

GUANGDONG INVESTMENT LIMITED (粤海投資有限公司)

Stock Code : 00270



Environmental, Social and Governance Report















Contents

01

About the Report	4
Reporting Period	4
Reporting Scope	4
Reporting Standards	4
Reporting Principles	5
Source of Information	6
Contact information	6

02

About	GDI
-------	-----

Company Profile	7
Awards and Honors	8
Business Segments	9
Corporate Governance	16
Highlights of 2022	17

03

Sustainable Development Management

ESG Strategy	18
ESG Governance Structure	18
Stakeholder Engagement	19
Materiality Assessment	22
Our Response to Sustainable	25
Development Goals	

04

Featured Topic: Efforts to Address Climate Change	29
Climate Change Governance	29 31
Climate Change Strategy Climate Change Risk and Opportunity	31
Identification, Analysis and Management	52
Climate Change Indicators and Targets	53

05

7

55 Our Sustainable Development Enhancing Risk Management and 55 Combating Corruption Safety First and Quality Operation 62 Caring about Employees and Building 97 a Strong Workforce Energy Conservation and 115 Environmental Protection Engaging in Community Building and 137 Giving Back to Society

06

Appendix ESG Reporting Guide Index



Guangdong Investment Limited (hereinafter referred to as "GDI" or the "Company", together with its subsidiaries, collectively referred to as the "Group", "we", or "us") is pleased to present to stakeholders its 2022 Environmental, Social and Governance Report (hereinafter referred to as the "Report"). In the Report, we disclose the concept, management, action and performance of Environmental, Social and Governance (hereinafter referred to as "ESG") of the company.

REPORTING PERIOD

The Report covers the period from 1 January 2022 to 31 December 2022 (hereinafter referred to as the "Reporting Period" unless otherwise stated).

REPORTING SCOPE

The Report sets out the ESG performance of the Group's six business segments, namely water resources, property investment and development, department store operation, hotel ownership, operation and management, energy projects and roads and bridges.

In addition, Guangdong Land Holdings Limited (粤海置地控股有限公司, hereinafter referred to as "Guangdong Land") (stock code: 00124), a subsidiary held by the Group, published its own 2022 ESG report, which is excluded from our reporting scope. More information about Guangdong Land is available on its official website at www.gdland.com.hk.

REPORTING STANDARDS

The Report is prepared in accordance with the Environmental, Social and Governance Reporting Guide (hereinafter referred to as the "ESG Reporting Guide") contained in Appendix 27 to the Rules Governing the Listing of Securities on the Main Board of the Stock Exchange of Hong Kong Limited (hereinafter referred to as the "Listing Rules"), with strict compliance with the disclosure requirements of the "comply or explain" provisions. Additionally, the Report refers to the Global Reporting Initiative Sustainability Reporting Standards (hereinafter referred to as the "GRI Standards") issued by the Global Sustainability Standard Board.

REPORTING PRINCIPLES

Π

E

The Report follows the international reporting standards, including materiality, quantitative, balance, consistency, and completeness.

Reporting Principles	Definition	Response from the Group
Materiality	The threshold at which ESG issues determined by the board are sufficiently important to investors and other stakeholders that they should be reported.	Through continuous engagement with stakeholders and materiality assessment, the Group focuses on the disclosure of ESG issues that are crucial to investors and other stakeholders.
Quantitative	Key performance indicators (hereinafter referred to as "KPIs") in respect of historical data need to be measurable. The issuer should set targets to reduce a particular impact. In this way the effectiveness of ESG policies and management systems can be evaluated and validated. Quantitative information should be accompanied by a narrative, explaining its purpose, impacts, and giving comparative data where appropriate.	The Group discloses quantitative information in the Report whenever possible and provides textual explanations to allow stakeholders to clearly understand the ESG performance of the Group.
Balance	The ESG report should provide an unbiased picture of the issuer's performance. The report should avoid selections, omissions, or presentation formats that may inappropriately influence a decision or judgment by the report reader.	The Group fully discloses its ESG performance and avoids expressions that may inappropriately influence decisions or judgment made by readers.
Consistency	The issuer should use consistent methodologies to allow for meaningful comparisons of ESG data over time.	The Group ensures that the reporting scope and methodologies are largely consistent every year to ensure reasonable comparison and analysis.
Completeness	The ESG report should cover substantive issues and their boundaries that are adequate to reflect material economic, environmental and social impacts and enable stakeholders to assess the performance of the reporting institution during the Reporting Period.	The ESG report covers all material areas whenever possible with targeted responses made to relevant issues.

01. ABOUT THE REPORT (CONTINUED)

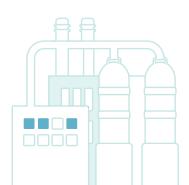
SOURCE OF INFORMATION

The information and data contained in the Report are derived from the Group's official documents and statistical reports. The Board of Directors (hereinafter referred to as the "Board") considers that there are no false records, misleading statements or major omissions in the Report, and the Board is fully responsible for the authenticity, accuracy and completeness of the Report.

CONTACT INFORMATION

For any questions or suggestions on the content of the Report, please contact the Company Secretary at:

Address	: 28th and 29th Floors, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong
Telephone	: (852) 2860 4368
Fax	: (852) 2528 4386
Email	: ir@gdi.com.hk
Official webs	ite : www.gdi.com.hk





COMPANY PROFILE

The Company, formerly known as Union Globe Development Limited (hereinafter referred to as "Union Globe"), was incorporated and listed on the Stock Exchange of Hong Kong in 1973 (stock code: 00270). Union Globe was acquired by an enterprise owned by the Guangdong provincial government in January 1987 and renamed Guangdong Investment Limited in July 1988. The Company is a constituent stock of the Hang Seng China (Hong Kong-listed) 100 Index, Hang Seng China-Affiliated Corporations Index and Hang Seng Composite Industry Index – Utilities.

As at the date of publication of the Report, the Company's ultimate controlling shareholder, Guangdong Holdings Limited (廣東粵海控股集團有限公司, hereinafter referred to as "Guangdong Holdings"), holds approximately 56.49% shareholding interest in the Company through its wholly-owned subsidiary, GDH Limited (粤海控股集團 有限公司). Guangdong Holdings is a state-owned provincial investment holding company under the supervision of the State-owned Assets Supervision and Administration Commission of the People's Government of Guangdong Province.

As of 31 December 2022, GDI recorded a market capitalisation of approximately HK\$52,237 million and with 9,897 on-the-job personnel. The Company holds approximately 73.82% of the issued share capital of Guangdong Land.

AWARDS AND HONORS

Awards	Issuing Organisation	Time	Recipient
Jiangxi Exemplary Enterprise for Safety Culture Development	Jiangxi Safety Production Association	2023	Nanchang Water Company
Organisation of Establishing Green Shopping Malls in 2022	Department of Commerce of Guangdong Province	2023	Panyu Teemall
Excellent Case of Municipal Sewage Treatment	E20 Environment Platform	2022	Liupanshui Yuehai Environmental Protection Co., Ltd.
2022-2023 Benchmarking Water Plants for Environmental Education	"Double Hundred Leaps" Sewage Treatment Benchmarking Alliance	2022	Liupanshui Yuehai Environmental Protection Co., Ltd.
National Education Base of Ideological and Political Practice Course on the Theme of Beautiful China	General Office of the Ministry of Education and General Office of the Ministry of Ecology and Environment	2022	Wuzhou Yuehai Environmental Protection Development Co., Ltd.
2022 Guangdong Municipal Excellent Model Project	Guangdong Municipal Industry Association	2022	Yangjiang Yuehai Environmental Protection Co., Ltd.
Level 1 Enterprise of Water Conservancy Safety Production Standardization	China Water Enterprises Confederation	2022	Enshi Yuehai Water Co., Ltd.
2022 Guangdong Province Civilized Construction Site of Water Conservancy	Guangdong Province Water Conservancy and Hydropower Industry Association	2022	Shanwei Yuehai Water Supply Co., Ltd.
National May 1 Labor Award	All-China Federation of Trade Unions	2022	Guangdong Yue Gang Water Supply Co., Ltd.
Excellent Member of Guangdong Province Water Conservancy and Hydropower Industry Association	Guangdong Province Water Conservancy and Hydropower Industry Association	2022	Guangdong Yue Gang Water Supply Co., Ltd.
Guangdong Exemplary Enterprise for Safety Culture Development	Guangdong Provincial Association of Work Safety	2022	Suixi Yuehai Water Co., Ltd.

