京投軌道交通科技控股有限公司
BII Railway Transportation Technology Holdings Company Limited

(Incorporated in the Cayman Islands with limited liability)
Stock code: 1522

2021
Environmental, Social and Governance Report

CONTENTS

Part 1: Environmental, Social and Governance Report Overview

ABOUT THE REPORT

BII Railway Transportation Technology Holdings Company Limited (together with its subsidiaries hereinafter referred to as "the Group", "BIITT" or "we") has prepared this 2021 Environmental, Social and Governance Report in accordance with the latest update of the Environmental, Social and Governance Reporting Guide (the "Reporting Guide"), which is contained in Appendix 27 to the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited* ("Main Board Listing Rules") as stipulated by The Stock Exchange of Hong Kong Limited ("SEHK"). This report incorporates a statement from the Board of Directors ("the Board") and has followed the reporting principles of Materiality, Quantitative and Consistency as well as the Reporting Boundary in respect of collecting relevant materials, analysing data and reviewing information over the course of its preparation and compilation.

For details of the corporate governance practices of the Group, please refer to the Corporate Governance Report section on pages 51-65 of the 2021 Annual Report.

REPORTING PERIOD AND BOUNDARY

This report focuses on the Group's environmental, social and governance ("ESG") policies, targets and initiatives from 1 January 2021 to 31 December 2021 (the "Reporting Period"). Unless otherwise specified, the domestic and overseas businesses covered by the policies, systems, statements and key performance indicator data in this report are consistent with the scope of its financial report.

The Group will continue to refine the scope of its environmental, social and governance reporting, and may include new topics and expand the depth of its reporting in the future.

DATA SOURCES AND RELIABILITY ASSURANCE

The information in the 2021 ESG Report, including the Group's policies, initiatives, practices and case studies, come mainly from its internal systems, statistics, reports and records. The Group takes responsibility for the authenticity, accuracy and completeness of the content of its report.

REPORT DISCLAIMER

The Board is accountable for the ESG strategy formulation and reporting. This ESG Report is published in both Chinese and English versions. Should there be any discrepancies in any of the information, the Chinese version shall prevail. In case of any conflict or inconsistency between this report and the Annual Report, the Annual Report shall prevail. The interpretation of this report is consistent with the 2021 Annual Report. Please refer to pages 66-68 of the 2021 Annual Report.

This ESG Report is available for downloading on the website of the SEHK (www.hkexnews.hk) and the website of the Company (https://www.biitt.cn).

CONFIRMATION AND APPROVAL

Following review by the Chief Executive Officer, and review and endorsement by the Environmental, Social and Governance Committee, this report was finally approved by the Board on 29 March 2022.

CONTACT AND ENQUIRY

The Group is committed to continuously improving the quality of its ESG disclosures and is looking forward to suggestions from investors and other stakeholders. Our contact information is as follows:

BII Railway Transportation Technology Holdings Company Limited
Investor Relations

Tel: +852 2805 2588
Email: IR@biitt.cn

Part 2: ESG Strategy and Oversight

ABOUT THE GROUP

The Group is a high-tech corporation focusing on the intelligent construction and development of various forms of rail transit including high-speed railways, intercity railways, suburban rail ways and urban metro lines as well as smart city infrastructures. Through innovative research and development, and production and system integration, the Group provides digitised solutions and operation and maintenance services for multiple core systems of intelligent railway transportation and smart city infrastructure.

Public transport is a pivotal infrastructure which serves as a lifeline for the economic activities and normal functionalities of modern cities. We support railway and metro operators as well as municipal administrators in safeguarding the system safety and efficiency of rail transport operations, which offer the mobility convenience and entitlement to all city dwellers and travelers. We are proud to have played an enabling role for the families and the cities we serve.

Through an in-depth understanding of its customer needs and industry evolution, coupled with the exploration and application of innovative technologies, the Group has achieved a promising market size and leading position in Passenger Information Systems ("PIS"), Automated Fare Collection ("AFC") systems and Automated Fare Collection Clearing Centre ("ACC") systems for rail network. As at December 31, 2021, the Group established its presence in 27 provinces, 49 cities across, autonomous regions and special administrative regions in China. It also extended its reach to 13 overseas markets including India, Indonesia, Mexico and Brazil, achieving geographical expansion and diversification of revenue sources, benefiting from its experience in delivering high-quality infrastructure projects in Beijing of metro and subway development.

In the face of the COVID-19 pandemic, the Group continued to record growth in various areas for the year of 2021:

Sales revenue grew 12.9%

Net profit increased 8.5%

Orders on hand up 6.8%

| 0 | 3 | 6 | 9 | 12 | 15 |

2021 HONOURS AND AWARDS

BIITT wins China Intelligent Rail Transit Excellent Solution Award 2020

荣誉证书
HONORARY CREDENTIAL

苏州华启智能科技有限公司：

贵司研发的"智慧乘客服务系统一体化解决方案（iPSS）"，荣获"2020年度中国智慧轨道交通优秀解决方案奖"。

特颁此证！

RT轨道交通

二〇二一年五月

At the 6th China Rail Transit Conference on 21 May 2021, Suzhou Huaqi Intelligent Technology Co., Limited ("Huaqi") garnered the Excellent Solution Award for the development of its Intelligent Passenger Service System (iPSS) integrated solution.

BIITT's Intensive Dispatch Control System (MSCADA/MBAS/MFAS, 3M) wins Information Technology Achievement Award

3M Intensive Dispatch Control System adopts a B/S architecture and the concept of cloud native, which is easy to deploy and expand and is compatible with a variety of systems, effectively reducing the cost and workload of system maintenance and upgrades.

This project is an important step taken in the R&D of the railway transportation industry towards establishing an intensive and intelligent dispatching system.
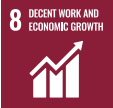
BIITT enters the list of national "science and technology reform demonstration enterprises" issued by e The State-owned Assets Supervision and Administration Commission of the State Council.

The "Science and Technology Reform Demonstration Enterprise" project is a special project designated for the deep reform of state-owned enterprises, which would build themselves into a model of reform for state-owned technology-based enterprises and a pioneer in independent innovation in accordance with development requirements.

Being selected among the first batch of 400 science and technology reform demonstration enterprises in the country speaks for the core strengths of the Group. We will continue to explore and innovate in the spheres of market-oriented reform, corporate governance, incentives and constraints in an effort to unleash further breakthroughs.

BENCHMARKING AGAINST THE UNITED NATIONS' SUSTAINABLE DEVELOPMENT GOALS

The Group has incorporated a benchmarking analysis against the United Nations' Sustainable Development Goals ("SDGs") in the process of defining its business strategy and has aligned its business orientation with four of the 17 goals to underline its social responsibility and commitment. The four SDGs are Goal 3: Good Health and Well-being, Goal 8: Decent Work and Economic Growth, Goal 9: Industry, Innovation and Infrastructure, and Goal 11: Sustainable Cities and Communities.

	SDGs	The Group's business orientation	Report chapter
3 GOOD HEALTH AND WELL-BEING	**Ensure healthy lives and promote well-being for all at all ages** 3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents	We actively promote the use of rail transit by advocating public transportation, raising the general public's awareness of the safety and convenience of traveling by rail, and by providing mobility options and solutions that enhance passenger experiences	Part 2 Part 5
8 DECENT WORK AND ECONOMIC GROWTH	**Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all** 8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value	We uphold the principle of equality and non-discrimination and offer competitive remuneration packages in respect of employment, and maintain a low turnover rate.	Part 6
	8.8 Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment	We provide our employees with avenues to voice their interests and offer contract employment opportunities and job trainings for migrant workers.	Part 6

	SDGs	The Group's business orientation	Report chapter
9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	**Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation** 9.1 Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	We participate in the construction of rail transit systems in China and other developing economies and the R&D of smart cities, and provide informatisation services for urban infrastructures.	Part 5
11 SUSTAINABLE CITIES AND COMMUNITIES	**Make cities and human settlements inclusive, safe, resilient and sustainable** 11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	We participate in the construction of rail transit systems in China and other developing economies, providing means for the general public to travel and facilitating their daily lives and activities.	Part 5

OVERSIGHT AND ACCOUNTABILITY

Being an important part of sustainable development, enabling the ease of travel among the general public not only is the Group's social responsibility, but also its business orientation and the purpose of all its efforts made. In order to optimise the management of the ESG practices, the Environmental, Social and Governance Committee (the "ESG Committee") of the Board and the ESG Working Group under it were formed during the reporting period, and corresponding scope of responsibilities and communication mechanism were determined.

The Board

Guide and approve the ESG and climate change-related strategies and targets

ESG Committee

Identify, formulate and review the ESG and climate change-related strategies, approaches and targets

ESG Working Group

Monitor updates of regulatory requirements and best practices in market. Lead researches on relevant topics Provide analyses of target setting and manage target implementation Coordinate annual reporting and information disclosures Coordinate the ESG report and related disclosures

The Group's ESG Oversight

STATEMENT FROM THE BOARD

The Group announced a privatisation proposal of the Group initiated by Beijing Infrastructure Investment (Hong Kong) Limited towards the end of the financial year of 2020. Related work kicked off in compliance with the *Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited* and the *Codes on Takeovers and Mergers and Share Buy-backs* in the financial year of 2021 until an update on the cessation of such privatisation was made on 11 May 2021. In view of the uncertainty brought about by this privatisation offer to the future development and related business strategy of the Group, the setting of specific ESG targets was deferred to the latter half of 2021 and is still underway.

In recent years, the notable rise in temperature caused by the accumulation of global greenhouse gas ("GHG") emissions and the resulting climate change, especially extreme weather events, have led to significant damages to lives and properties as well as crop yield. Secondary disasters induced by these would have further disrupted global supply chains and increased economic inequality and government spendings. A global energy transformation in line with the Paris Agreement is paramount in combating climate change and reducing dependence on non-renewable resources. In this respect, the Chinese government is proactively involved and has announced its nationally determined contribution targets and a timeline for achieving carbon neutrality. The Group has also in its 14th five-year plan (2021-2025) pinned down a preliminary working direction of its own carbon emission targets taking into account the trends and requirements of sustainable development as well as the characteristics of the industry and the development stage of the Group. The targets for emissions and resource use efficiency will be developed accordingly.

During the reporting period, the Board-led ESG efforts revolved around, establishing the ESG Committee of the Board and its ESG Working Group, and setting out the working objectives and responsibility scope of the Committee as well as the key tasks for 2021.
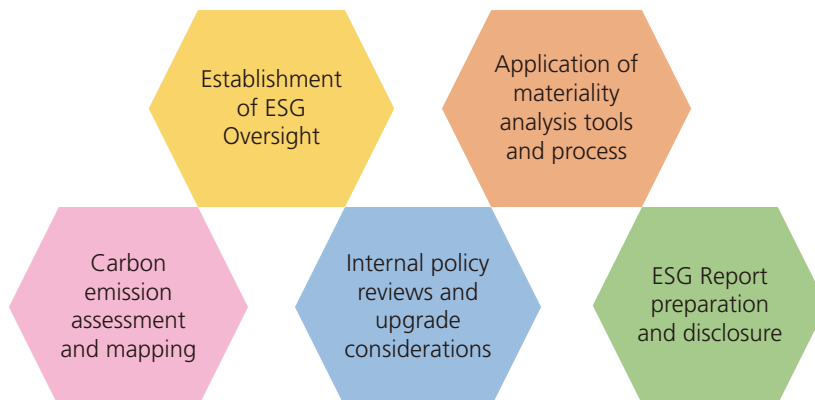
Three Objectives of the ESG Committee

1
Take sustainable development as the fundamental, giving full consideration to social and public well-being as well as the continuous reduction of environmental impact and demand for natural resources in strategic management decisions.

2
Have the ability to anticipate potential conflicts of interest and risks in the midst of complex internal and external stakeholder demands so as to strive for a win-win situation.

