impact on our business operations. We have conducted climate risk assessments to identify and assess potential risks in our business operations and facilitate the development of our climate risk mitigation measures. At the same time, the Company has taken the initiative to reduce its carbon footprint by setting greenhouse gas emission targets to contribute to the mitigation of climate change.

Through the above methods, the Company has identified the following climate risks that may have an impact on the Company’s business:

Physical risks

With the frequent occurrence of global warming and extreme weather events (such as typhoons and heavy rains), it is possible to face damage to equipment such as offices, production bases and laboratories, resulting in threats to employee safety and production interruption, affecting stable operations and causing property losses. Different extreme weather caused by climate change, such as super typhoons and heavy rains, can cause landslides, flooding and reduced visibility, which pose potential risks and threats to the safety of road users and employees, and may also cause damage to equipment and facilities, and increase the cost of facility maintenance. Long-term high temperature also has a continuous impact on the working and living environment of local employees, which may reduce the work efficiency of employees and cause life risks to their health.

In response to these risks, the Company actively formulates emergency plans to minimise the impact of extreme weather events on us. We conduct regular emergency drills to enable employees to respond promptly and effectively in the event of extreme weather. At the same time, we are equipped with corresponding labour protection supplies, drinks, medicines, etc. We will continue to promote Energy Saving and emission reduction, reduce energy use and emissions, adopt sustainable operation methods, reduce the impact on the environment, and make positive contributions to the realisation of sustainable development.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

Transition risk

As countries pledge to achieve carbon neutrality goals, we expect the government to adopt more stringent policies and measures to achieve emission reduction goals. If we fail to respond to these changes in a timely manner, we will face issues such as increased costs and non-compliance fines, which will increase our compliance costs. At the same time, we may face changes in market demand caused by climate change due to failure effects, resulting in damage to our reputation and reduced competitiveness, resulting in property losses. The Company will pay close attention to the updates of laws, regulations and policies related to the environment and take corresponding measures in a timely manner. We disclosed the greenhouse gas emission data of the Company in the ESG report and made efforts in low-carbon operation to actively maintain our corporate image. We also actively respond to the national call for “carbon peaking and carbon neutrality goals”, actively communicate with stakeholders, and formulate and disclose emission reduction targets.

3. ENVIRONMENTAL AND ECOLOGICAL PROTECTION

▲ 3.1 Sewage Treatment

The Company strengthens the safety management of sewage treatment throughout the process, and establishes sewage treatment facilities at major toll stations, and discharges sewage after treatment and reaching the standard. The sewage treatment process of the Company’s subsidiaries is divided into the following categories:

- The wastewater generated by the car washing machine can be recycled after sedimentation in the sedimentation tank;
- Production sewage is discharged through sewers and through sedimentation tanks;
- Waste water from canteens is treated by grease traps, and oil is regularly cleaned to prevent pollution;
- We strictly regulate the management of asphalt reservoirs, and designate personnel to be responsible for storage, use and storage to prevent oil from polluting water bodies;
- Toilet sewage is discharged after centralised treatment on a regular basis.

In 2023, waste water discharge volume of the Company was approximately 5,000 cubic meters.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

▲ 3.2 Raw Material Management

Gangtong Company and Assembly Company consumes cement, stone and asphalt in the production and operation process. The consumption is shown in the table below:

Type	2023	2022	Unit
Cement	4,109.58	4,424.48	tonnes
Stone	297,934.41	80,375.55	tonnes
Asphalt	4,850.13	3,342.44	tonnes

▲ 3.3 Noise Control

The Company advocates civilised construction at the construction site and establishes and improves the management system for man-made noise. We focus on minimizing the loud noises of human beings, enhancing the awareness of all construction workers to prevent noise from disturbing the people, strengthening the education of construction workers, establishing internal rules and regulations, improving reward and punishment measures, clarifying the responsibilities of construction workers, punishing those who fail to comply with civilised construction standards, giving rewards to those who are prominent, and prohibiting noise such as calligraphy and knockout that is not related to construction.

Control of strong noise operation hours:

- We arrange the construction process scientifically and reasonably, and strictly control the operation time if the operation of strong noise is carried out in the densely populated area of residents. The night operation shall not exceed 22 hours, and the morning operation shall not be earlier than 6 hours;
- If continuous operation (or night operation) is required under special circumstances, noise reduction measures shall be taken as much as possible, and the surrounding people shall be well prepared in advance, and the construction can only be carried out after filing with the relevant competent authorities.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

Noise reduction measures for noisy machinery:

- The processing and production of finished and semi-finished products (such as mortar mixing, steel reinforcement production, etc.) that generate strong noise shall be completed in factories and workshops as much as possible to reduce the noise caused by processing and production on the construction site;
- We choose construction machinery with low noise or noise reduction equipment as much as possible;
- Enclosed mechanical sheds shall be set up for the noisy machinery on the construction site (such as mixers, electric saws, electric planers, sand turbines, etc.) to reduce the spread of strong noises;
- We keep away from residential areas as far as possible, and set up necessary noise reduction facilities, such as sound insulation walls and covers, to minimize the impact of construction on the surrounding environment.