BUSINESS SEGMENTS

Upholding the corporate culture with "Commitment, Performance and Teamwork" at the core, the Group actively promotes its brand slogan of "Corporation Thrives on Solid Efforts". Aspiring to become a leading enterprise in the industry, GDI has constantly developed its core businesses and increased its business capabilities. The Group has six core business segments and operates its businesses in Mainland China and Hong Kong.



02. ABOUT GDI (CONTINUED)

WATER RESOURCES

Guangdong Yue Gang Water Supply Company Ltd. (hereinafter referred to as "Yue Gang Water Supply") and Guangdong Water Holdings Limited (hereinafter referred to as "Water Holdings") are engaged in water resources business, contributing 73.07% of the Group's revenue in 2022. Dongshen Water Supply Project, one of the core businesses, was designed for water supply, flood prevention, irrigation and electric power generation. The total volume of water supply to Hong Kong, Shenzhen and Dongguan during the Reporting Period amounted to 2.249 billion tons (2021: 2.355 billion tons). Apart from the Dongshen Water Supply Project, the Group has a number of subsidiaries and associates which are principally engaged in water distribution, sewage treatment operation and waterworks construction. And the total designed water supply capacity of the water supply plants and the total designed wastewater processing capacity of the sewage treatment plants of the Group's other water resources projects as at 31 December 2022 are 15,893,200 tons per day (2021: 13,783,200 tons per day) and 3,342,900 tons per day (2021: 2,635,200 tons per day), respectively.

PROPERTY INVESTMENT AND DEVELOPMENT

The property investment and development business, operating in Hong Kong SAR, Guangzhou, Shenzhen, Tianjin, Panyu, Jiangmen, Zhuhai, Foshan, Zhongshan and Huizhou, contributed 12.38% of the Group's revenue in 2022. Guangdong Investment Tower, the headquarters of the Group, is located at Guangdong Investment Tower, Connaught Road Central, Hong Kong. The other properties held by the Group mainly include GDH Teem Plaza, Panyu GDH Plaza, Guangzhou Comic City, Tianjin Yuehai Teem Shopping Mall and Shenzhen Teemall. GDH Teem Plaza comprises a shopping mall, an office building and a hotel. The shopping mall, known as Teemall, has a total GFA of approximately 160,000 m², of which 106,000 m² is held for rental purposes. Tianjin Yuehai Teem Shopping Mall has a total GFA of around 205,000 m², of which 145,000 m² is held for rental purposes.

02. ABOUT GDI (CONTINUED)

DEPARTMENT STORE OPERATION

GDH Teem Commercial Co., Ltd. (廣東粤海天河城商業有限公司) and GDH Teem Department Commercial Co., Ltd. (廣州市粤海天河城百貨商業有限公司) (collectively referred to as "Teemall Department Store"), are engaged in the business of department store operation, which contributed 3.44% of the Group's revenue in 2022. During the Reporting Period, they operated six stores, including Teemall Store, Wan Bo Store, Ming Sheng Store, Dong Pu Store, Ao Ti Store and Hua Du Store (opened in January 2022). As of 31 December 2022, the total leased area was approximately 222,300 m² (2021: 123,900 m²).

The hotel segment is responsible for hotel ownership, operation and management. The segment managed a total of 24 hotels (2021: 27 hotels) as at 31 December 2022, of which three were located in Hong Kong and twenty-one in Mainland China, collectively generating 1.67% of the Group's revenue in 2022. Among the Group's five star-rated hotels, four were managed by its hotel management team with the exception of the one located in Guangzhou, namely Sheraton Guangzhou Hotel, which was managed by other hotel management group. The average occupancy rate of Sheraton Guangzhou Hotel was 69.6% (2021: 74.8%), and that of the other four star-rated hotels and a newly opened hotel in Zhuhai was 59.1% (2021: 57.6%) during the Reporting Period.



HOTEL OWNERSHIP, OPERATION AND MANAGEMENT

02. ABOUT GDI (CONTINUED)

ENERGY PROJECTS

Zhongshan GDH Energy Co., Ltd. (中 山粤海能源有限公司, hereinafter referred to as "GDH Energy") and Guangdong Yudean Jinghai Power Generation Co., Ltd. (廣東粵電靖海發 電有限公司, hereinafter referred to as "Yudean Jinghai Power") are engaged in the energy business, contributing 6.59% of the Group's revenue in 2022. GDH Energy has two power generation units with a total installed capacity of 600 MW. Sales of electricity during the Reporting Period amounted to 2,604 million kwh (2021: 2,969 million kwh). As at 31 December 2022, Yudean Jinghai Power had four power generation units with a total installed capacity of 3,200 MW. Sales of electricity for the Reporting Period amounted to 15,054 million kwh (2021: 16,742 million kwh).

ROADS AND BRIDGES

Guangxi GDH Highway Co., Ltd. (廣西粤海高速公路有限公司, hereinafter referred to as "GDH Highway") held the Xingliu Expressway which contributed 2.85% of the Group's revenue in 2022. The Xingliu Expressway, located in Guangxi Zhuang Autonomous Region, comprises a main line which is approximately 100 km in length and three connection lines (to Xingye, Guigang and Hengxian) with an aggregate length of approximately 53 km. The average daily toll traffic flow of the Xingliu Expressway increased by 1.5% to 23,060 vehicle trips (2021: 22,710 vehicle trips). In addition, the Company entered into a cooperation agreement with Dongguan City Xiegang Town People's Government (東莞 市謝崗鎮人民政府) in respect of a public-private-partnership project for the development of certain A-grade highways, connecting roads and municipal roads (not being toll roads) ("Project Road(s)") and the related ancillary support services in Yinping Innovation Zone (銀瓶創新區) in Dongguan, Guangdong Province. As at 31 December 2022, four Project Roads were completed and one Project Road was under construction.

CORPORATE GOVERNANCE

In order to cooperate with the requirements of the business operation and serve the best interests of all stakeholders, the Group consistently implements the highest standard of corporate governance. We applied the relevant provisions of the Corporate Governance Code contained in Appendix 14 to the Listing Rules for the stabilisation and efficiency of corporate operations and strictly complied with the provisions of Sections 3.10(1), 3.10(2), and 3.10A of the Listing Rules regarding Directors' independence.

The Board

The overall function of the Board is directed and supervised by the Chairman, who is also required to act in the best interests of the Group. The Chairman is responsible for leading development, setting strategic goals, and ensuring the accomplishment of those goals by acquiring necessary financial support and other resources through developing the overall strategy and regulations of the Group. Meanwhile, the Chairman also monitors the behaviour of the management and reviews business performance.

Functional Committees

Multiple functional committees are formed under the supervision of the Board, which provides suggestions on the Group's policies and compliance from various perspectives, aiming to ensure the robustness and effectiveness of the Group's operations.

Specifically, the responsibilities of the Nomination Committee are to identify suitable candidates for the Board and to plan appointments and succession with caution. The Remuneration Committee helps determine the compensation of Directors and Senior Management. The Audit Committee assists the Board in monitoring the risk assessment, control and management procedures to achieve the effectiveness of the internal control system by carrying out a detailed annual review.

Independence

The Group requires independence from all members of GDI's Board. No financial, business, family, or other significant/relevant relationships exist among different members of the Board. As of the report's publication date, the Board consisted of five Executive Directors, three Non-Executive Directors, and four Independent Non-Executive Directors.