3
Effectively identify and manage ESG risks and opportunities.

The ESG Committee was established on 29 November 2021. Committee members discussed the direction of the Group's ESG efforts and the risks and opportunities in the time of climate change. Related ESG program was reported to the Board and was approved on 22 December 2021 as part of the Group's 14th Five-Year Strategic Planning. Preparation for the 2021 ESG Report commenced thereafter.
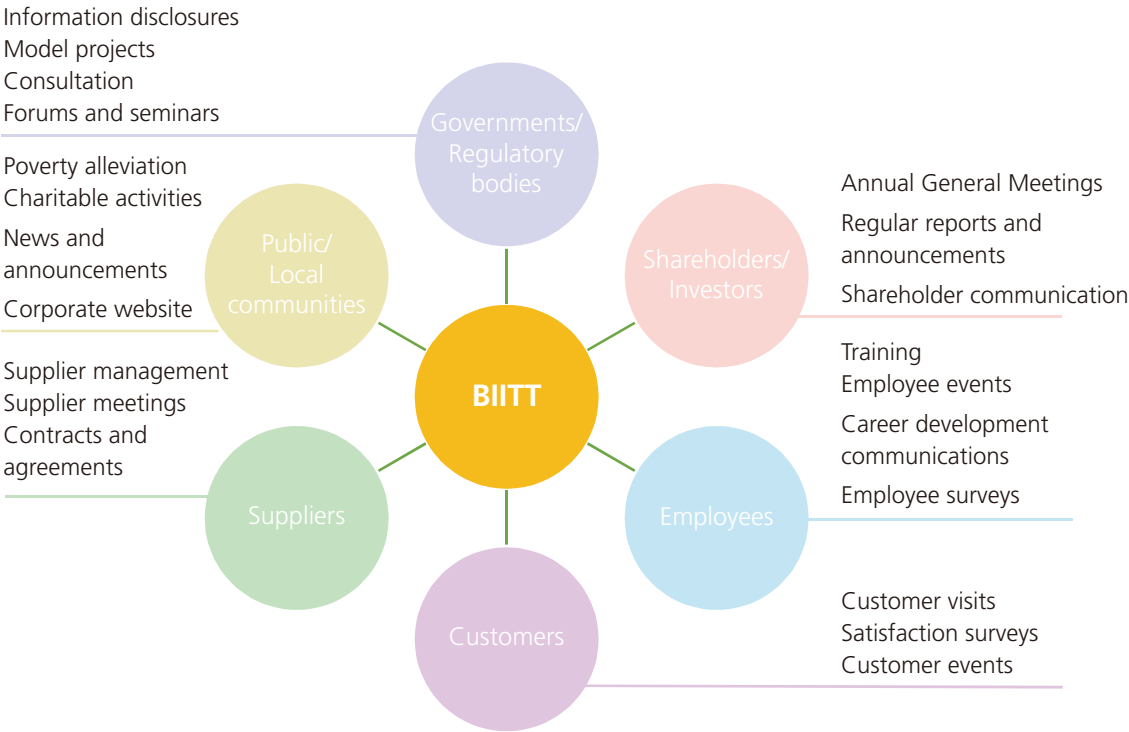
The Group has engaged external experts to take part in the preparation and compilation of the 2021 ESG Report. The Working Group and experts laid emphasis on stakeholder engagement and feedback, delved into the entire engagement process of survey subject identification, coverage assessment and questionnaire development. Following the internal and external exercises, the Working Group concluded with the Group's materiality matrix and priority of material topics. The Working Group supported by the experts, reviewed the Group's policies from ESG lens, and carried out a preliminary review on its current whistle blowing system with an aim to unify various reporting channels. In view of the business nature of the Group, its GHG emissions are mainly generated by using purchased electricity from the power grid, which will be disclosed in CO_2 equivalent.

The Group's key ESG tasks in 2021

Establishment of ESG Oversight

Application of materiality analysis tools and process

Carbon emission assessment and mapping

Internal policy reviews and upgrade considerations

ESG Report preparation and disclosure

PART 3: IDENTIFICATION, ASSESSMENT AND PRIORITISATION OF MATERIAL TOPICS

The Group's identification and disclosure of material ESG topics is an important reporting principle followed in this report. We are well aware that corporate decisions would have different degrees of impact on various stakeholders. Keeping this in mind, we have strived to engage with our stakeholders including governments and regulatory bodies, customers, shareholders and investors, suppliers, local communities and employees in constructive dialogues via ongoing, regular business activities and/or dedicated channels, with the aim of better understanding their views and soliciting their feedback.

Information disclosures
Model projects
Consultation
Forums and seminars

Poverty alleviation
Charitable activities

News and announcements

Corporate website

Supplier management
Supplier meetings
Contracts and agreements

Governments/
Regulatory
bodies

Public/
Local
communities

Suppliers

BIITT

Shareholders/
Investors

Employees

Customers

Annual General Meetings

Regular reports and announcements

Shareholder communication

Training
Employee events

Career development communications

Employee surveys

Customer visits
Satisfaction surveys
Customer events

MATERIAL TOPIC IDENTIFICATION

In 2021, the Group continued to engage and communicate with its stakeholders through the channels detailed above. References were also made to 1) the requirements stipulated by relevant regulatory bodies; 2) media coverage on ESG-related topics in the industry; and 3) major incidents identified by the business units and functional departments of the Group during the year. With our findings from these processes, we collated and defined the Group's ESG topic universe for the year of 2021, which comprises 10 environmental, 12 social and 5 governance-related topics over risks and opportunities.

Environment		
1. Carbon emissions	5. Land Use of land resources	8. Electronic wastes
2. Impact of severe weather	6. Biodiversity	9. Green finance
3. Energy consumption	7. Hazardous emissions and wastes	10. Renewable energy
4. Water consumption and management		

Social		
11. Compensation and welfare	15. Technological innovations	19. Intellectual property rights
12. Development and training	16. Product quality	20. Supply chain labour standards
13. Work intensity and health	17. Customer satisfaction	21. Supply chain business ethics
14. Production safety	18. Privacy and data security	22. Community relations

| Governance		
23. Board effectiveness	25. Fair competition	27. Feedback mechanism
24. Legal capabilities and compliance	26. Anti-bribery and corruption	

Based on the aforementioned 27 topics, we communicated with various stakeholder groups through interviews and/or questionnaires and received 99 valid responses. They were hence gathered and compiled in the table below. We received no supplementary suggestions for the topic universe.

Stakeholder Groups	Topics of Concern
Governments/Regulatory bodies	Production safety, Technological innovations, Product quality, Legal capabilities and compliance
Shareholders/Investors	Carbon emissions, Energy consumption, Privacy and data security, Anti-bribery and corruption
Employees	Carbon emissions, Compensation and welfare, Development and training, Technological innovations
Consumers	Product quality, Customer satisfaction, Supply chain labour standards, Privacy and data security
Suppliers	Technological innovations, Product quality, Customer satisfaction, Fair competition

The Group was unable to collect responses from media and community organisations in 2021. In the coming year, we will look to collect their concerns and suggestions via questionnaires and regular interactions.

MATERIALITY ASSESSMENT

In accordance with the relevant requirements of Appendix 27 to the Main Board Listing Rules of the SEHK, the Group embarked upon its materiality assessment from both internal and external perspectives, amalgamating the expectations of stakeholders with the Group's own business strategies and priorities to draw up a materiality matrix for the year of 2021. The results showed that material topics of high concern include Technological innovations, Product quality, Customer satisfaction, Production safety, Carbon emissions, Privacy and data security, Anti-bribery and corruption, Energy consumption, Legal capabilities and compliance, and Fair competition.

BIITT Materiality Matrix
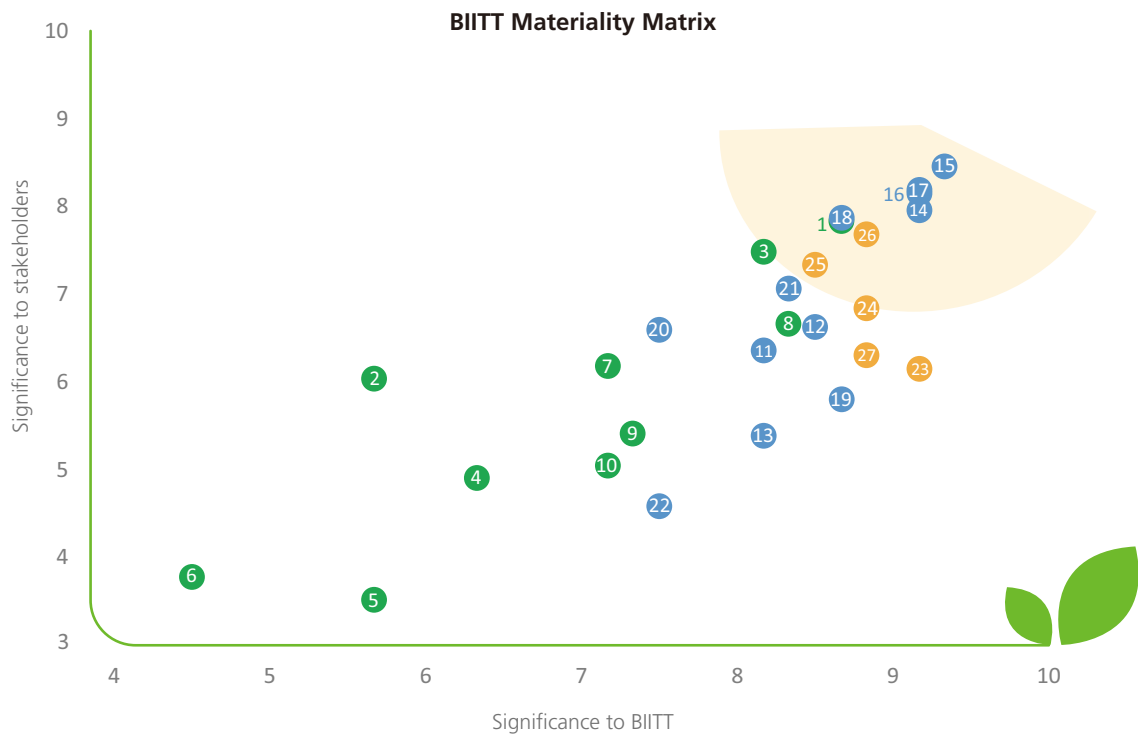
1. Carbon emissions	10. Renewable energy
2. Impact of severe weather	11. Compensation and welfare
3. Energy consumption	12. Development and training
4. Water consumption and management	13. Work intensity and health
5. Use of land resources	14. Production safety
6. Biodiversity	15. Technological innovations
7. Hazardous emissions and wastes	16. Product quality
8. Electronic wastes	17. Customer satisfaction
9. Green finance	18. Privacy and data security

19. Intellectual property rights
20. Supply chain labour standards
21. Supply chain business ethics
22. Community relations
23. Board effectiveness
24. Legal capabilities and compliance
25. Fair competition
26. Anti-bribery and corruption
27. Feedback mechanism

These ten material topics were endorsed by the Board and are presented in the following chapters of this report.

PART 4: BUSINESS ETHICS AND ANTI-CORRUPTION

BUSINESS ETHICS

The Group's business activities strictly comply with all applicable laws and regulations of the countries and regions where it operates, as well as with the entry requirements and standards of those markets in which its products are sold. It actively safeguards and promotes fair competition practices in all its markets. Likewise, the Group attaches great importance to anti-bribery and anti-corruption and conducted relevant trainings for all directors and completed large-scale anti-corruption trainings at the headquarters and its subsidiaries in the financial year of 2021. External professional trainers were engaged to deliver related lectures, visits and discussion sessions with a total of 141 participants partaking in these. Internal documents including Policy and Procedures for Employees Reporting Possible Improprieties and Measures on Anti-fraud Management have been put in place, together with an array of communication mechanisms and reporting channels as well as a comprehensive protection mechanism for whistle-blowers. In 2021, there was no corruption lawsuit filed against the Group or its employees.