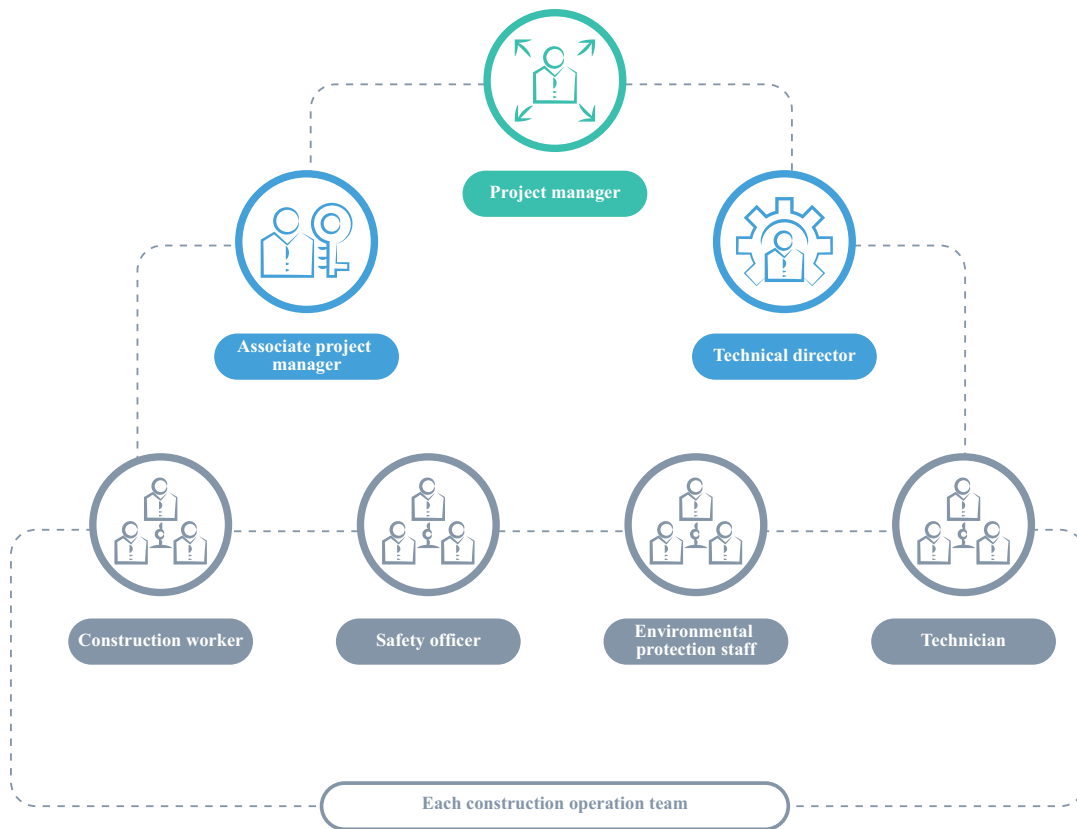
Strengthening noise monitoring at construction sites:

- Strengthen the long-term monitoring of environmental noise at the construction site, adopt the principle of special personnel management, fill in the noise measurement record form of the construction site according to the measurement results, and adjust the factors related to the excessive noise at the construction site in a timely manner if the noise level exceeds the standard of the “Noise Limits at the Construction Site Boundary 《施工場界噪聲限值》” to achieve the purpose of construction noise not disturbing the people.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

▲ 3.4 Ecological Construction and Engineering

The Company tries its best to reduce the impact on the environment during the construction process, establishes a leading group for construction environmental protection, and strengthens the environmental protection work during the construction period.



Leading group for construction environmental protection

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

Environmental protection construction technology disclosure was made for the operation teams involved in dust problems, and the dust control work was specifically implemented. The project department purchased pure electric fog sprinklers to reduce the pollution of fog sprinklers to the atmosphere. We develop pre-shift education system, provide training and education on environmental protection issues arising from construction in advance, firmly establish the idea of environmental protection construction, improve the awareness of environmental protection construction, and enhance the responsibility of construction workers for environmental protection construction. We strictly implement the various measures on dust control issued by the construction unit and the supervision unit, accept inspections, and immediately rectify the existing problems.