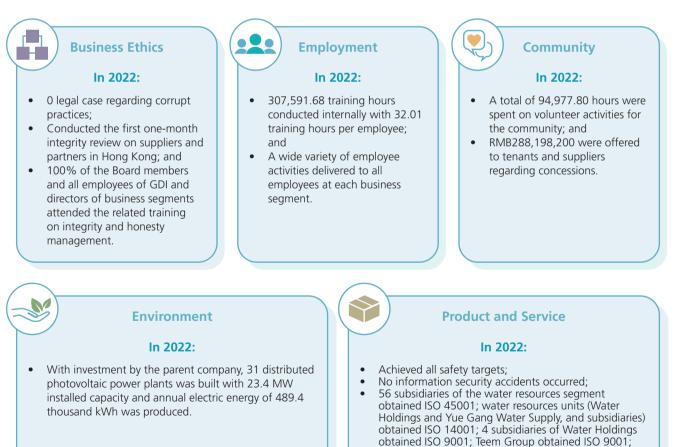
The Group received confirmation of independence from the Independent Non-Executive Directors. All Independent Non-Executive Directors' independency is verified per Article 3.13 of the Listing Rules by the Group. Furthermore, Directors are considered capable of providing constructive independent suggestions and making valuable contributions to the Board and the Company, based on their abundant experience in diverse fields and their reliable character.

Diversification

Diversification of the Board has always been considered an essential element in the Group's corporate governance structure. The Group formulated a board diversity policy and strictly implemented all requirements of the policy. We conduct momentary reviews of the policy to ensure its efficiency. In addition, the Company recognises and embraces the benefits brought by the diverse Board and perceives their diversity as the key element for achieving strategic goals and sustainable development of the Group.

Besides, the Group keeps reflecting on its business model and actual demands and analyses the benefit of a diverse Board with sufficient objective criteria. Gender, age, length of service, professional experience, and skills and knowledge are five measurable focuses that our Nomination Committee takes into consideration in the actualisation of Board diversification.

HIGHLIGHTS OF 2022



- Total number of suppliers: 5,403;
- The overall leakage rate of the water resources segment decreased by 2.03% compared with the previous year, and the key water leakage control companies declined by 2.51% compared with the previous year, which reduced the leakage volume by 38 million tons.

03 Sustainable Development Management

ESG STRATEGY

GDI holds the attic faith that corporations have to contribute to the sustainable development of the entire society while creating interests for shareholders. The Group has incorporated ESG management into daily corporate operation in response to our commitment to society. In order to fulfil such a commitment, all business segments are united in delivering sustainable development management through various dimensions, of which risk management, business ethics, work safety, product and service quality, talent development, community service and others are well covered to strengthen the Group's efforts in sustainable development.

ESG GOVERNANCE STRUCTURE

In order to ensure the stability of the Group's governance and carry out sustainability work efficiently, the Company has established a well-functioning ESG governance structure with roles and responsibilities clearly defined. The Board acts as the highest authority within the ESG governance structure, which supervises and determines all ESG-related issues and relevant goals of the Group. In 2022, the Group engaged in materiality assessment to identify and prioritise ESG material issues.

Under the leadership of the Board, the Group formed the ESG Committee with full responsibility for the supervision, coordination, and evaluation of risks and opportunities regarding ESG within the Group. Moreover, the ESG Committee monitors the direction of sustainable strategy based on relevant laws, standards, and observations of the major trend of peer companies and industry practices. Besides, the ESG Committee reports relevant work records to the Board annually and regularly reviews all ESG-related policies.

To carry out the daily routine of ESG, the ESG Committee organised ESG Working Groups for each business segment. The ESG Committee provides overall coordination, instruction, and supervision, while the ESG Working Groups of business segments and relevant departments are required to carry out relevant work, set targets and monitor progress and performance. ESG Working Groups of business segments are also required to collect and summarise ESG-related information and report to GDI to support the ESG Committee in monitoring the progress of ESG-related work. Besides, to ensure the accuracy and reliability of all information collected and reported, all members of ESG Working Groups of business segments are required to sign the "Letter of Undertaking of ESG Information Disclosure".



STAKEHOLDER ENGAGEMENT

In the process of facilitating the development of our core businesses, GDI always adheres to the concept of sustainable development. We actively promote ESG management, striving to achieve synergistic development of the economic, environmental and social value of the Group. With great importance attached to the expectations and demands of our stakeholders, we have established multiple engagement channels to ensure that stakeholders are well-informed about the Group's ESG performance. We actively listen and respond to their requests and suggestions, consolidate close relationships and cooperation with them, and constantly promote sustainable development with win-win results.

Engagement Channels Investors/ • Stable and sustained Compliance with • General meetings Shareholders/Analysts investment return Regular reports applicable laws and • Clear strategic • News and regulations planning announcements Continuous Legally compliant Company website improvement of Investor conferences operations corporate governance Efficient corporate Ouestionnaires and structure governance • Regular review and surveys Sound risk improvement of risk management system management systems • Timely and truthful Releasing reports and information disclosure announcements Information disclosure Government and Legally compliant Compliance with regulatory authorities operations • Daily communication applicable laws and Contributing (including emails, regulations to economic phone calls) Continuously development and Site visits improving integrity • responding to national • Supervision and systems • Conducting business strategies inspection Providing employment activities well in opportunities line with regional Energy saving and economic strategies • emission reduction Targeted poverty alleviation implementation **Employees** • An equal and inclusive Labour Union Creating open, working environment telephone hotline just and diversified A comprehensive • Enterprise WeChat working atmosphere welfare and Employee opinion box • Revision and remuneration system Questionnaires and improvement of Robust training remuneration and surveys and development welfare system • Hiring internal trainers programmes Labour rights and building internal protection training systems Occupational health • Establishment of and safety Labour Union to Smooth career safeguard the rights progression paths and interests of employees • A dual promotion mode for a managerial and technical career

path

03. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

Stakeholders	Expectations	Engagement Channels	Our Responses
Customers	 Product quality and safety Customer information and privacy protection 	 Customer satisfaction surveys Customer return visits 24-hour customer complaints hotline Corporate open days Questionnaires and surveys 	 Launching product and service-related quality training for employees Occasional revisions to the service guidelines Stringent customer information protection policies and procedures
Suppliers/Contractors and service providers	 Win-win cooperation Open and fair tendering process 	 Supplier assessments Supplier training Engineering and construction conference Visits and communication 	 Establishing transparent procurement procedures and sound supply chain evaluation and management policies Working on trustworthy and long- term relationships with qualified suppliers
Media partners	Transparent informationCorporate ESG values	 News and announcements Company websites Questionnaires and surveys 	 Publishing reports and announcements Timely updating corporate information on official websites
Local communities	 Contribution to community development Creating job opportunities and facilitating local economic development 	 Community support Voluntary work Charity activities Corporate open days 	 Participation in community volunteer activities and charitable activities Targeted poverty alleviation implementation

03. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

MATERIALITY ASSESSMENT

1. Identification of ESG Issues

In view of the current status and performance of the Company's ESG management, we commissioned a third-party ESG consulting firm to comprehensively identify ESG issues through benchmarking analysis of outstanding peer companies and key concerns of mainstream ESG rating agencies, including Morgan Stanley Capital International (hereinafter referred to as "MSCI"), Standard & Poor's Global Corporate Sustainability Assessment (hereinafter referred to as "S&P CSA") and Sustainalytics etc. In addition, we also reviewed the disclosure requirements of the ESG Reporting Guide and GRI standards to ensure that all ESG-related issues were covered.

2. Engaging stakeholders for Questionnaires

To adhere to the materiality principle and facilitate communication with stakeholders, the Company invited both internal and external stakeholders to participate in an anonymous online questionnaire, in which stakeholders evaluate the materiality of each issue from their own perspectives. The questionnaire was also designed to collect stakeholders' expectations and opinions on GDI's ESG policies, practices and performance.