As a listed company, the Group abides by the requirements of the SEHK in respect of connected transactions and management of inside information. It has established corresponding internal systems and review mechanisms (*Information Disclosure Management System, Management Measures for the Registration of Insider Information and Management Measures for Connected Transactions*), including the provision of trainings and exchange opportunities for those in relevant positions. However, during the reporting period, the Group had an incident of non-compliance continuing connected transactions. In the incident, due to the failure of Mr. Cao Wei, an executive director and the vice chairman of the Group at that time, to timely notify and disclose his indirect shareholding of Beijing Subway Information Development Co., Ltd. ("Beijing Information"), the Group was not able to identify the connected relationship at the relevant time and therefore had not complied with the reporting and disclosure requirements under the Main Board Listing Rules in relation to the non-compliance continuing connected transactions. Upon becoming aware of the situation, the Group took immediate actions to rectify such non-compliance, including adding Beijing Information as a connected person in the Group's list of connected persons. On 17 December 2021, the Group entered into a framework agreement with Beijing Information. The resolution of which was duly passed at the Extraordinary General Meeting held on 3 March 2022. Led by the ESG Committee, the Group plans to review its corporate code of conduct and propose and implement an update in the coming financial year.
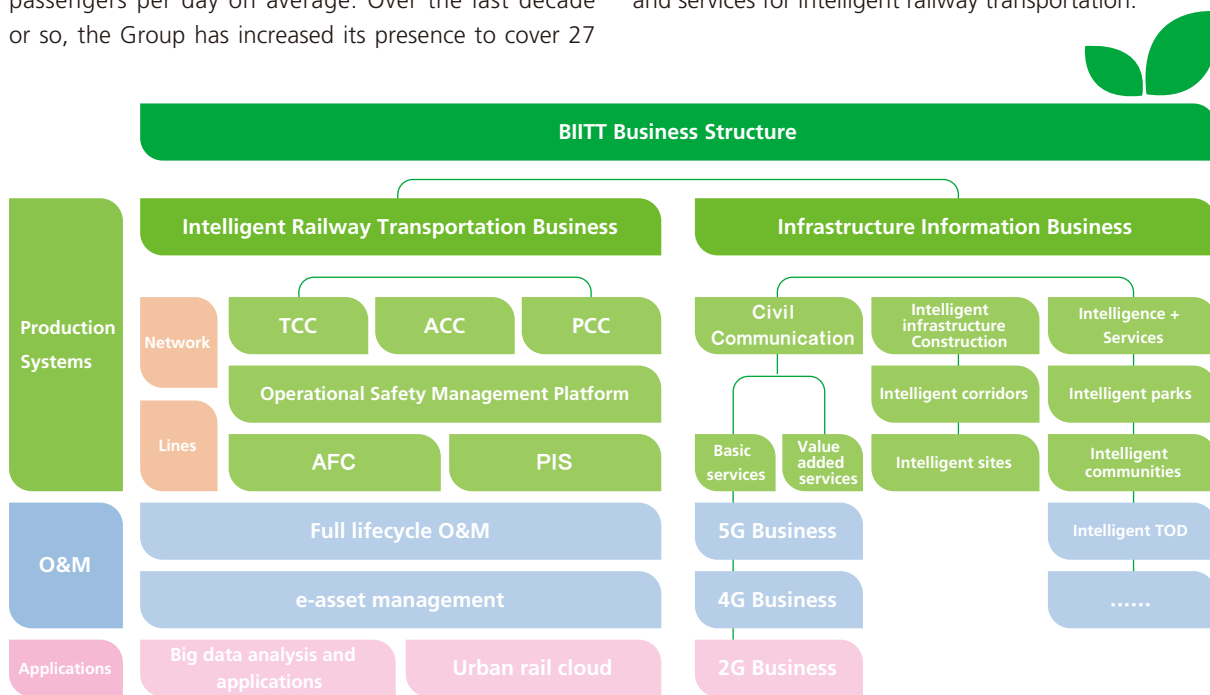

COMPLIANCE MANAGEMENT SYSTEM

In order to achieve high quality development during the 14th Five-Year Plan period, the Group embarked upon a special project to upgrade existing compliance practices to a comprehensive compliance system in 2021, integrating the functions of legal, internal control, risk control, audit and compliance to systematically manage and control compliance risks within the organisation, with the appointment of the Group's General Legal Advisor as the Chief Compliance Officer. This compliance project has identified 12 key areas of compliance management, namely corporate governance, contract management, procurement management, tender compliance, fair trade, finance and taxation, information disclosure, intellectual property rights, labour practices, production safety and environmental protection, and overseas investment and operation.

During the reporting period, the Group laid down the compliance management architecture and system on the basis of the existing 119 internal policies and issued compliance management regulations for trial implementations in key functional areas including the *Regulations on Compliance Management*, the *Measures for the Management of Procurement*, the *Measures for the Management of Compliance with Intellectual Property Rights* and the *Measures for the Management of Legal Compliance Review*. Furthermore, relevant control protocols were reviewed and optimised.

Part 5: Serve the Public and Enable Emissions Reduction

The Group deeply participated in the construction of metro system in Beijing amid its rapid development period as well as its subsequent operation and maintenance, rendering the most fundamental system support for the orderly, safe and efficient operation of the Beijing Subway that carries nearly eight million passengers per day on average. Over the last decade or so, the Group has increased its presence to cover 27 provinces, autonomous regions and special administrative regions and 49 cities in China, providing products and services in the areas of intelligent rail transit and infrastructure information. In recent years, the Group has also made foray into overseas markets to include 22 cities in 13 countries and regions, offering PIS products and services for intelligent railway transportation.

BIITT Business Structure

	Intelligent Railway Transportation Business			Infrastructure Information Business		
Production Systems	Network	TCC	ACC	PCC	Civil Communication	Intelligent infrastructure Construction	Intelligence + Services
		Operational Safety Management Platform				Intelligent corridors	Intelligent parks
	Lines	AFC		PIS	Basic services / Value added services	Intelligent sites	Intelligent communities
O&M		Full lifecycle O&M			5G Business		Intelligent TOD
		e-asset management			4G Business		......
Applications		Big data analysis and applications		Urban rail cloud	2G Business		

The Group provides full lifecycle intelligent rail transit system solutions and services for railway operators, such as AFC systems, ACC systems, PISs and integrated security systems, as well as infrastructure information services for urban utility providers, including the design, construction and maintenance services of the civil communication transmission system infrastructure for the metro lines and integrated corridors. In addition, the Group has explored and developed intelligent solutions for urban mobility and communities.

When the public travels by metro, they will use the automated ticketing system to enter and exit the stations, check as about train arrival, itinerary and interchange information through screens and broadcast services on the platform and in the train compartments, and the wireless communication service of their mobile phone or computer will also be seamlessly switched to the underground network when in use during the ride. While all of these services provided by the Group are user experience oriented, they are also the basic means and tools for the daily management of railway operators and even the core communication channels and sources of information to support decision making in the event of an emergency. In this respect, at the centre of the Group's efforts, the solutions and services we provide are set for uncompromising quality, security and reliability.

AFC system: Automatic turnstiles and gates
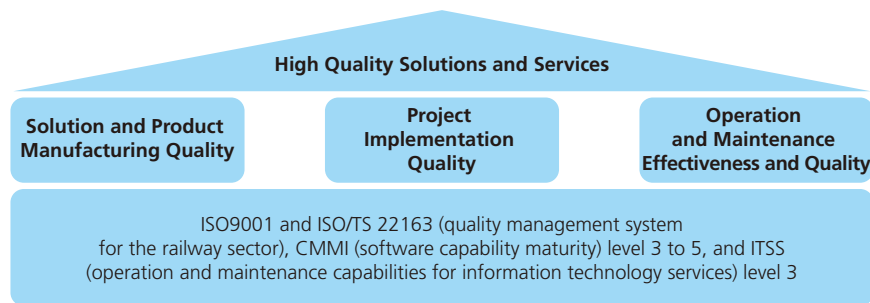

PIS and e-directory signs at ground level
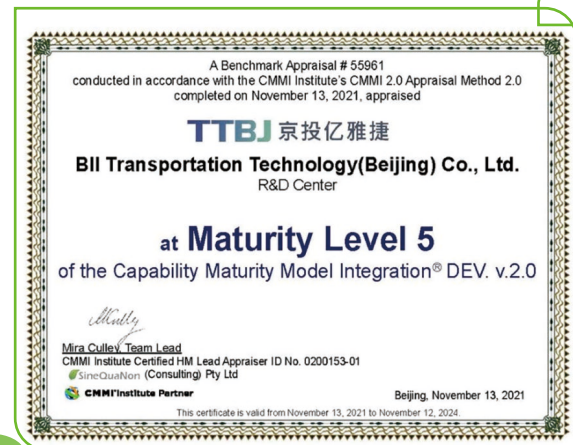

PIS: on-board broadcast

ACC system

DELIVERING HIGH QUALITY SOLUTIONS AND SERVICES

The Group's business operation is project based which comprises three main phases: 1) solution development and product manufacturing; 2) project implementation; and 3) system operation and maintenance. Our quality standards are implemented and effectively managed throughout all phases of the project.

High Quality Solutions and Services

Solution and Product Manufacturing Quality	Project Implementation Quality	Operation and Maintenance Effectiveness and Quality

ISO9001 and ISO/TS 22163 (quality management system for the railway sector), CMMI (software capability maturity) level 3 to 5, and ITSS (operation and maintenance capabilities for information technology services) level 3

Quality System

Ever since 2017, the Group has embarked upon the qualification certification work for ISO 9001 quality management system, with all of its subsidiaries having been ISO 9001 certified as at the end of 2021. The Group has also obtained the Quality Management System Certification for the Rail Sector (ISO/TS 22163:2017) and the Safety Integrity Level (SIL) 2 Certification. The software development business unit successfully adopted the Capability Maturity Model Integration (CMMI) model, and a majority of business entities under which have earned the CMMI Capability Maturity Level 3 to 5 Certifications, in addition to the Information Security Management System Certifications

A Benchmark Appraisal # 55961
conducted in accordance with the CMMI Institute's CMMI 2.0 Appraisal Method 2.0
completed on November 13, 2021, appraised

TTBJ 京投亿雅捷

BII Transportation Technology(Beijing) Co., Ltd.
R&D Center

at **Maturity Level 5**
of the Capability Maturity Model Integration® DEV. v.2.0

Mira Culley, Team Lead
CMMI Institute Certified HM Lead Appraiser ID No. 0200153-01
SineQuaNon (Consulting) Pty Ltd

CMMIInstitute Partner

Beijing, November 13, 2021

This certificate is valid from November 13, 2021 to November 12, 2024.

(ISO 27001), the Information Technology Service Management System Certifications (ISO 20001-1) and ISO 9003, achieving a systematic assurance for high quality software and system development. In the field of smart buildings, the Group has received the qualifications of Professional Contractor Level 2 for Electronic and Intelligent Engineering and Professional Contractor Level 2 for Mechanical and Electrical Engineering for Buildings. Furthermore, the Group has acquired the Operation and Maintenance Service Maturity Level 2 and 3 Certifications of the Information Technology Service Standards (ITSS). The comprehensive qualification construction effectively guarantees the smooth development of the Group's various businesses and is also conducive to further deepening its business strategy of "relying on Beijing and Hong Kong, stepping up presence nationwide, and exploring international markets" as it marches ahead on its growth path.

Huaqi, a subsidiary of the Group, participated in the formulation of the technical specifications for serialised Chinese standard metro train products, which received related approval. The first serialised Chinese standard metro train based on this standard was officially released in June 2021, representing an important milestone in the standardisation of metro train manufacturing in China. During the reporting period, the Group also took part in the revision and update work to the *Standard for Construction Quality Acceptance of Urban Rail Transit Automatic Fare Collection System Engineering* of the country.

During the reporting period, the Group's subsidiary Litmus Technologies (Beijing) Co., Ltd. ("Litmus") obtained the Software Enterprise Certification, representing the recognition by the industry association of Litmus' R&D management and core competitiveness, and paving the way for the sustainable development of Litmus' quality innovations.

The Group's development of solutions for AFC systems, ACC systems, PISs and other products encompasses an integration of both system and software development and hardware equipment. The PIS, for instance, comes with two types, namely on the ground and on-board, and the main components of which are manufactured by the Group's own production bases in Suzhou and Chengdu. The two bases have both implemented full process quality management systems.

Case study: BIITT's production lines in Suzhou and Chengdu

At our two production bases, the raw materials and components procured are sent for warehousing only after passing the sampling inspection. The production lines are also equipped with quality control personnel to ensure that the procedure standards are followed, and the finished products are 100% tested. For the processing of moisture-sensitive components, for the sake of enhancing product stability, the Group has enforced mandatory steps for setting humidity and temperature controls in the production process, thus assuring product quality.

The product solutions of the Group entail the procurement of established communication systems, network and storage equipment from suppliers, such as switches and servers from Huawei Technologies and central cloud system from New H3C Technologies. In the process of evaluation and selection, the Group has in place procedures requiring the distributors to obtain project-specific authorisations for the equipment from original manufacturers, so as to ensure the legitimacy of supply and adequacy of warranty services after deployment.