The mining excavator and crushing machinery using fog cannon to reduce dust, with one cannon for each machinery



Spraying and fog cannon for dust reduction in aggregate production line workshop

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT

The construction shall meet the requirements of national, local and industry laws and regulations on environmental protection, and reduce packaging materials on the premise of ensuring quality. Safer, explosive and toxic hazardous materials are properly kept, and preventive measures are taken to prevent fire, explosion and other accidents in the process of storage and transportation, resulting in environmental pollution.



Environmental Management System Certification

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT



Case: Green Mine Training Organised by the Assembly Company

On 25 May, the Mine Development and Management Centre (礦山開發管理中心) of the Assembly Company conducted training and learning on the Green Mine Construction Specifications 《綠色礦山建設規範》 and Green Mine Evaluation Indicators 《綠色礦山評價指標》 in the conference room on the first floor of the Company. Green mines will evaluate the construction of green mines in six aspects, including mining area environment, resource development methods, comprehensive utilization of resources, Energy Saving and emission reduction, scientific and technological innovation, and enterprise management and corporate image.



IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT



Case: the Assembly Company Initiated Tree Planting Activities

On 10 March, Qilu Expressway (Shandong) Assembly Co., Ltd., Pingyin County Federation of Trade Unions, Youth League and County Women's Federation, and the Youth Working Committee of Hongfangchi Town, carried out a tree planting activity with the theme of "Planting a green forest, cultivating a clean atmosphere". Party members and league members of the Company participated in the tree planting together.



Case: Deshen Operation and Management Centre's Expressway Greening Plan

According to the requirements of the Company's precise maintenance demonstration road work objectives, and on the basis of maintaining maintenance in accordance with the construction work standards, the Deshen Operation and Management Centre completed the construction of a 26-kilometre precision maintenance demonstration road in the K179+000-K205+000 road section of the Deshang Expressway in 2023, accounting for 30% of the management and maintenance mileage, and the cumulative construction of 61.914 kilometres of the precision maintenance demonstration road, accounting for 71% of the total management and maintenance mileage. 80 seedlings were replanted, the slope lawn was trimmed for 3,578,000 square metres, the side ditch was silted for 10,440 cubic metres, and the middle part of seedlings was trimmed for two times.

IV. TAKING RESPONSIBILITY WITH GREEN DEVELOPMENT



Case: Implementation of the concept of ecological and environmental protection in the R&E Project for green quality construction

In accordance with the strategic blueprint of the 20th CPC National Congress, Jihe R&E Project Office grasped the historical mission entrusted by the new era, firmly established and practiced the concept that lucid waters and lush mountains are invaluable assets, organized and studied the spirit of the 20th CPC National Congress, improved the ideological understanding of environmental protection, carried out environmental protection work in accordance with the spirit of the 20th CPC National Congress, and took effective measures to implement environmental protection requirements into project construction.

- Each project department has established a comprehensive environmental protection system, clearly assigning responsibilities to individuals, implementing an internal environmental protection inspection system, improving various types of environmental protection internal documents, and using internal environmental protection efforts as a leverage to actively implement on-site environmental protection measures.
- Construction access roads were equipped with automatic sprinkler systems for dust suppression. Construction access roads at important national and provincial road intersections are fitted with car wash platforms, accompanied by triple sedimentation ponds, to achieve water recycling, maximally reduce the consumption of various raw materials, and save energy, water, and raw materials.
- The comprehensive site construction planning has abandoned the traditional brick wall, opting instead for dust suppression netting as the wall design. This reduces the energy consumption of excavation and the use of masonry materials, achieving the dual benefits of wind and dust prevention and enclosure function, leading to both environmental and economic benefits.

APPENDIX: INDEX TABLES OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE OF THE HONG KONG STOCK EXCHANGE

A. Environmental			Related Sections
Aspect A1: Emissions`	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation
	A1.1	The types of emissions and respective emissions data.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.4 Treatment of Solid Waste 1.5 Management of Air Emissions
	A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.5 Management of Air Emissions
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Chapter IV Taking Responsibility With Green Development 1. Low-Carbon Operation- 1.4 Treatment of Solid Waste
	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.4 Treatment of Solid Waste

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A. Environmental			Related Sections
	A1.5	Description of emission target(s) set and steps taken to achieve them.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.2 Energy Saving and Consumption Reduction 1.5 Management of Air Emissions
	A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.4 Treatment of Solid Waste
Aspect A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.2 Energy Saving and Consumption Reduction 1.3 Use of Water Resources 3. Environmental and Ecological Protection- 3.2 Raw Material Management
	A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.2 Energy Saving and Consumption Reduction

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A. Environmental			Related Sections
A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.3 Use of Water Resources	
A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.2 Energy Saving and Consumption Reduction	
A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target(s) set and steps taken to achieve them.	Chapter IV Taking Responsibility With Green Development 1. Low-carbon Operation- 1.3 Use of Water Resources	
A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not applicable. Due to business nature, the Group does not produce any finished goods. Therefore, a great amount of packaging materials will not be used during our daily operations.	