@

22

3. Preparation and review of the Materiality Matrix

Based on the results of the Questionnaire, relevant analysis and issues ranking were conducted by the third-party ESG consulting firm to identify the most material issues. Through the above analysis, we classified the most material ESG issues into environmental, social and governance and economic areas, and thereby identified 9 environmental issues, 12 social issues, and 5 governance and economic issues.

Based on the results of the questionnaire, a comprehensive Materiality Matrix was prepared in two dimensions, namely "materiality to stakeholders" and "materiality to GDI", which was summarised below. And the Materiality Matrix was submitted to the Board for review and confirmation.

4. Materiality response and disclosure

We will respond to and disclose the most material ESG issues in the Report. In consideration of the issues' materiality, we will constantly improve GDI's policy systems and relevant management initiatives accordingly.



03. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)





Social Area

- **01** Occupational Health and Safety
- **03** Product Quality and Safety
- **12** Elimination of Child Labour and Forced Labour
- **13** Data and Information Security
- **15** Disaster and Early Warning Mechanisms
- **16** Customer Relations and Privacy Protection
- **17** Intellectual Property and Patent protection
- **18** Employee Recruitment, Retention and Development
- **19** Community Engagement and Contribution
- **20** Employee Diversity and Equality
- 22 Sustainable Supply Chain and Responsible Procurement
- **23** Poverty Alleviation and Philanthropy



Governance and Economic Area

- **02** Corporate Governance
- **05** Responding to National Policies
- 09 Anti-corruption
- **10** Technological Innovation
- 14 Promoting Local Economic Development

OUR RESPONSE TO SUSTAINABLE DEVELOPMENT GOALS

Goals	Descriptions	Chapters	Our Actions
3 GOOD HEALTH AND WELL-BEING	Ensure healthy lives and promote well-being for people at all ages	ENGAGING IN COMMUNITY BUILDING AND GIVING BACK TO SOCIETY	As a part of society, we devote ourselves to the development of the local community through charitable donations and assistance projects. Besides, we spare no efforts to reduce the impacts of the Novel Coronavirus Pneumonia (NCP) on local people by offering them supplies, with an aim of ensuring their health and safety.
6 CLEAN WATER AND SANITATION	Ensure availability and sustainable management of water and sanitation for people	SAFETY FIRST AND QUALITY OPERATION ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION	We undertake to secure water supply for our customers with advanced ideas and professional techniques. At the same time, we strictly regulate water utilisation efficiency for all business segments from the source.
7 AFFORDABLE AND CLEAN ENERGY	Ensure access to affordable, reliable, sustainable and modern energy for people	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION	We actively respond to the national goal of "carbon peaking and carbon neutrality" by constructing distributed photovoltaic plants and continuously develop and upgrade energy-efficient equipment, so as to advance the development of renewable energy and the use of environmentally friendly equipment.

03. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

Goals	Descriptions	Chapters	Our Actions
B DECENT WORK AND ECONOMIC GROWTH	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for people	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE	We continuously boost local economy while creating job opportunities. Furthermore, we respect and value every employee by protecting their legal rights and interests and strive to build a diverse and inclusive working environment. We deliver targeted training to help our employees with their career development.
9 INDUSTRY, INNOVATION INDINFRISTRUCTURE	Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation	SAFETY FIRST AND QUALITY OPERATION	We support industrial development and innovation. While cultivating industry professionals and independently developing equipment and facilities, we promote cooperation with universities and cross-industry institutions to stimulate the development of the industry.
10 REDUCED INEQUALITIES	Reduce inequality within society	Caring About Employees and Building a strong Workforce	We implement the principle of equal employment. Based on this, we treat every employee equally by eradicating any form of discrimination and unfair treatment.

Goals	Descriptions	Chapters	Our Actions
11 SUSTAINABLE CITIES Image: Comparison of the second s	Make cities and human settlements inclusive, safe, resilient and sustainable	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION	We consider that the concept of environmental protection and energy saving should be integrated into all stages of production and operations. By increasing the usage of green energy, optimising production techniques and adopting energy- saving equipment, we build an environmentally friendly enterprise. Furthermore, we pay attention to social development by continuously helping people in need with an expectation of sharing a better future for all.



03. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

Goals	Descriptions	Chapters	Our Actions
13 CLIMATE	Take urgent action to combat climate change and its impacts	FEATURED TOPIC: EFFORTS TO ADDRESS CLIMATE CHANGE ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION	We concern about climate change and proactively identify and respond to climate- related risks and opportunities. Besides, we have formulated a climate change policy and takes elements regarding low-carbon development and environmental protection into consideration to build a green enterprise.
15 LIFE ON LAND	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION	We take full consideration of projects' potential impacts on the surrounding ecological environment by strictly monitoring the entire life cycle of projects, so as to reduce our negative impacts on the environment.
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Promote peaceful and inclusive societies for sustainable development, provide access to justice for people and build effective, accountable and inclusive institutions at all levels	ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION	We abide by the highest standard of business ethics beyond complying with laws and regulations. We maintain zero tolerance for corruption and bribery. We set up reporting channels and carry out publicity activities to promote integrity, thus fostering an open and transparent enterprise culture.

04 Featured Topic: Efforts to Address Climate Change

Climate change is a major challenge that human beings are currently facing. GDI realises that climate change risks will inevitably impact its business in the foreseeable future. Following the advice of the Task Force on Climate-Related Financial Disclosures (TCFD), we integrate climate change into our strategic planning and management practice to respond to the challenges. By identifying and evaluating our climate-related risks and opportunities, we detect potential risks and take corresponding actions in a timely manner. Additionally, we are working on a low-carbon development plan to build our resilience to climate change.

CLIMATE CHANGE GOVERNANCE

The Group integrates climate change-related risks into its risk management mechanism and operational strategy, building and implementing a scientific and professional ESG governance structure. The Group has established an ESG Committee, which is responsible for identifying, assessing and managing the Group's ESG risks and opportunities, with a focus on climate-related issues. The ESG Committee regularly reviews and updates the profiles of climate-related risks and opportunities identified and reports the results to the Board. Under the leadership of the ESG Committee, all business segments have developed and adopted appropriate measures to cope with climate change. They identify multi-dimensional risks and opportunities from the perspective of actual business and operations and sort out and analyse the physical and transition risks and associated opportunities so as to assist the ESG Committee and the Board in planning future strategies and formulating countermeasures.

04. FEATURED TOPIC: EFFORTS TO ADDRESS CLIMATE CHANGE (CONTINUED)

Board of Directors is responsible for identifying the key stakeholders and climate risks, considering the sustainability issues as part of the Group's strategic formulation and assuming responsibility for corporate governance.

Board of Directors

ESG Committee ESG Committee is responsible for monitoring, reviewing, and reporting our performance on managing climate risks, providing practical guidelines and support to the Group's sustainable development and climate risk management work to ensure thorough implementation of the sustainable management policies.

Directors of each business segments are responsible for overseeing the sustainability performance of its own segment and organising functional departments to carry out sustainable development work and respond to climate risks.

Each Business Segment and ESG Working Teams

Project Specialists Specialist in charge of safety and environmental management is appointed for each of the Group's projects under construction and in operation and responsible for implementing the sustainable development plans and monitoring the sustainability performance of the projects.

CLIMATE CHANGE STRATEGY

In response to the 14th Five-Year Plan of China and the national goals to peak carbon dioxide emissions and achieve carbon neutrality, the Company has developed the Climate Change Policy of Guangdong Investment Limited to specify the management approach of the Group and various business segments on climate change issues. The policy sets out our strategy and commitments to addressing climate change, which provides guidelines for subsidiaries and suppliers to incorporate climate change, energy conservation and emissions reduction and other considerations into each phase of their business operating cycle, including but not limited to project investment, design, development and operation. Based on this, we can strengthen climate change management and mitigate the impact of climate change on business, environment and society.