Reliability and Testing Capabilities

The Group's embedded software development is firmly rooted to the RAMS (Reliability, Availability, Maintainability and safety) disciplines. Throughout the entire product lifecycle from product planning to obsolescence, a series of evaluation steps will be taken to ensure the Group's product quality and reliability to the greatest extent product quality and reliability. These include reliability prediction, reliability allocation, reliability modelling, reliability testing, maintainability analysis, failure mode effects and criticality analysis, root cause analysis, failure reporting, and analysis and corrective actions, etc.
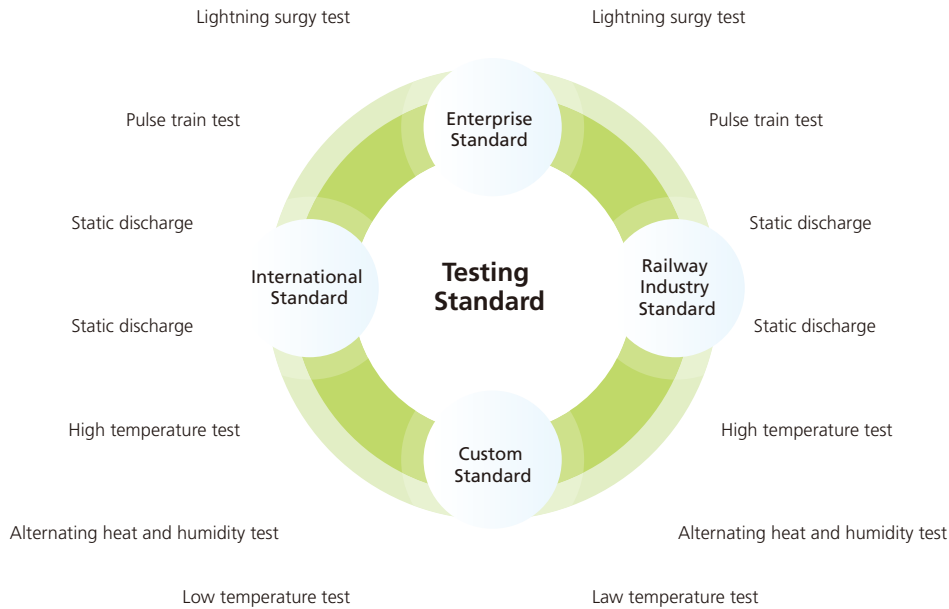
The provision of leading solutions to high-speed train manufacturers rests upon the Group's own laboratory in Suzhou. The laboratory, which possesses strong testing capabilities of conducting more than ten major kinds of tests required by the industry, fully meets various international and national industry standards and has been earned dual certification for both the Chinese and German laboratory standards. This also provides extra systematic quality assurance to fulfil the tailored needs of customers looking for small scale manufacture with diverse technical specifications.

The hardware and software of the solutions provided by the Group is installed and commissioned at the project site, which are duly tested and accepted by the customer. The quality management of the project is jointly tracked by the project manager and a dedicated project quality engineer, and the work is carried out according to the "Project Quality Assurance Plan". Project progress and quality of each project will be reported to the respective subsidiary on a monthly basis, while major projects of each subsidiary will be reported to the Group Project Management Department by way of monthly project management reports. At the end of the project, a comprehensive quality review will be conducted and be presented in the form of a "QA Inspection Report" covering all 12 aspects of the project process with rectification actions being recommended for individual items in the event that any nonconformance to the project standards may be spotted. Related measures that follow will be implemented and supervised accordingly.

Project quality inspection and assessment (example)

Process Conformance
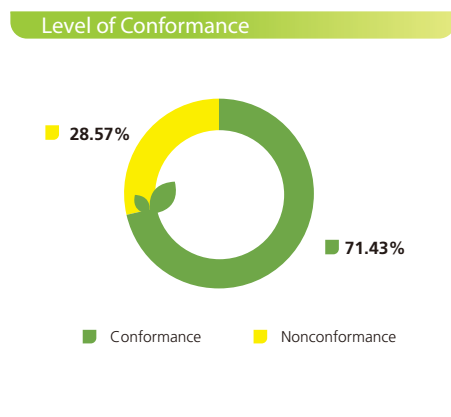
Inspection Checks of the Entire Project Process
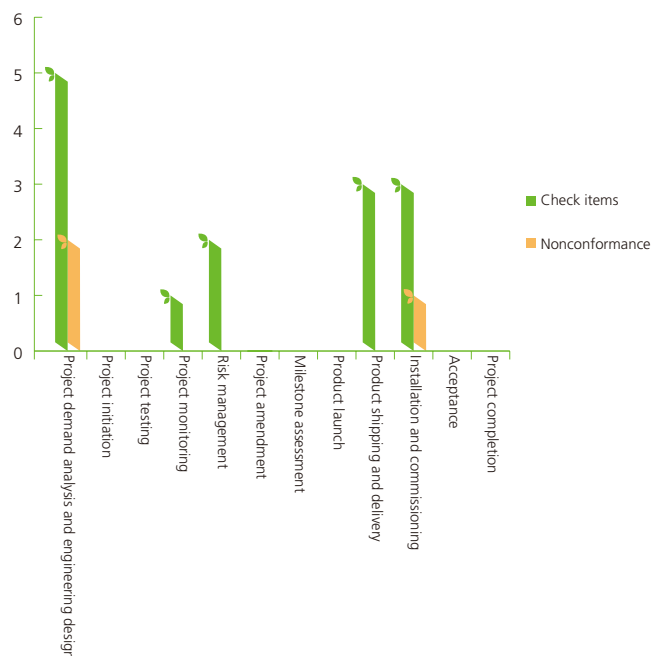
Data Security and Privacy
The Group's AFC system and on-board security monitoring and alarm system solutions involve the collection of personal data and information of passengers on their payment habits, commuting and behavioral pattern, etc. Such data and information is owned by the railway operators. The Group designs all product solutions in accordance with the information security laws and regulations (see table below) that railway operators need to abide by and their data privacy principles and confidentiality rules. The Group holds the ISO Information Security Management System Certification (ISO 27001), and all the engineers are required to act in conformance with the information and privacy policies of the client and the Group when accessing confidential passenger information during system maintenance.

Major applicable laws and regulations related to information security
Cybersecurity Law of the People's Republic of China
Regulations of the People's Republic of China on Protecting the Safety of Computer Information Systems
Administrative Measures for the Graded Protection of Information Security
Several Measures for the Implementation of the Party Committee (Party Group) Responsibility System for Cybersecurity Work in Beijing（《北京市貫徹落實黨委（黨組）網絡安全工作責任制若干措施》）
Regulation on Protecting the Security of Critical Information Infrastructure (Order of the State Council of the People's Republic of China No. 745) (Issued in 2021)

The Group has established three internal management rulebooks, namely the *Measures for Information Technology Management*, the *Measures for Safety Management* and the *Measures for the Management of Network and Information Security*, as well as ten operational specifications to standardise data security work in all aspects from business operation, product development to employee behaviour. Data security breaches are classified into three levels and corresponding handling protocols have been laid down.

ALIGNING WITH SUPPLIERS
The Group procures network systems and electronic equipment as well as engineering services to fulfill its rail transit projects during normal operations. The amount of such procurement is often of large size in volume and value. We attach great importance to the long-term benefits of the full lifecycle of rail transit products and services and have formed a cooperation model that work together with suppliers to serve railway operators.

The Group expects suppliers to have constant, fast and reliable supply and delivery capabilities in addition to excellent product and service quality. A supplier list has been in place with suppliers being managed in four groups, namely qualified, candidate, provisional and unqualified, based on their qualifications, financial status and working performance. Adhering to the *Measures for Supplier Management* of the Group, the preliminary selection process is conducted by a review panel led by the Information Department and comprising members from the procurement, production process, technology and other departments. A comprehensive assessment of the suppliers is performed covering supply response, product quality, qualifications and finances, etc. Re-evaluation of all qualified suppliers is carried out once a year generating a "Supplier Performance Appraisal Report", which will be submitted to a Chairman's Office Meeting for approval. The annual Qualified Supplier List will then be released accordingly. In April 2021, the re-evaluation of suppliers of year 2020 took place where 404 suppliers were reviewed and were all deemed qualified. In the year of 2021, 274 new qualified suppliers were added to the list.
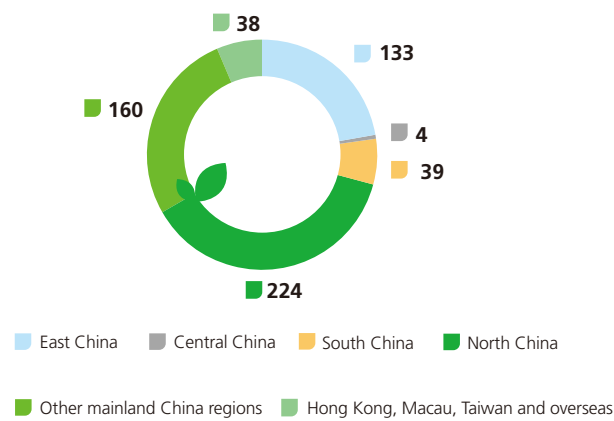
The Group has formulated the *Measures for Procurement Management*, stipulating that all procurement requests have to be published through the BIITT Procurement Platform and open to all capable suppliers for participation, so as the tender progress and results. The electronic tender process of the Group effectively helps ensure the standardisation and fairness of procurement practices.

In 2021, the Group launched an upgrade of the Supplier Relationship Management system and is expected to fully realise digital procurement and supply management in 2022. The Group also published the *System for the Management of Procurement Compliance*, stating explicitly that all procurement activities must comply with relevant laws and regulations, administrative measures and internal policies of the Group and must strictly follow the basic principles of fairness, impartiality and openness. This further standardises the tender and procurement procedures and ensures quality operation through compliance supervision.

In the year of 2021, the Group had business dealings with 598 suppliers, 93.65% of which are from mainland China or Chinese agents of international brands. In our cooperation with suppliers, the Group focuses on the cultivation of long-term partnership by taking quality as the foundation, while actively promoting the business philosophy with embedded positive social value along the industrial chain and pushing for higher energy-saving efficiency of the electronic equipment. Many of the Group's system and network equipment suppliers are large enterprises enjoying significant market shares in multinational markets and have higher awareness and better practices in the ESG spheres. When entering into business contracts, additional documents such as "Production Safety Agreement", "Integrity Building Agreement", "EHS Commitment to Related Parties" and "Quality Assurance Agreement" will also be signed with a move to jointly raise the standard of business conduct in the industrial chain.

Suppliers by Geographical Region

- East China
- Central China
- South China
- North China
- Other mainland China regions
- Hong Kong, Macau, Taiwan and overseas

East China: 133
Central China: 4
South China: 39
North China: 224
Other mainland China regions: 160
Hong Kong, Macau, Taiwan and overseas: 38

INTERLOCKING WITH CUSTOMERS

The Group's customers are mainly rail transit operators and train manufacturers. We always take customer satisfaction as our foremost priority and exceed customer expectations where we can. Throughout our years of development in the past decade or so, we have evolved our business along with the needs of customers and formed a deep bond with urban rail transit companies and train manufacturing enterprises, jointly delivering a safe and comfortable travel experience for the general public.

By serving the huge and complex Beijing Subway system, the Group have accumulated rich industry experience in metro operation and have developed unique approach to tackling potential issues in the operation of the systems and fulfilling the needs of customers at their different stages of business development. With an in-depth knowledge of the industry and pre-emptive risk control measures taken, our solutions become an obvious better fit for customers. Our metro projects have been deployed in a total of 49 cities in 27 provinces, autonomous regions and special administrative regions in China.

As an original equipment supplier to train manufacturers, the Group has gained a significant advantage in the Chinese market with products installed in over 30,000 train carriages. In 2021, invitations to tenders for on-board PISs for a total of 5,810 carriages were issued in mainland China. Of which, the Group won tenders for 1,894 of them, accounting for a market share of 32.6% for the year and comfortably securing the number one place in the industry for six consecutive years. In the Indian market, the Group has also been a new emerging force, increasing its presence to cover eight cities thus far.