APPENDIX: INDEX TABLES OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE OF THE HONG KONG STOCK EXCHANGE

A. Environmental			Related Sections
Aspect A3: The Environment and Natural Resources	General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	Chapter IV Taking Responsibility With Green Development 3. Environmental and Ecological Protection
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Chapter IV Taking Responsibility With Green Development 3. Environmental and Ecological Protection
Aspect A4: Climate Change	General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Chapter IV Taking Responsibility With Green Development 2. Coping With Climate Change
	A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Chapter IV Taking Responsibility With Green Development 2. Coping With Climate Change

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B. Social			Related Sections
Aspect B1: Employment	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, and other benefits and welfare.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles 1.2 Talents Management
	B1.1	Total workforce by gender, employment type (for example, full – or part-time), age group and geographical region.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles
	B1.2	Employee turnover rate by gender, age group and geographical region.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles

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B. Social			Related Sections
Aspect B2: Health and Safety	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.4 Health and Safety Assurance
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.4 Health and Safety Assurance
	B2.2	Lost days due to work injury.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.4 Health and Safety Assurance
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.4 Health and Safety Assurance

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B. Social			Related Sections
Aspect B3: Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.3 Employee Growth
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.3 Employee Growth
	B3.2	The average training hours completed per employee by gender and employee category.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.3 Employee Growth

APPENDIX: INDEX TABLES OF THE ENVIRONMENTAL, SOCIAL AND GOVERNANCE REPORTING GUIDE OF THE HONG KONG STOCK EXCHANGE

B. Social			Related Sections
Aspect B4: Labour Standards	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles
	B4.1	Description of measures to review employment practices to avoid child and forced labour.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles
	B4.2	Description of steps taken to eliminate such practices when discovered.	Chapter III Work in Concerted Efforts for Long-Term Development 1. Employees Management and Care- 1.1 Employment Principles

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B. Social			Related Sections
Aspect B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain.	Chapter III Work in Concerted Efforts for Long-Term Development 2. Responsible Supply Chain
	B5.1	Number of suppliers by geographical region.	Chapter III Work in Concerted Efforts for Long-Term Development 2. Responsible Supply Chain
	B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, and how they are implemented and monitored.	Chapter III Work in Concerted Efforts for Long-Term Development 2. Responsible Supply Chain
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Chapter III Work in Concerted Efforts for Long-Term Development 2. Responsible Supply Chain
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Chapter III Work in Concerted Efforts for Long-Term Development 2. Responsible Supply Chain

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B. Social		Related Sections	
Aspect B6: Product Responsibility	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Chapter II Pursuing Enhanced Transportation Accessibility For the Future 2. Operational Safety and Standards
	B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not applicable. As the Group operates expressway business, no products sold or shipped are subject to recalls for safety and health reasons.
	B6.2	Number of products and service related complaints received and how they are dealt with.	Chapter II Pursuing Enhanced Transportation Accessibility For the Future 1. Ensuring Transportation Quality 1.4 Service Optimisation
	B6.3	Description of practices relating to observing and protecting intellectual property rights.	Chapter II Pursuing Enhanced Transportation Accessibility For the Future 3. Moving Forward with Intelligence- 3.2 Innovation Application
	B6.4	Description of quality assurance process and recall procedures.	Not applicable. As the Group operates expressway business, no products sold or shipped are subject to recalls for safety and health reasons.
	B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Chapter II Pursuing Enhanced Transportation Accessibility For the Future 3. Moving Forward with Intelligence- 3.1 Information and Data Safety

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B. Social			Related Sections
Aspect B7: Anti-corruption	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Chapter I Tamping Foundation to Promote Development 2. Ensuring Stable Governance
	B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Chapter I Tamping Foundation to Promote Development 2. Ensuring Stable Governance
	B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	Chapter I Tamping Foundation to Promote Development 2. Ensuring Stable Governance
	B7.3	Description of anti-corruption training provided to directors and staff.	Chapter I Tamping Foundation to Promote Development 2. Ensuring Stable Governance
Aspect B8: Community Investment	General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Chapter III Work in Concerted Efforts for Long-Term Development 3. Social Services and Contributions
	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Chapter III Work in Concerted Efforts for Long-Term Development 3. Social Services and Contributions
	B8.2	Resources contributed (e.g. money or time) to the focus area.	Chapter III Work in Concerted Efforts for Long-Term Development 3. Social Services and Contributions



齐鲁高速公路股份有限公司
QILU EXPRESSWAY COMPANY LIMITED