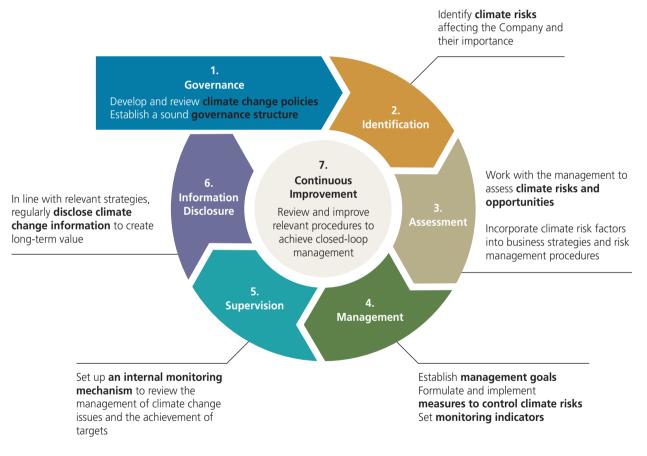
The Group recognises that climate change presents a range of short-term, medium-term and long-term risks and opportunities, which may have a significant impact on our business and activities. We actively explore ways to address and mitigate the impacts of climate change in order to achieve the sustainable development of the Group. We conduct our business in full compliance with policies and regulatory requirements. Each business segment has formulated respective business development and performance improvement plans in response to the market demand for green and low-carbon products and services and continues to improve performance through innovation and technological upgrading so as to achieve sustainable and low-carbon operations.



04. FEATURED TOPIC: EFFORTS TO ADDRESS CLIMATE CHANGE (CONTINUED)

CLIMATE CHANGE RISK AND OPPORTUNITY IDENTIFICATION, ANALYSIS AND MANAGEMENT

The Company continuously identifies, assesses and manages climate-related physical and transition risks to integrate the risks into its operation. We have established a system designed for risk assessment and management and specified procedures to identify, assess, respond to, monitor and update climate risks, so as to ensure effective closed-loop management.

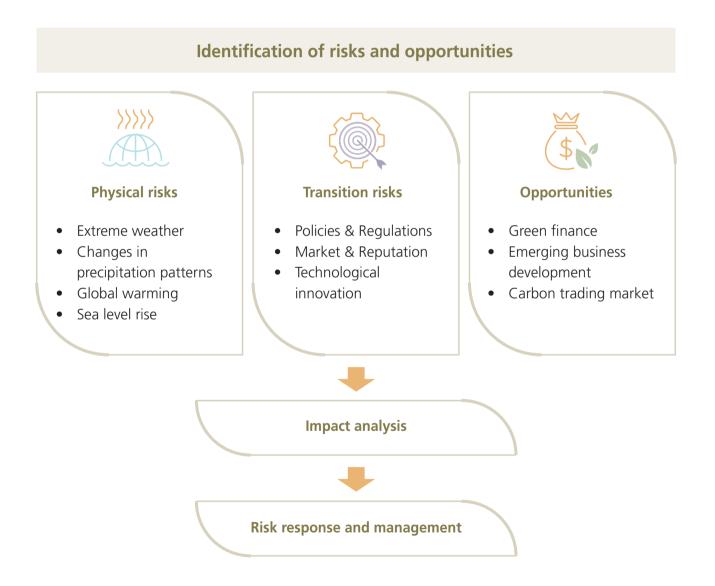


Procedures for managing climate-related risks

The Company fully considers the potential long-term impacts of climate change on the macro market environment, key stakeholders, facilities and business development. Based on the study of policies and regulations, background research, peer benchmarking and historical data, we systematically identify the climate-related risks and opportunities that GDI faces to analyse the impacts on the operations of business segments. The scope of analysis includes extreme, acute and chronic climate phenomena caused by climate change, as well as changes in policy, technology and market.

To finalise quantitative and objective results, we invited departments involved in the operation, facilities management, emergency response, and finance and risk management in various business segments to rate and discuss the identified physical and transition risks and opportunities in two key dimensions, which are risk likelihood and risk severity to conclude final results. All ratings and discussions are conducted against the assessment criteria of the segments' enterprise risk management systems.

According to the TCFD framework, we identify and access major climate-related risks and formulate corresponding measures to manage these risks. The details are as follows.

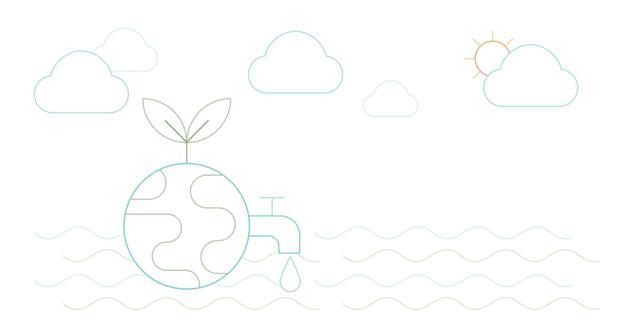


04. FEATURED TOPIC: EFFORTS TO ADDRESS CLIMATE CHANGE (CONTINUED)

Water Resources

Physical Risk

Risk Characteristics	Risks	Impacts	Responses
Acute	Typhoons	 High-intensity typhoons may lead to unceasing strong winds and torrential rains, and hence rising water surface and intrusion of seawater into river mouths, which could affect the water quality; Destroys operational pipeline networks and facilities, affecting the stability of water supply; Threats to the employees' health and safety. 	 Establishing a flood, drought and storm control ("Three- Control") command office to formulate and implement the Three-Control plan and specific emergency response plans; Organising regular emergency drills to enhance employees' safety and crisis awareness, which strengthens their abilities to deal with emergency situations.



Risk Characteristics	Risks	Impacts	Responses
Acute (continued)	Extreme precipitation	 A significant impact on the quality and quantity of source water at the water supply plant, resulting in the interruption of production and operation; Increases the difficulties for operation and maintenance of water environment to reach relevant standards; Extreme precipitation gives rise to regional flood disasters easily, which overloads the drainage system; Elevates risk of flooding water supply facilities in low-lying areas. 	 Applying treatment technologies with stronger load toughness to new sewage treatment facilities; Adopting excess water treatment load technology and formulating contingency plans for the existing sewage treatment facilities; Formulating contingency plans on prevention and control of overflow pollution at outfall for water environment operation and maintenance projects; Studying and applying intelligent control of the pipeline networks to achieve the maximum capacity of water discharge and improve the forced drainage capacity of temporary pumps; Formulating contingency plans for flood relief and arranging more personnel training and drills.
	Floods	 Effects the water quality and volume of water supply plant; Generates pressure on the production capacity of water supply plants and sewage treatment plants; Rises the water level of the drainage pipeline networks, which exerts pressure on the operational stability of the water resources segment pipeline networks; Disrupts production and operation of plants and increases maintenance costs. 	
	Landslides and mudslides	• Extreme rainfalls scour the hillside and loosen the soil, resulting in mudslides and landslips that cause water pollution and damage to facilities.	

04. FEATURED TOPIC: EFFORTS TO ADDRESS CLIMATE CHANGE (CONTINUED)

Risk Characteristics	Risks	Impacts	Responses
Acute (continued)	Droughts	 Reduces water reserves and probability of water supply; Drought may cause higher concentrations of pollutants in water bodies. 	 Developing and applying the intelligent control of the whole process of sewage treatment and cutting the cost of the concentration control for water quality by using GDI's Smart Water System; Researching and developing water-saving water purification technology to reduce self-use water rate; Deploying emergency water reserve and stabilising water supply with quality and safety by using dual water sources; Researching and developing emerging intensive pollutant removal technologies.
	Extreme cold	 Causes damage to some water supply and sewage pipelines; Reduces sewage system treatment capacity and increased operating costs. 	 Insulation measures or designs are required for outdoor facilities (reflux pool, etc.); Increasing insulation measures for projects in operation.