The Group listens to customers' feedback via its biannual customer satisfaction surveys among others. In the year of 2021, the Group adjusted the survey method and engaged a third-party professional company to conduct the survey, covering all 141 projects under construction and operation during the period. A satisfaction rate in the 95% to 99% range was received from the respondents surveyed. In response to the issues reflected in the survey regarding the timeliness and completeness of material delivery in individual projects as well as the timeliness of the operation and maintenance project reports, relevant improvement work has been carried out by personnel in charge of the project.

CONSERVING ENERGY AND REDUCING EMISSIONS TO ADDRESS CLIMATE CHANGE

Climate Change

The rail transit industry serves the general public a means to travel, which effectively improves the energy efficiency for commuting to work and many other activities in life. This bears a great social significance and is also an effective path for energy conservation and emissions reduction. Providing passengers with a more comfortable, convenient and technology-driven travel experience can greatly enhance the appeal of public transport and broaden the participating and beneficiary groups of railway transportation. This unarguably helps in reducing the direct consumption of fossil fuels and air pollutant emissions from the societal perspective.

The Group is committed to providing solutions for system upgrades and programme optimisation in an effort to facilitate the modal shift from private to public transport, thereby structurally reducing carbon emissions. At the same time, we are actively engaged in reducing energy consumption in our production and operating activities, where energy demand mainly concentrates on electricity.
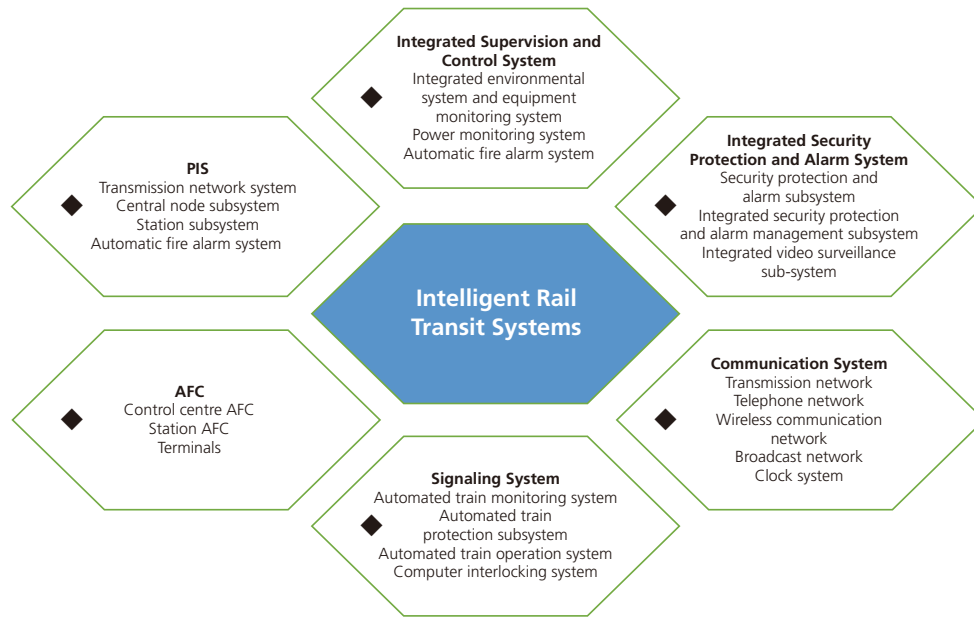
Enable Emissions Reduction and Develop Rail Cloud Platform

While rail transit operation consumes mainly electricity, the consumption of which has a direct impact on operating indicators. Therefore, energy conservation system-wide has always been an area of focus for enterprises. In the context of China's carbon peaking and carbon neutrality goals, energy conservation and efficiency enhancement has further become a key indicator for the upgrading of operation and management systems. In this respect, the Group prioritises overall system energy efficiency in solution design and development to support railway operators in achieving ongoing energy saving management and operational efficiency improvement. Since 2020, leveraging the rapid development of cloud technology and big data applications, the Group has made a strategic evolution and deployment of product solutions, making development breakthroughs in the areas of product weight reduction and enhanced integration density, and creating a new generation of intelligent urban rail transit systems that help crystalise a qualitative change of operational efficiency.

During the reporting period, the Group continued to participate and drive the construction of the cloud platform for rail transit network, seeking to maximise comprehensive resource sharing and data integration within the system. Through which, various operating systems will shift to cloud-based deployment with improved deployment efficiency, enhanced resource utilisation and reduced uses of land resources, thereby lowering the resource and energy consumption during operation and consistently fostering the sustainable development of intelligent rail transit systems.

Integrated Supervision and Control System
Integrated environmental system and equipment monitoring system
Power monitoring system
Automatic fire alarm system

PIS
Transmission network system
Central node subsystem
Station subsystem
Automatic fire alarm system

Integrated Security Protection and Alarm System
Security protection and alarm subsystem
Integrated security protection and alarm management subsystem
Integrated video surveillance sub-system

Intelligent Rail Transit Systems

AFC
Control centre AFC
Station AFC
Terminals

Communication System
Transmission network
Telephone network
Wireless communication network
Broadcast network
Clock system

Signaling System
Automated train monitoring system
Automated train protection subsystem
Automated train operation system
Computer interlocking system

Cloud Platform of Zhengzhou Subway

The Group began its cooperation with Zhengzhou Metro Group Co., Ltd. in 2018, with the purpose of supporting the latter in exploring the application of big data and cloud platform in the mass transit sector. To date, three projects have been successfully deployed.

AFC System of Zhengzhou Line 4
Achieved the supply and commissioning of all equipment for 27 stations, data nods, testing systems and maintenance systems at Metro Line 4 in nine months, demonstrating a new level of project management and product development.

AFC Network Control Centre (ANCC) System
Designed, developed and built a new generation of ANCC system that is flexible and easy to expand based on urban rail cloud platform and micro-services, staying at the forefront of the industry in the application of urban rail cloud in the market.
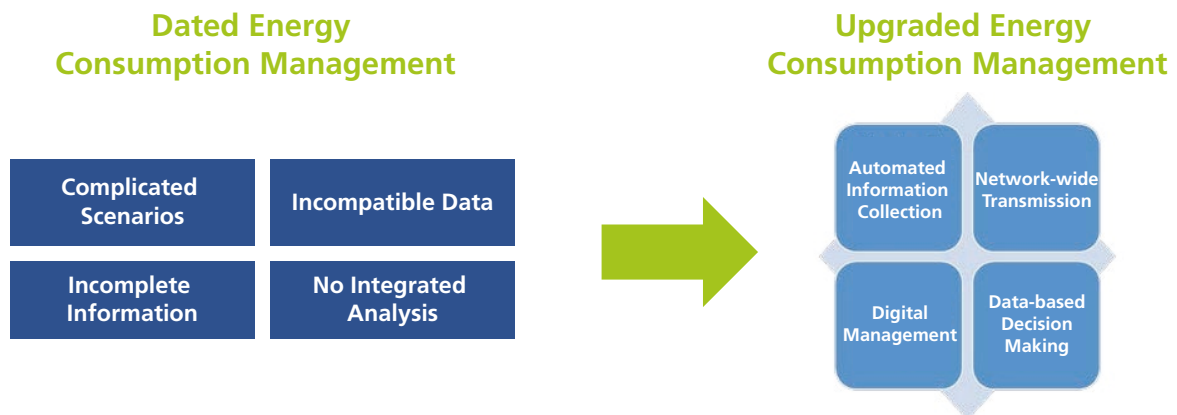
Zhengzhou Big Data Cloud Platform Project Phase 1
The project is the first in China to realise resource pooling and unified management of heterogeneous servers based on cloud native technology of the container cloud platform.

Support Beijing Subway and Build Energy Consumption Monitoring System

With environmental issues attracting growing concern among the public and becoming a subject that faces increasing regulation in China, energy reduction and efficiency enhancement of the rail transit operation has turned into one of the utmost tasks of the industry. In subway operation, power is mainly used for traction, ventilation and lighting and train power accounting for about 90% of the total power consumption, of which traction power consumption accounts for about 40~50%. The power management system of old metro network is individually fitted for each line, and in-person meter reading is still needed. Lack of an automated digital management system made comprehensive energy consumption analysis and data-based decision-making unfeasible.

Dated Energy Consumption Management

Complicated Scenarios	Incompatible Data
Incomplete Information	No Integrated Analysis

Upgraded Energy Consumption Management

Automated Information Collection	Network-wide Transmission
Digital Management	Data-based Decision Making

The Group participated in a project of the Beijing Subway to help design and build the Energy Consumption Statistics and Monitoring Platform, which facilitates high quality decision-making through tracking and analysis of energy consumption data. The platform achieves automated data collection and incorporates data from equipment, meters, passenger flow, weather and other sources forming a database for comprehensive modeling and featuring in-depth analyses of important indicators particularly the traction energy consumption and the lighting and ventilation system energy consumption. The platform is a multi-dimensional energy consumption evaluation system encompassing metro lines, networks, stations and depots with early warning capabilities of identifying potential issues.
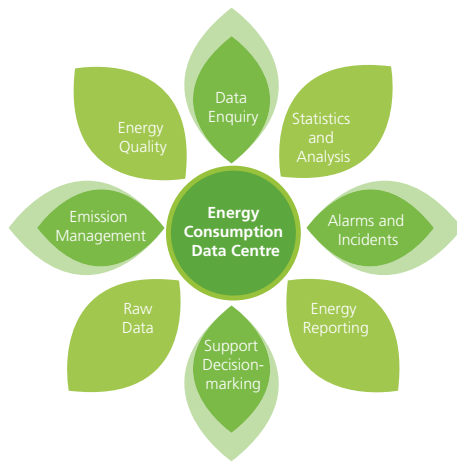
Six Functions of the Energy Consumption Data Collection and Monitoring Platform

- Precision measuring at unit level
- Energy consumption diagnosis and energy saving solution
- Energy consumption mapping with operating activities
- Energy quality monitoring
- Energy management system establishment
- Energy saving results validation

Energy Consumption Data Centre

Data Enquiry · Statistics and Analysis · Alarms and Incidents · Energy Reporting · Support Decision-marking · Raw Data · Emission Management · Energy Quality

The Energy Consumption Data Collection and Monitoring Platform of the Beijing Subway launched in 2018 is the first networkwide energy management system of intelligent urban rail transit based on big data platform in China, providing effective data support for the development and continual optimisation of the energy saving and monitoring service platform. Since its commissioning, the Group has been consistently providing platform integration services for newly opened metro lines. By the end of 2021, the platform centrally manages approximately 10,000 data nodes covering 13 metro lines, more than 9,000 meter data, train and passenger information, as well as operation data of key energy consuming equipment such as lighting, air conditioning and escalators of some metro lines. The platform achieved management and diagnosis of energy consumption, while exploring energy saving potential and assessing energy policy effectiveness for the Beijing Subway.

Promote Public Transport and Live Up to Emissions Reduction

The Group's business activities revolve around the sales of product solutions, solution development and integration, project implementation management and system operation and maintenance. While office environment is the main workplace, some of our employees have to visit customers located primarily in cities in China and overseas with rail transit infrastructure. During project construction and operation and maintenance stages, more frequent visits are warranted to railway operators and train manufacturers in the cities where the projects are located. The main business entities of the Group have all earned the ISO 14001 Environmental Management System Certifications.

Sales and Business Development	**Solution Development and Integration**	**Project Implementation and Management**	**System Operation and Maintenance**
Office work	Office work	Onsite project supervision	Office work
Business travels	Small-scale electronic product assembly	Business travels	Onsite inspection

One of our four major solution products, the PIS solution, involves small-scale production activities in addition to integration. The Group has two production bases in Suzhou and Chengdu, where the primary production includes customised information displays and dynamic maps, etc. The technological process focuses on the assembly of electronic components and its main energy consumption is electricity which is used for air conditioning, lighting and testing in the manufacturing facility. The production process does not generate any hazardous waste as specified in the *Law of the People's Republic of China on the Prevention and Control of Environmental Pollution Caused by Solid Wastes*. The welding process required in the processing procedures is undertaken and completed by Suzhou Yiqikang Electronic Technology Co., Ltd., an investee company of the Group. The company has a complete environmental management system and related certifications, and receives annual and random inspections by the environmental protection authorities concerned.

In the office, the Group attaches importance to creating a green and energy-saving working environment. The Group entered its first year of paperless workplace in 2021 by integrating the enterprise resource management system, online procurement platform, and office systems of all subsidiaries. We also endeavour to contribute to energy conservation and environmental protection in various small ways, such as replacing bottled water with drinking glasses in the reception of visitors and meetings, using LED light tubes in the office and signing commitment note to waste sorting by employees in Beijing, just to name a few.

For the year of 2021, the Group's energy and water consumptions and CO_2 and waste emissions are listed in the table as follows.

Energy Consumption	Unit	2021
Petrol	MWh	26,525
Electricity	MWh	1,956,611
Total Energy Consumption	MWh	1,983,136
Energy Consumption Intensity	MWh/Revenue (HKD million)	1,133.74

GHG Emissions	Unit	2021
Scope 1: Vehicles and refrigerants	Tonne carbon dioxide equivalent (CO_2-e)	21
Scope 2: Purchased Electricity	Tonne carbon dioxide equivalent (CO_2-e)	1,194
Total Emissions (Scope 1 and 2)	Tonne carbon dioxide equivalent (CO_2-e)	1,215
Emission Intensity	Tonne carbon dioxide equivalent (CO_2-e)/ Revenue (HKD million)	0.69

Air Pollutants	Unit	2021
Nitrogen Oxides (NO_x)	Gram	1,574
Sulfur Oxides (SO_x)	Gram	40
Particulate Matter (PM)	Gram	116

Water Consumption	Unit	2021
Water Consumption	Tonne	5,418
Water Consumption Intensity	Tonne/Revenue (HKD million)	3.10

Non-hazardous Wastes	Unit	2021
Office Wastes	Tonne	57
Packaging Materials	Tonne	31
Non-hazardous Waste Intensity	Tonne/Revenue (HKD million)	0.05

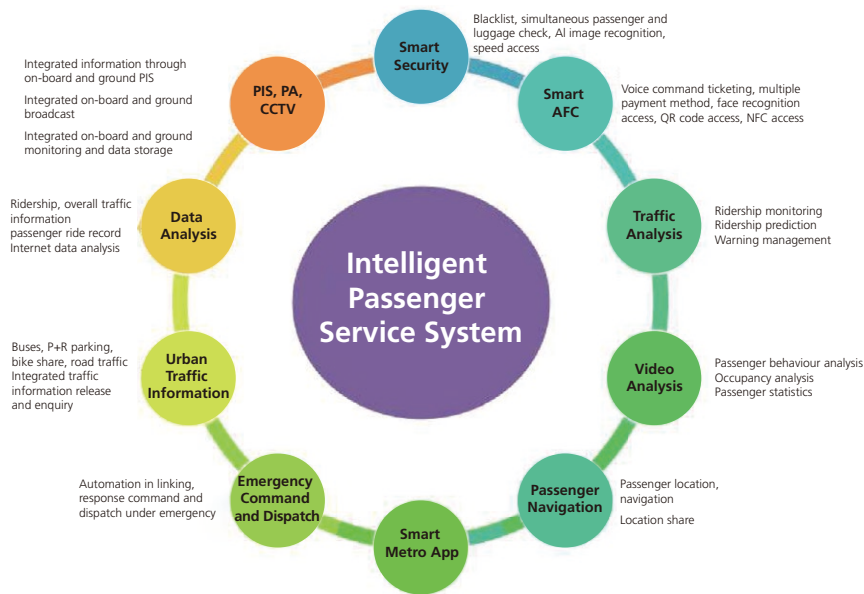## ACHIEVING INTELLIGENT MOBILITY BACKED BY TECHNOLOGICAL INNOVATIONS

As all rail transit systems in China are state owned, the Group has always maintained an open dialogue with government offices and government agents and participates in the research of pioneering projects with benchmarking significance in the industry.

Intelligent Mobility

The growth of urban population and density coupled with the constant needs of cities for continuous development, have made the issues of resource allocation and efficiency increasingly prominent. Making use of big data, 5G, cloud and AI technologies to manage traffic information and provide citizens with a modern and efficient 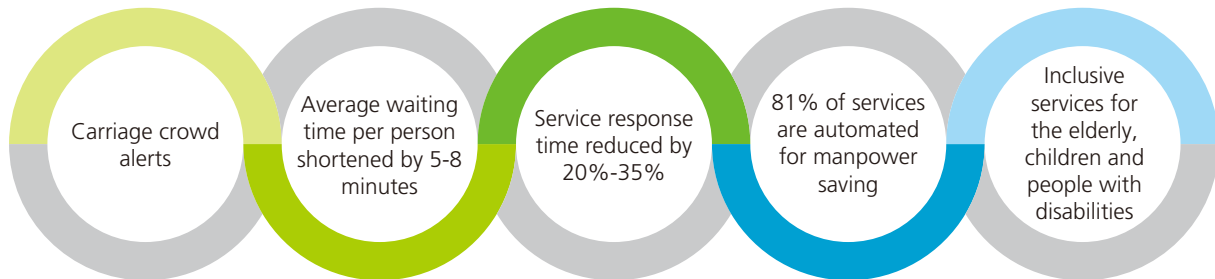urban living experience has become a popular expectation. As the COVID-19 pandemic lingers on, it is more than necessary for the general public to acquaint themselves with updates on the control measures taken when travelling.

Firmly founded on its solid industry experience and technological capabilities of intelligent rail transit, the Group is exploring more the application scenarios of smart travel. Stepping forward from integrated PIS and intelligent customer service centre solutions, the Group has further taken into consideration of passengers' needs for the fastest and shortest route when commute and is devising ways to integrate information from various public transport resources (e.g. ride hailing, bus and bikeshare), to develop an intelligent metro mobile application which truly provides personalised mobility services.

Integrated information through on-board and ground PIS
Integrated on-board and ground broadcast
Integrated on-board and ground monitoring and data storage

Blacklist, simultaneous passenger and luggage check, AI image recognition, speed access

Voice command ticketing, multiple payment method, face recognition access, QR code access, NFC access

Ridership, overall traffic information passenger ride record Internet data analysis

Ridership monitoring
Ridership prediction
Warning management

PIS, PA, CCTV
Smart Security
Smart AFC
Traffic Analysis
Data Analysis

Intelligent Passenger Service System

Passenger behaviour analysis
Occupancy analysis
Passenger statistics

Urban Traffic Information
Video Analysis

Buses, P+R parking, bike share, road traffic Integrated traffic information release and enquiry

Passenger location, navigation
Location share

Emergency Command and Dispatch
Smart Metro App
Passenger Navigation

Automation in linking, response command and dispatch under emergency

Enhanced Efficiency and Convenience with Intelligent Customer Service Centre

| Carriage crowd alerts | Average waiting time per person shortened by 5-8 minutes | Service response time reduced by 20%-35% | 81% of services are automated for manpower saving | Inclusive services for the elderly, children and people with disabilities |

To accelerate the pace of smart city development and create a model of "AI+5G" city, the Group entered into a strategic cooperation agreement with the People's Government of Baiyin city, Gansu province on 3 December 2021. The agreement signifies the first step taken for the two parties to jointly promote the innovative 5G applications in new infrastructure and the development of the emerging industry of IoT based on the multi-network convergence supported by 5G technology. This opens up possibilities for a new path for innovative cities and promotes a new pattern of joint development between Beijing and other cities.

During the reporting period, the Group signed strategic cooperation framework agreements with the three major telecommunication operators, namely Beijing Telecom, Beijing Unicom and Beijing Mobile, respectively, to promote innovative 5G applications in railway transportation and smart city solutions, the setting of 5G standards for railway transportation and the development of civil communication for railway transportation. At the same time, all parties will work together to ensure the deployment of 5G networks for Beijing's railway transportation and contribute to the high quality development of the rail sector in the 14th Five-Year Plan period.

Respect and Protect Intellectual Property Rights

The Group promotes enterprising spirit, encourages innovation and protects intellectual property rights. We make annual targets and annual application plan for intellectual property rights including patent and software copyright. During the reporting period, the Group has been awarded 25 licenced patents and 88 licenced software copyrights. As at the end of 2021, 111 patents have been obtained, including 24 licenced invention patents, 59 utility model patents and 28 design patents primarily in the fields of hardware equipment, AFC systems, PISs and screen doors, etc. A total of 436 software copyrights have also been approved, mainly in the fields of on-board media and PISs, information

technology and security, artificial intelligence and big data, video surveillance and networked operations. In the year of 2021, as a high-tech corporation, the Group continued to promote the process of technological empowerment via intellectual property rights and achieved high quality development of the company. While protecting its own intellectual property rights, the Group likewise pays high respects to inventions of other players in the industry and carries out relevant search work in accordance with our *Measures for the Management of Compliance with Intellectual Property Rights* and other systems as well as related regulations of its subsidiaries to avoid infringement. During the reporting period, there was no reported infringement complaint or violation.

PART 6: SAFEGUARD EMPLOYEE BENEFITS AND CONTRIBUTE TO PUBLIC WELFARE

It has been widely accepted that talents are valuable assets of corporations, and it is especially true with the Group which is propelled by the capacity of intelligence and creativity. In this regard, the Group makes corporate culture a critical component in its business plan so as to attract, retain and motivate the people it needs and enhance its soft power. The Group enlivens its four-element corporate culture, i.e., creativity, progressiveness, pragmatism and contribution by connecting the personal career planning of its employees with corporate development prospects in which each has a role to play, and, at the same time, ensures there is a delicate balance between remuneration and overall benefits, aiming to nurture a management style that appreciates the well-being of individuals. We are committed to strengthening a working principle of fairness, respect and transparency with no vertical or cross-departmental silos. In addition to supporting the public's commuting needs, we invest in community affairs especially in areas in close proximity to the Group's business operations. This also serves as a major step of delivering the Group's promise of contributing to society.

ROOTING PRODUCTION SAFETY IN OPERATIONS

Putting production safety in the forefront of its operation, the Group has established a Production Safety Committee and internal management system, ensuring that the principles and requirements at the Group level are implemented in all of its subsidiary entities. The main business units of the Group are ISO 45001 or OHSAS 18001 (Occupational Health and Safety Management System Certifications) certified.

> **BIITT's Main Policies in Respect of Production Safety**
>
> **Management Measures for Production Safety**
>
> **Emergency Response Plan for Production Safety Accidents**
>
> **Production Safety Responsibility System**

In the year of 2021, the Chinese government made several amendments to the *Work Safety Law of the People's Republic of China*, with particular emphasis on enterprises establishing a company-wide production safety responsibility system covering all employees and a dual prevention mechanism for classified safety risk control and hidden risk screening and elimination, as well as mandatory liability insurance for high-risk areas. In response to these changes, the Group updated and enhanced its production safety responsibility system and the supervision and inspection system, and the safety management system of related parties. It also organised its subsidiaries to identify potential safety hazards and upgrade relevant management measures for their respective businesses. Concurrently, the weighting of emergency management, safety risk classification and hidden risk screening and elimination within

the safety evaluation system was adjusted and increased in a timely manner. The Group's Production Safety Committee consistently promoted the dual prevention mechanism, adopting the safety risk management checklist to ensure that risks are under control as always and, at the same time, optimising the hidden risk screening checklist to enhance risk identification capabilities. In 2021, 61 onsite safety inspections were conducted by the Committee and all of the 24 subsequent rectifications requested were completed during the year.

During this reporting period, the Production Safety Committee also revised its *Emergency Response Plan for Production Safety Accidents* and issued more than 20 warning notices for matters including catastrophic weather and operations of high safety risks. To meet the need of flood control and comprehensive fire prevention, 67 emergency drills were completed by the business units of the Group. Furthermore, the Production Safety Committee organised five safety education and training sessions through a combination of both online and offline methods. The specific training contents are as follows.

Time	Trainings	Method
February	Work at Height Safety Training	onsite
April	Forklift Operator Safety Training	onsite
June	Project Safety Management Training	onsite
	Safety Training for Project Team	
June	Explanation session on the *Work Safety Law of the People's Republic of China (2021 Amendment)*	online
August	Use of Firefighting Equipment	onsite
	Project Occupational Health	

In 2021, all of the six production safety targets set by the Group, namely fatalities/major injuries, zero related party safety accidents, fire accidents, occupational health hazards, environmental pollution incidents and hidden safety risk rectification were fully achieved. There was no reported case of work-related fatalities and injuries.