Risk Characteristics	Risks	Impacts	Responses
	Temperature rise	 Increases the risk of heat waves, droughts and wildfires and raises the maintenance cost of facilities; Endangers the health and safety of outdoor workers who need to work under the hot weather for a long time. 	 Formulating the Regulations on Occupational Health Management and providing employees with a working environment and conditions that meet the requirements of laws, regulations, procedures and norms regarding occupational health; Formulating emergency plans for heat stroke.
Chronic	Sea level rise	 Increases possibility of early obsolescence of existing facilities in coastal areas; Affects the water quality of the river due to the tidal action, resulting in higher operating costs for water environment projects; Affects the water quality of the river due to the tidal action, resulting in higher operating costs of water environment projects; 	 Strengthening investment risk control and adjusting investment strategy in time for areas exposed to sea-level rise in the foreseeable future; Researching and applying preventive maintenance technology as well as regional intensive management for equipment and facilities, reduce the marginal costs and hedge the risk of saltwater intrusion.



Transition Risk

Risk Characteristics	Risk	Impacts	Response
Policy and	Water quality management	China has introduced a number of policies to control water pollution. The water resources segment needs to enhance the water quality and ecology management that have been worsened due to climate change to ensure strict compliance with water quality standards.	 Constructing an online monitoring platform of water quality for the actualisation of smart water quality management, which further enhances the capacity of water quality management; Developing online laboratory information management system to build monitoring network for real time water quality data monitoring; Conducting third party unannounced inspection monthly to ensure achievement of water quality standards.
Compliance	Water supply management	To cope with drought and water shortage, the government of The People's Republic of China (PRC) will pursue a strict water resources management system, aiming to cap water usage at 700 billion m ³ for the national economy by 2030. Corporates are required to comply with the policy to seek continuous improvement on water use efficiency.	 Providing strategic direction and practical guidance for water resource control at operational level by formulating Regulation of Reservoir Operation and Operation Plan for Reservoir Operation in Flood Season; Conducting reliability demonstration, evaluations of water supply sustainability and water quality, forecast of downstream water demand before developing new project to avoid the impact of water resource shortage.

Risk Characteristics	Risk	Impacts	Response
Technology	Water treatment efficiency	To align with China's goals to peak carbon dioxide emissions and achieve carbon neutrality, corporates should effectively improve the energy efficiency of water treatment process or turn to other alternatives such as renewable energy and carbon capture, storage and utilisation technology to reduce carbon emissions generated from operations.	 Using the roof space of water companies to construct distributed photovoltaic energy project; Formulating "One Factory One Policy" energy saving plans for factories.
Markets	Customer preference	As green consumer behaviour is becoming popular in the society, Water Holdings would face the challenge of meeting consumers' direct demand for green transformation and low-carbon lifestyles.	• Providing green and low- carbon services for downstream customers by popularising high- performance, lightweight and long-life green water products and developing ecological product design and low-carbon production.
Reputation	Stakeholders' concerns	As China's action on climate change involves a range of social participation, the general public has paid increasing attention to and gained better understanding of climate change, carbon emissions and other environmental issues. The international community and capital markets also expect corporates to implement plans for energy conservation and emissions reduction. Failure to actively respond to climate change may affect the public image of an enterprise, resulting in reputational damage.	 Disclosing climate-related risks and opportunities in ESG report; Formulating Climate Change Policy to standardise the process and enhance the capacity of climate change management; Communicating with stakeholders actively, including government departments, non-government organisations, and professional institutions, to understand their expectations of key sustainable development areas.

Opportunity

Opportunity Characteristics	Specific Opportunity	Description of Opportunity
Markets	Demands of emerging markets	As set out in the PRC government's 14th Five-Year Plan, one of the key points in relation to environmental protection is to coordinate and improve the quality and standard of rural ecological and environmental protection and promote the coordinated development of urban and rural ecological and environmental protection so as to regulate the construction and operation of rural sewage treatment facilities. Water Holdings may deploy dispersed, and small-sized waste treatment facilities in various rural areas step by step and expand its business coverage.
	Green finance	The PRC government and the banking sector have been actively promoting green finance. The recently released Green Bond Endorsed Project Catalogue covers a number of water resources-related projects, aiming to diversify and upgrade financing channels and provide more funding for Water Holdings to develop new water projects.
Products and services	Technological innovation	Water Holdings may build on its existing Smart Water System to further develop a smart water management system with reference to market demand. By delivering solutions to assist users in managing water consumption and improve operational efficiency, Water Holdings can engage in new lines of business with technology and attract new customers with changing preferences.
	Unconventional water resources	The National Action Plan for Water Conservation released by the PRC government seeks to vigorously increase public awareness of water conservation to ensure national water security. Against this backdrop, Water Holdings may increase the use of unconventional water such as reclaimed water, seawater, rainwater, mine water and brackish water to seize the opportunity to expand the business and reduce reliance on individual water sources and the costs resulting from unstable operations.

Energy Projects

Physical Risk

-			
Risk Characteristics	Risk	Impacts	Responses
Acute	Typhoons	 High-intensity typhoons may lead to sustained strong winds and torrential rains, causing damage to pipeline networks and operational facilities and resulting in an unstable power supply. Therefore, relevant projects may face problems such as business interruptions involving breach of contract, compensation and legal liability; High-intensity typhoons may threaten the safety of employees and customers. 	 Establishing a Three-Control command office to formulate
	Extreme precipitation	 Extreme precipitation, such as increased number of days of heavy rainfall, massive amount of rainfall within a short period of time and the increase in annual maximum precipitation, will result in rapid rising of water bodies to increase the risk of inundation of infrastructure in low-lying areas along rivers, lakes, and coasts; Extreme precipitation within a short period may threaten the safety of employees and customers. 	 and implement the Three- Control plan and specific emergency response plans; Organising regular emergency drills to enhance employees' safety and crisis awareness, which strengthen their abilities of dealing with emergency situations.
	Floods	• Rising water level of the drainage pipeline causes floods, which leads to the interruption of plant production and operation, and increases maintenance costs.	

Risk Characteristics	Risk	Impacts	Responses
	Temperature rise	 During the year, increased frequency of high temperature appearance, probability of occurrence of heat waves, and higher warm spell duration index increased the safety risk of outdoor workers; To cope with surging demand for electricity, power generators or energy transmission facilities may operate in an exceeding temperature range so that the full load operation is difficult to satisfy a large amount of power demand. 	• Developing management standards such as the Production Safety Responsibility System for all Employees, and the List of Production Safety Responsibility System for all Employees to clarify all work standards, responsibilities, management contents and requirements for production safety.
Chronic	Sea level rise	• Rising sea levels may shorten service life of existing facilities in coastal areas.	 Monitoring the sea levels continuously; Strengthening investment risk control and adjust investment strategy in time for areas exposed to sea-level rise in the foreseeable future; Strengthening investment risk control and adjust investment strategy in time for areas exposed to sea-level rise in the foreseeable future; Taking the impact of sea-level rise into the consideration of new projects' site selection, planning, and design.