EMPOWERING THE WORKFORCE
Employment Standards and Policies

The industry in which the Group operates is characterised as asset-light and human-asset-heavy. The Group treasures the relationship with employees and is committed to building a cohesive corporate culture to ensure that employees' career advancement demands are aligned with the development of the Group for mutual growth.

The Group follows open, impartial, fair, rational and merit-based principles in its recruitment practice. Special care is taken to ensure no occurrence of any discrimination on the ground of an individual's gender, race, belief, religion, marital status or age. In 2021, the Group strictly observed all applicable laws and regulations of mainland China and Hong Kong SAR in respect of employment and found no non-compliance case.

In mainland China, the Group has the setup of a trade union and has formulated the *Regulations on the Work of Enterprise Trade Union*. The Group enters into collective contracts with the trade union in accordance with relevant laws and regulations to establish labour standards and conditions such as remuneration, work and leave, workplace safety, training and insurance benefits. It strictly prohibits any restrictive conditions related to marriage and pregnancy of female employee's.

The Group has established its remuneration system based on job responsibilities, performance and operational risk. In addition, the Group adheres to equal pay for equal work and emphasises individuals' capability and skills. Remunerations are performance-oriented and linked to responsibilities and risks of the position.

The Group has in place a collective contract supervision and inspection team and a labour dispute mediation team to ensure the fulfillment of employment contracts and reasonable resolution of disputes. The various communication channels within the organisation were setup to listen and care for employees' wellbeing. During the COVID-19 epidemic, employees were more regularly using virtual communications.
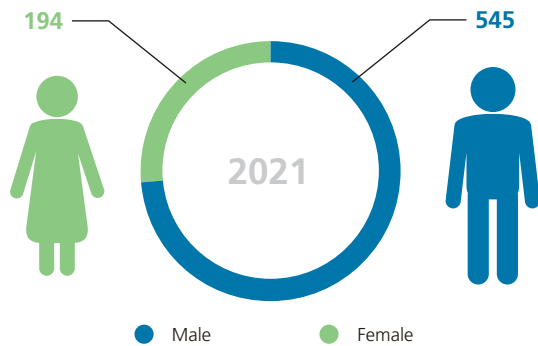
The Group currently has a total of 739 permanent employees. In addition to this, there are 61 labour dispatch personnel, 4 rehired retirees and 3 interns. The dispatched workers are mainly involved in temporary and auxiliary work in the operation and maintenance function. The Group adopts the equal pay principle for the labour dispatch personnel and provides the same level of compensation and welfare as the permanent employees.

Beside office work, the Group's business requires relevant personnel to work at project sites. The maintenance of rail transit systems and carriages also have to be carried out after service shutdown, i.e., from dusk to midnight or even early morning. Other maintenance services demand 24x7 response and support. Such work schedule and intensity bring about a relatively high proportion of male employees.
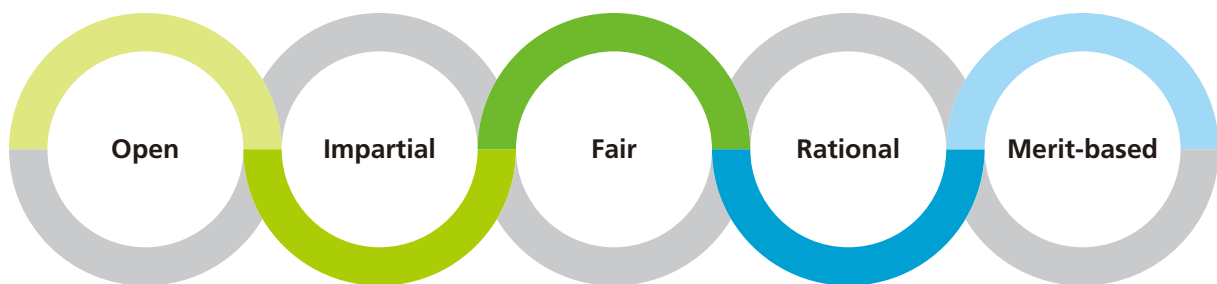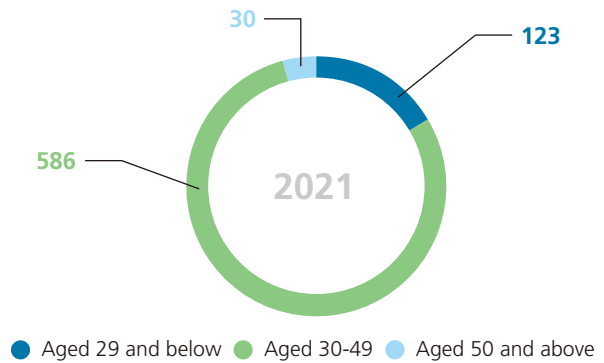
| Open | Impartial | Fair | Rational | Merit-based |

Number of employees by gender

194 545

2021

● Male ● Female

Number of employees by age group

30 123

586

2021

● Aged 29 and below ● Aged 30-49 ● Aged 50 and above

Number of employees by geographical region

24

715

2021

● Mainland China ● Hong Kong SAR
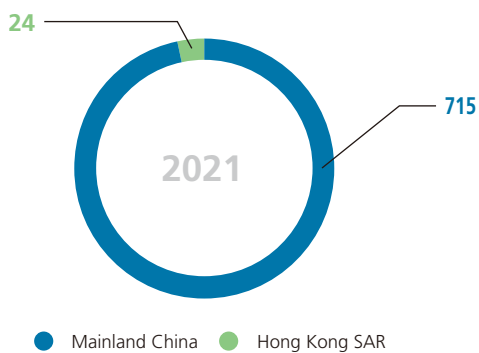
Number of employees by category

7 112

620

2021

● Senior management ● Middle management ● Staff
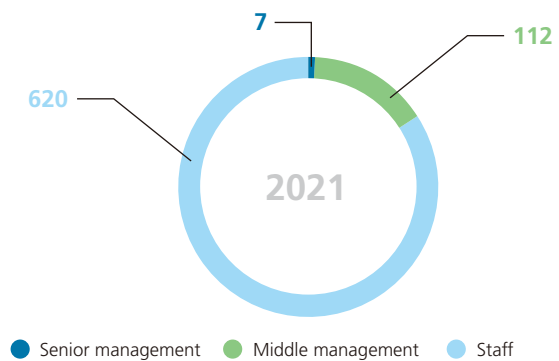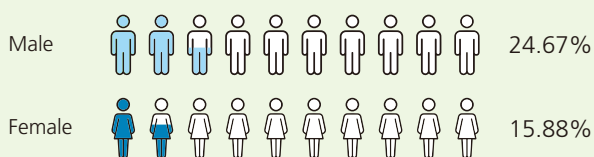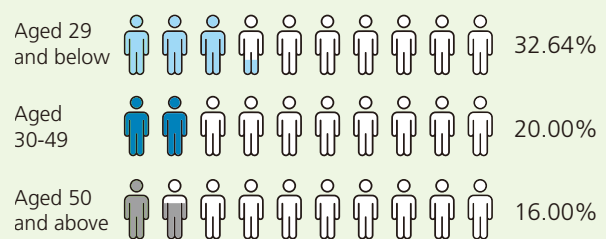
In 2021, the Group's overall turnover rate for full-time employees stood at 22.45%. The turnover rates for each category are shown as follows.

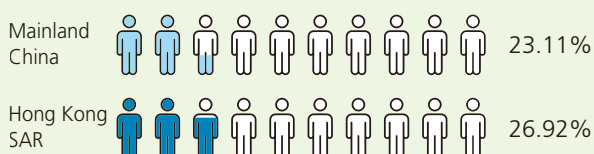## Overall turnover rate for full-time employees: 22.45%

Employee turnover rate by gender

Male	24.67%
Female	15.88%

Employee turnover rate by geographical region

Mainland China	23.11%
Hong Kong SAR	26.92%

Employee turnover rate by age group

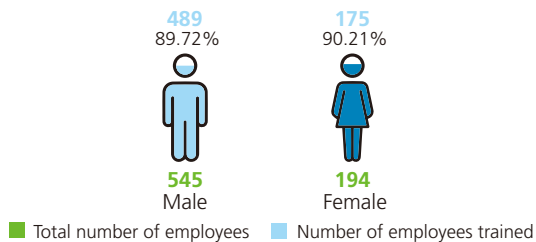|	
Aged 29 and below	32.64%
Aged 30-49	20.00%
Aged 50 and above	16.00%

Employee Benefits and Development

The Group provides competitive arrangements for various types of leave and paid annual leave for employees. In particular, male employees are entitled to 15 days of paternity leave, employees with children under 3 years old are entitled to five days of parental leave, and employees with no siblings have 10 days leave to attend to aging parents. In addition to pension scheme, medical insurance, unemployment insurance, work injury insurance, maternity insurance and housing fund, the Group's mainland operation also provides employees with supplementary commercial medical insurance and company annuity, as well as "Six Insurance and Two Pension".
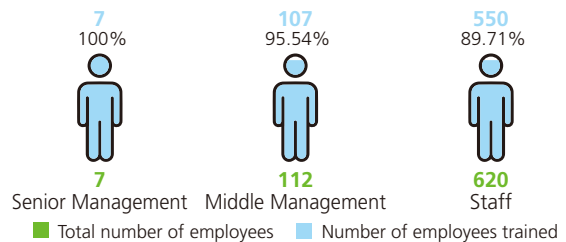
The Group's training system is designed by taking into account the job characteristics of respective positions and business requirements of the company. A specific budget is allocated each year to ensure the completion of the annual training plan. The training programmes companywide are structured to encompass four dimensions: firstly, the induction training for new employees; secondly, business and professional training; thirdly, young echelon talent training; and fourthly, management skills training. In 2021, the Group conducted more than 40 professional training sessions mainly in the form of in-person lectures, covering various topics such as finance, taxation, bidding, project management, information security, construction operations and product development skills. Each business department also organised small-scale on-demand trainings themselves. This year, the overall training ratio of the Group reached 89.85%.
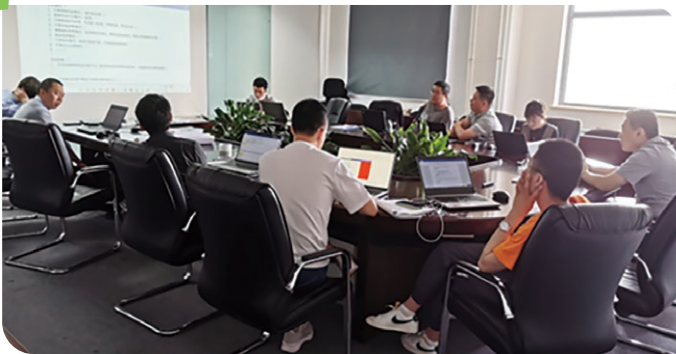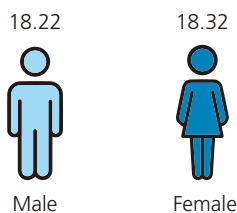
Number of employees trained by gender

489 / 89.72%	175 / 90.21%
545 Male	194 Female

■ Total number of employees   ■ Number of employees trained

Number of employees trained by gender

7 / 100%	107 / 95.54%	550 / 89.71%
7 Senior Management	112 Middle Management	620 Staff

■ Total number of employees   ■ Number of employees trained

Average training hours by gender

18.22	18.32
Male	Female

Average training hours by employee category

4.96	19.40	18.01
Senior Management	Middle Management	Staff
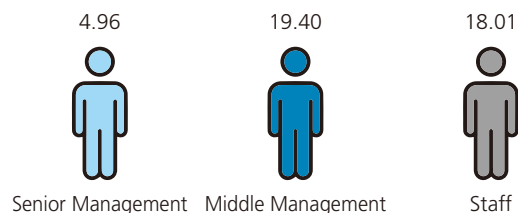
CONTRIBUTING TO PUBLIC WELFARE AND SERVING THE COMMUNITY

By enabling the safety and convenience of public travel with the provision of high quality solutions, the Group also actively take part in public welfare activities, building connections and interactions with the surrounding communities in an effort to give back to society through local volunteer services.

In June 2021, we joined hands with the Datun Street Working Committee of Chaoyang District in Beijing to establish a working mechanism of "deepening joint collaboration and enabling community development" with the Century Village community, offering volunteer services in the locality and paying visits to the elderly.

In 2021, the Group's rural revitalisation charity campaign entered its fourth year. The teachers and students of Zhenningbao Central Primary School in Chicheng county, Zhangjiakou city, with whom we have been helping, received our donations as scheduled. The first batch of materials donated in June was about RMB15,600 in summer and autumn clothes provided to all students in the school. In August the same year, upon the school's relocation, we donated daily necessities for the student dormitory, such as quilts, sheets, towels and toiletries, which was worth around RMB51,700.

Zhenningbao Central Primary School in Chicheng county is located in the remote mountainous area of Zhangjiakou, where local economy has always been struggling. Most of the students in the school are left-behind children away from their parents' care. In this regard, the Group has long supported the development of the school. In 2021, with the support of the local government, the school was able to move to a new site and expand its enrolment, which increased from 78 to nearly 150 students.

In early 2022, based on actual situation of the COVID-19 pandemic, the Group delivered 500 sets of protective clothing and 5,000 KN95 disposable medical masks to the Suzhou Science and Technology Park Social Welfare Foundation to support regional pandemic prevention. Boxes of anti-epidemic materials embody the love, warmth, responsibility and accountability of the Group.

Adhering to the principle of assisting in the comprehensive promotion of rural revitalisation, the Group actively carried out its poverty relief work by way of consumption and public welfare in 2021 and took part in establishing connections with the areas in need of assistance. The Group purchased local produce as visiting gifts from the aided areas to promote local economic growth and donated to the People's Government of Luopu county, Hetian region, Xinjiang a sum of RMB1 million for the purchase of IT teaching equipment to help the development of local education.

APPENDIX I: LIST OF APPLICABLE POLICIES, LAWS AND REGULATIONS

Scopes	Applicable Policies, Laws and Regulations
Environment	Mainland China: • Environmental Protection Law of the People's Republic of China • Law of the People's Republic of China on Environmental Impact Assessment • Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution • Water Pollution Prevention and Control Law of the People's Republic of China • Measures for Pollutant Discharge Permitting Administration (For Trial Implementation) • Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Wastes • Regulation on the Administration of Permitting of Pollutant Discharges • Measures for the Administration of Transfer of Hazardous Wastes • Measures for the Administration of Permit for Operation of Dangerous Wastes • Law of the People's Republic of China on Energy Conservation • Cleaner Production Promotion Law of the People's Republic of China • Electric Power Law of the People's Republic of China • Measures for the Administration of Electricity Conservation (《節約用電管理辦法》) • Water Law of the People's Republic of China • GB/T 2589 General Rules for Calculation of Comprehensive Energy Consumption • Law of the People's Republic of China on Prevention and Control of Pollution from Environmental Noise
Employment	Mainland China: • Labor Law of the People's Republic of China • Labor Contract Law of the People's Republic of China • Regulation on the Implementation of the Employment Contract Law of the People's Republic of China • Provisions of the State Council on Working Hours of Employees (《國務院關於職工工作時間的規定》) • Regulation on Paid Annual Leave for Employees • Implementation Measures for Paid Annual Leave for Employees of Enterprises • Provisions on Minimum Wages • Payment of Wages Tentative Provisions (《工資支付暫行規定》) • Trade Union Law of the People's Republic of China • Social Insurance Law of the People's Republic of China • Interim Regulation on the Collection and Payment of Social Insurance Premiums • Regulation on the Administration of Housing Accumulation Funds • Regulation on Work-Related Injury Insurance • Regulations on Unemployment Insurance • Interim Provisions on Labor Dispatch • Notice on Further Regulations on Issues Concerning Work-Related Injury Insurance for Labor Dispatching Entities (Henan Province) (《關於進一步規範勞務派遣單位工傷保險有關問題的通知》(河南省)) • Special Rules on the Labor Protection of Female Employees • Provisions on the Administration of the Employment of Foreigners in China • Interim Measures for the Participation in Social Insurance of Foreigners Employed in China • Provisions on Medical Treatment Period for Employees of Enterprises for Illness or Non-Work-Related Injury (《企業職工患病或非因工負傷醫療期規定》) Hong Kong SAR, China: • Employment Ordinance • Minimum Wage Ordinance • Employees' Compensation Ordinance

Scopes	Applicable Policies, Laws and Regulations
Workplace Environment and Occupational Health Management	Mainland China: • Work Safety Law of the People's Republic of China • Labor Law of the People's Republic of China • Fire Protection Law of the People's Republic of China (2021 Amendment) • Administrative Measures for Work Safety Training • Regulation on Work Safety Permits • Regulation on the Reporting, Investigation and Handling of Work Safety Accidents • Regulations of Beijing Municipality on Work Safety • Provisions of Beijing Municipality on the Main Responsibility for Production Safety of Production and Business Entities • Provisions on the Five Implementations and Five Confirmations of the Enterprise Work Safety Responsibility System (《企業安全生產責任體系五落實五到位規定》) • Provisions on the Safety Training of Production and Operation Entities • Measures for the Administration of Contingency Plans for Work Safety Incidents • Interim Provisions on the Screening, Identification and Control of Hidden Risks of Work Safety Accidents (《安全生產事故隱患排查治理暫行規定》) • The Administrative Regulations on the Work Safety of Construction Projects • Interim Measures for the Supervision and Administration of "Three Simultaneities" for Safety Facilities of Construction Projects • Regulation on Emergency Responses to Work Safety Accidents • Law of the People's Republic of China on the Prevention and Control of Occupational Diseases • Measures for the Supervision and Administration of "Three Simultaneities" of Facilities for the Prevention and Control of Occupational Diseases of Construction Projects • Rules for the Administration of Regular Inspection of Occupational Hazard Factors of Employers (《用人單位職業病危害因素定期檢測管理規範》) • Management Rules for Labor Protection Supplies of Employers • Provisions on the Administration of Occupational Health at Workplaces (Order No. 5 of the National Health Commission of the People's Republic of China, 2021) • Guidelines for Enterprises to Develop Emergency Response Plan for Work Place Accidents (GB/T29639-2020) (《生產經營單位安全生產安全事故應急預案管理辦法編製導則》) • Safety Precaution Engineering Procedures and Requirements (GA/T 75-1994)

Scopes	Applicable Policies, Laws and Regulations
Prevention of Child and Forced Labour	Mainland China: • Labor Contract Law of the People's Republic of China • Law of the People's Republic of China on the Protection of Minors • Civil Code of the People's Republic of China • Provisions on the Prohibition of Using Child Labor • Criminal Law of the People's Republic of China • Measures for Lump-Sum Compensation to the Disabled or Deceased Employees of Entities Involving Illegal Employment
Product Responsibilities	Mainland China: • Patent Law of the People's Republic of China • Trademark Law of the People's Republic of China • Copyright Law of the People's Republic of China • Cybersecurity Law of the People's Republic of China • Regulations of the People's Republic of China on Protecting the Safety of Computer Information Systems • Administrative Measures for the Graded Protection of Information Security • Regulation on Protecting the Security of Critical Information Infrastructure (Order No. 745 of the State Council) • Opinions of the General Office of the State Council on Further Strengthening the Management of Urban Rail Transit Planning and Construction (No. 52 [2018] of the General Office of the State Council) • Outline for Digital Transportation Development Planning (《數字交通發展規劃綱要》) • Program of Building National Strength in Transportation • Outline for National Comprehensive Three-Dimensional Transportation Network Planning《國家綜合立體交通網規劃綱要》 • Opinions on Accelerating the Building of National Strength in Transportation with Technological Innovations (《科技創新驅動加快建設交通強國的意見》) • Assessment and Evaluation Standards for Green Travel Projects (《綠色出行創建行動考核評價標準》) • Action Plans for Building New Infrastructure in the Field of Transportation (2021-2025) (《交通運輸領域新型基礎設施建設行動方案（2021–2025年）》) • Working Guidance for Carbon Dioxide Peaking and Carbon Neutrality in Full and Faithful Implementation of the New Development Philosophy • Guideline for Promoting Green Development in Urban and Rural Areas • Action Plan for Carbon Dioxide Peaking Before 2030 • White Paper on Responding to Climate Change: China's Policies and Actions • Implementation Plan for Promoting the Actions of "Migrating to Cloud, Using Digital Tools and Enabling Intelligence" and Fostering the Development of New Economy • Three-Year Action Plan for the Development of New Types of Data Centers (《新型數據中心發展三年行動計劃》) • Three-Year Action Plan (2021-2023) for the Construction of New Types of Infrastructure for the Internet of Things

Scopes	Applicable Policies, Laws and Regulations
Anti-Bribery and Corruption	Mainland China: • Anti-Unfair Competition Law of the People's Republic of China • Anti-Money Laundering Law of the People's Republic of China • Interim Provisions on Banning Commercial Bribery (Order No.60 of the State Administration for Industry and Commerce of the People's Republic of China) Hong Kong SAR, China: • Prevention of Bribery Ordinance
Intellectual Property Rights	Mainland China: • Patent Law of the People's Republic of China • Trademark Law of the People's Republic of China • Copyright Law of the People's Republic of China

APPENDIX II: HKEX ESG REPORTING GUIDE CONTENT INDEX

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
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 exhaust gas and GHG emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change Appendix I
KPI A1.1	The types of emissions and respective emissions data.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) GHG emissions in total (in tonnes) and intensity.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A1.3	Total hazardous waste produced (in tonnes) and intensity.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A1.4	Total non-hazardous waste produced (in tonnes) and intensity.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A1.5	Description of emission target(s) set and steps taken to achieve them.	Part 2 –> Statement from the Board Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change Appendix I
KPI A2.1	Direct and/or indirect energy consumption by type in total (kWh in '000s) and intensity.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A2.2	Water consumption in total and intensity.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A2.3	Description of energy use efficiency target(s) and steps taken to achieve them.	Part 2 –> Statement from the Board Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI 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.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A2.5	Total packaging material used for finished products (in tonnes) and with reference to per unit produced.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	Part 5 –> Conserving Energy and Reducing Emissions to Address Climate Change
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.	Part 2 –> Statement from the Board
KPI 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.	Part 2 –> Statement from the Board
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.	Part 6 –> Empowering the Workforce Appendix I
KPI B1.1	Total workforce by gender, employment type, age group and geographical region.	Part 6 –> Empowering the Workforce
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Part 6 –> Empowering the Workforce

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
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.	Part 6 –> Rooting Production Safety in Operations Appendix I
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years, including the reporting year.	Part 6 –> Rooting Production Safety in Operations
KPI B2.2	Lost days due to work injury.	Part 6 –> Rooting Production Safety in Operations
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Part 6 –> Rooting Production Safety in Operations
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Part 6 –> Empowering the Workforce
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Part 6 –> Empowering the Workforce
KPI B3.2	The average training hours completed per employee by gender and employee category.	Part 6 –> Empowering the Workforce
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.	Part 6 –> Empowering the Workforce Appendix I
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Part 4 Part 6 –> Empowering the Workforce
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Part 4 Part 6 –> Empowering the Workforce

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
Aspect B5: Supply Chain Management		
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Part 5 –> Aligning with Suppliers
KPI B5.1	Number of suppliers by geographical region.	Part 5 –> Aligning with Suppliers
KPI 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.	Part 5 –> Aligning with Suppliers
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Part 5 –> Aligning with Suppliers
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Part 5 –> Aligning with Suppliers
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.	Part 5 –> Delivering High Quality Solution and Services Appendix I
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not applicable
KPI B6.2	Number of products and service-related complaints received and how they are dealt with.	Part 5 –> Interlocking with Customers
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Part 4 Part 5 –> Achieving Intelligent Mobility Backed by Technological Innovations
KPI B6.4	Description of quality assurance process and recall procedures.	Not applicable
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	Part 5 –> Delivering High Quality Solution and Services

Subject Areas, Aspects, Disclosures and KPIs	Description	Sections/Declaration
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.	Part 4 Appendix I
KPI 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.	Part 4
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Part 2 –> Statement from the Board Part 4
KPI B7.3	Description of anti – corruption training provided to directors and staff.	Part 4
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.	Part 6 –> Contributing to Public Welfare and Serving the Community
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Part 6 –> Contributing to Public Welfare and Serving the Community
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Part 6 –> Contributing to Public Welfare and Serving the Community