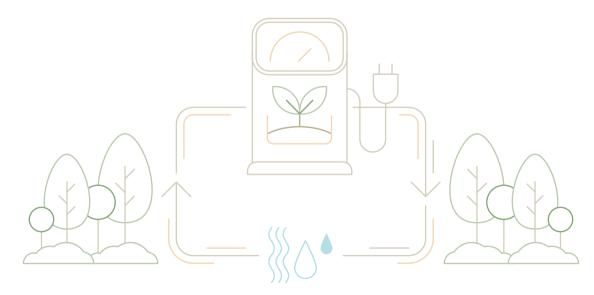
Transition Risk

Risk Characteristics	Risk	Description of Risk	Responses
Policy and	Energy mix	In response to the goals of peaking carbon dioxide emissions and achieving carbon neutrality, China is targeting to have its energy mix from non-fossil fuel sources instead of fossil fuels and increase the proportion of clean energy and non-fossil energy so as to reduce the level of carbon dioxide emissions and pollutant emissions, accelerating the transition to green and low-carbon energy. Achieve the goal of carbon neutrality requires energy corporates to further consider the coal power generation improvement, renewable energy alternatives, utilisation of carbon capture technology, etc.	• Further developing coal power generation improvement and renewable energy substitution, focusing on carbon capture technology implementation, etc.
Compliance	Carbon trading	China has launched carbon emission trading markets, setting carbon emission quotas for enterprises. Those enterprises whose emissions exceed their quotas need to purchase additional quotas from the emission trading market, which means they have to bear environmental, social and external costs for extra emissions. The power generation industry is one of the industries covered by the national carbon emission trading system. As a power generation company, GDI may face higher power generation costs when emitting more carbon dioxide than its quota allows.	 Paying close attention to the development of carbon trade market; Joining carbon trade market to undertake environmental responsibility generated by carbon emissions in production.

Risk Characteristics	Risk	Description of Risk	Responses
Technology	Efficiency of energy technology	To align with China's goals of peaking carbon dioxide emissions and achieving carbon neutrality, corporates should effectively improve energy efficiency and eliminate outdated production planning and equipment or turn to other alternatives such as renewable energy and carbon capture, storage and utilisation technology to reduce carbon emissions generated from operations.	• Improving energy efficiency efficiently, eliminating backward production plans and facilities, or seeking other renewable energy, carbon capture, storage and utilisation technologies to reduce carbon emissions during production process.
Markets	Customer preference	As green consumer behaviour is becoming popular in the society, GDH Energy will face the challenge of meeting consumers' direct demand for green transformation and low-carbon lifestyles.	• Expanding green business, which is to provide service plans such as renewable energy and carbon offset to customers.
Reputation	Stakeholders' concerns	As China's action on climate change involves a range of social participation, the public has paid increasing attention to and gained a better understanding of climate change, carbon emissions and other environmental issues. The international community and capital markets also expect corporates to implement plans for energy conservation and emissions reduction. Failure to actively respond to climate change may affect the public image of an enterprise, resulting in reputational damage.	 Disclosing climate-related risks and opportunities in ESG report; Formulating Policy of Climate Change to standardise the process and enhance the capacity of climate change management; Communicating with stakeholders actively, including government departments, non- government organisations, and professional institutions, to understand their expectations of key sustainable development areas.

Opportunity

Opportunity Characteristics	Specific Opportunity	Description of Opportunity
	Renewable energy	With increasingly clearer top-level design of the national goal of "carbon peaking and carbon neutrality", the end-use energy sector will take the chance to accelerate electrification, and the use of multi-energy complementary distributed clean energy will become more common. The overall pattern and market development trend of China's regional development and energy enterprises will see significant changes. GDH Energy can invest in developing new markets to provide customers with renewable electricity generation, carbon offset and other solutions so as to assist corporate customers in emissions reduction.
Product	Carbon trading markets	China has launched carbon emission trading markets, setting carbon emission quotas for enterprises. Those enterprises whose emissions exceed their quotas need to purchase additional quotas from the emission trading market, which means they have to bear environmental, social and external costs for extra emissions. Instead, enterprises which do not use up all of their quotas can sell their unused amount. At present, the power generation industry is one of the industries covered by the national carbon emission trading system. GDH Energy can reduce its own carbon emissions through energy conservation and emission reduction actions and get additional revenue by selling the surplus amount of its quota.



Property Investment and Development, Department Store Operation

Physical Risk



Risk Characteristics	Risks	Impacts	Responses
Acute	Typhoons	 High-intensity typhoons may lead to sustained strong winds and torrential rains, resulting in property loss and damage to operating facilities, which increase maintenance costs; Property, shopping mall and other businesses activities may also need to be shut down due to typhoons and may face more problems such as business interruptions involving breach of contract, compensation and legal liability. 	 Establishing a Three-Control command office to formulate and implement the Three-
	Extreme precipitation	 Extreme precipitation will result in rapid rising of water bodies to increase the risk of inundation of infrastructure in low-lying areas along rivers, lakes and coasts; Increases water leakage in buildings, property loss, damage to machinery and equipment, and repair and maintenance costs of building facilities; Heavy rainfall can pose threats to employees and customers safety. 	 Control plan and specific emergency response plans; Organising regular emergency drills to enhance employees' safety and crisis awareness, which strengthen their abilities of dealing with emergency situations.
	Floods	• Rising water level causes floods, which leads to the interruption of production and operation, and increases maintenance costs.	

Risk Characteristics	Risks	Impacts	Responses
Chronic	Temperature rise	 During the year, increased frequency of high temperature appearance, probability of occurrence of heat waves, and higher warm spell duration index increased the safety risk of outdoor workers; The hot weather may increase the demand for ventilation and air-conditioning in properties and shopping malls, resulting in an increase in electricity consumption and operating costs; Prolonged hot weather may increase the risk of fire in properties and shopping malls. 	 Carrying out the Month of Production Safety activity and organising fire drills in collaboration with property management; Enhancing production safety inspections and conducing regular inspections and random checks on safety.
	Sea level rise	 Rising sea levels may shorten service life of existing facilities in coastal areas; Causes destruction of groundwater aquifers in coastal areas, resulting in saltwater intrusion, which affects the service life of facilities. 	 Continuously monitoring the sea levels; Conducting relevant prevention and emergency studies; Strengthening investment risk control and adjust investment strategy in time for areas exposed to sea-level rise in the foreseeable future.

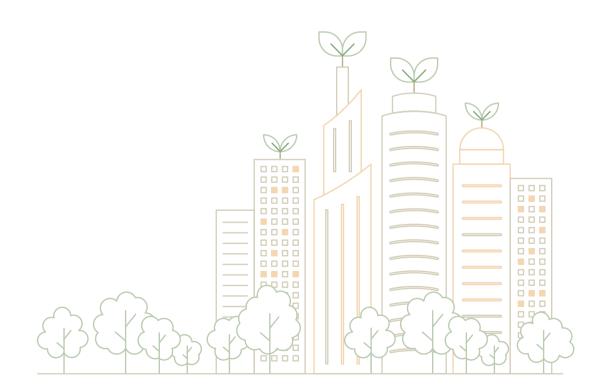
Transition Risk

Risk Characteristics	Risk	Description of Risk	Responses
Policy and Compliance	Energy mix	To align with China's goals of peaking carbon dioxide emissions and achieving carbon neutrality, the real estate industry needs to strengthen the energy efficiency requirements for new and existing properties and formulate and implement energy-saving measures for projects under construction and operation. Property, shopping mall and other business activities may also need to pay additional costs to implement carbon reduction projects, such as energy-saving transformation and the more renewable energy usage.	• Conducting elevator transformation to convert the kinetic energy generated by the elevator goes up with no load and down with full load into electric energy, and fed back the electric energy to the building's power grid through the inverter system for the usage of other electrical equipment.

Risk Characteristics	Risk	Description of Risk	Responses
Policy and Compliance (Continued)	Carbon trading	China has launched carbon emission trading markets, setting carbon emission quotas for enterprises. Those enterprises whose emissions exceed their quotas need to purchase additional quotas from the emission trading market, which means they have to bear environmental, social and external costs for extra emissions. Instead, enterprises which do not use up all of their quotas can sell their unused amount. At present, the PRC government has not imposed carbon tax or set a cap on carbon emission quotas for the real estate industry. However, it is expected that the national carbon market coverage will be extended to other key energy consumption industries in the future, including the building materials industry, which is closely related to the upstream supply chain of the real estate industry. Therefore, the construction and operation costs of Teem Group will increase due to more expensive construction materials such as cement, etc.	Paying close attention to carbon trade market.

Risk Characteristics	Risk	Description of Risk	Responses
Policy and Compliance (Continued)	Goals and standards of green building	According to the 14th Five-Year Plan for Building Energy Efficiency and Green Building Development, it is expected that China will put forward more advanced targets for green buildings and energy consumption of buildings. The real estate/property management industry may need to afford additional costs to meet the latest green building policies, objectives and standards to ensure that the properties meet certain technical requirements on energy conservation and carbon reduction, such as architectural design and technology development, green building certification and energy- saving transformation.	 Continuously promoting completion of projects of ultra- low and near-zero energy consumption, and low carbon buildings.
Markets	Customer preference	As green consumer behaviour is becoming popular in the society, Teem Group will face the challenge of meeting consumers' direct demand for green transformation and low-carbon lifestyles.	 Increasing the number of green architecture designs and conducting energy conservation transformation to build green brand.

Risk Characteristics	Risk	Description of Risk	Responses
Reputation	Stakeholders' concerns	As China's action on climate change involves a range of social participation, the public has paid increasing attention to and gained a better understanding of climate change, carbon emissions and other environmental issues. The international community and capital markets also expect corporates to implement plans for energy conservation and emissions reduction. Failure to actively respond to climate change may affect the public image of an enterprise, resulting in reputational damage.	 Disclosing climate-related risks and opportunities in ESG report; Formulating Policy of Climate Change to standardise the process and enhance the capacity of climate change management; Communicating with stakeholders actively, including government departments, non- government organisations, and professional institutions, to understand their expectations of key sustainable development areas.



Opportunity

Opportunity Characteristics	Specific Opportunity	Description of Opportunity
Product	Demand of emerging markets	The 14th Five-Year Plan for Building Energy Efficiency and Green Building Development has proposed a number of green indicators for urban buildings, which indicated that green requirement for buildings will become much stricter in the future. Besides, products with green building certification will be highly favoured by the market. By increasing green building design and carrying out energy-saving renovation, the real estate/property management enterprises can attract more market attention and meet market needs.
riouuci	Green finance	The PRC government and the banking industry have been actively promoting green finance. The real estate/property management segment can diversify financing channels by issuing green financial products, providing more funds for enterprises to develop green buildings, and improving environmental performance; at the same time, the segment continuously promotes business expansion and upgrading and effectively increases funding for corporates to help them alleviate financing difficulties.

CLIMATE CHANGE INDICATORS AND TARGETS

Based on the Group's development strategy, GDI has studied and refined its climate change response strategy and deploys them in accordance with the policy and regulatory requirements. Taking the actual conditions of development of various industries into account, GDI has fully assessed the carbon emissions of each business segment with interviews, external background research and peer benchmarking analysis. In 2022, we set the following goals for the water resources, property investment and development, department store operation, and energy projects.

Water Resources

- Strive for a 36% reduction in the carbon intensity (tons of CO₂e/HK\$ million of revenue) of the water resources segment by 2030, against the FY2020 baseline.
- Strive to increase the proportion of renewable energy of Water Holdings to 25% by 2030.
- For Yue Gang Water Supply, the annual energy consumption per unit was 3.71 kWh/kTm, lower than the Company's target of 4.0 kWh/kTm and the industry standard of 4.53 kWh/kTm.

Property Investment and Development, Department Store Operation

- Strive for a 36% reduction in the greenhouse gas emissions intensity (tons of CO₂e/m²) of property investment and development, department store operation by 2030, against the FY2019 baseline.
- Strive for a 27% reduction in the overall energy consumption intensity (tons of standard coal/m²) of property investment and development, department store operation by 2030, against the FY2019 baseline.
- Strive for a 5% reduction in the water consumption intensity (tons/m²) of property investment and development, department store operation by 2030, against the FY2020 baseline.
- Maintain a non-hazardous waste recycling rate of 95% or above.
- Maintain a hazardous waste recycling rate of 60% or above.

Energy Projects



- Strive to increase the proportion of renewable energy consumption in non-production areas of the Zhongshan Thermal Power Plant to 60% by 2030.
- Strive for a 36% reduction in scope 1 carbon emissions intensity (tons of CO₂e/HK\$ million of revenue) of the energy project by 2030, against the FY2020 baseline.
- Zhongshan GDH Energy's environmental targets for 2022 were to achieve an ultra-low emission compliance rate, and the yearly ultra-low emission compliance rate of both units reached 99%, meeting expectations.
- Strive for an 11% reduction in water withdrawal for power generation (ton/MWh) of the energy project by 2030, against the FY2020 baseline. In 2022, the total volume of water withdrawal of Zhongshan GDH Energy was 6,950,000 m³, better than the annual target of 8,580,000 m³.
- Strive for a 2% reduction in coal consumption for power supply (g standard coal/kWh) of the energy project by 2025, against the FY2020 baseline. In 2022, the annual coal consumption of Zhongshan GDH Energy for each unit of power supply was 305.18 g/kWh, successfully achieving the annual target of 307g/kWh.

Our Sustainable Development

ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION

Sound risk management and internal control systems are the cornerstones of stable corporate operations. The Group continues to optimise its risk management and internal control systems by taking stringent measures so as to enhance execution capability and elevate the level of overall management. Meanwhile, upholding the highest standards of business ethics and integrity, the Group fosters an anti-corruption culture that advocates honest practices and speak-up behaviour. All these efforts are made for a higher level of integrity and a clean business environment.

Risk Management

The Group has established comprehensive risk management to guard against risks. The Board pays close attention to the systems and reviews their effectiveness annually. To further standardise risk management and internal control, the Group has formulated policies such as the Measures for the Comprehensive Risk Management of Guangdong Investment Limited and the Internal Control Manual of Guangdong Investment Limited. Besides, we have set up three lines of defence framework to further enhance comprehensive risk management.

Inree Lines of De	fence Framework for Comprehensive F	lisk Management
First Line of Defence	Second Line of Defence	Third Line of Defence
Functional Departments	Risk Management Departments	Audit Supervision
and Subsidiaries	Formulate policies and standards for	Departments
Formulate and implement	comprehensive risk management to	Formulate supervision policie
management measures and	offer guidance on the building of a	and conduct independent
procedures to control business- specific risks.	management system.	supervision and assessment.

Water Resources

To further enhance risk control, Water Holdings has launched an efficient and synergistic risk management information system. The system has been proven effective for the visualisation of risk profiles, efficient management of risk warnings and standardisation of processes, with its eight functional modules, such as risk standard library, risk event management and internal control management, connected to five business systems (operation management, project management and others).

In addition, the water resources segment provides full support for routine audits by Yue Gang Water Supply and special audits by Water Holdings. More efforts are made by the segment to rectify the issues detected in the audit findings. Assessment indicators are optimised, and assessment rules are refined to ensure a satisfactory rectification effect. Besides, active response to internal audit findings helps improve internal control system. The water resources segment conducts audits and supervision to promptly identify issues and takes corresponding rectification measures, so as to constantly improve internal control management. In addition, the segment attaches importance to collaboration with functional departments for better results. Beyond this, self-inspection for common issues in the audit findings is frequently carried out by the segment. Relevant results are shared among responsible departments to ensure the same mistakes will not be committed again.

Property Investment and Development, Department Store Operation

Teem Group, for the purpose of strengthening corporate governance, constantly improves the risk management system by analysing various procedures oriented towards risk management and identifying key controls. In 2022, Teem Group carried out risk surveys and risk scoring to identify major business risks. Based on risk assessment results, Teem Group put forward rectification suggestions and required responsible departments to formulate risk management measures with detailed practices included and lines of responsibilities defined to ensure effective performance. Besides, a risk management ledger was established to follow up on the implementation of rectification measures.

To enhance the risk management awareness of employees and promote the implementation of the risk management system, Teem Group has developed a comprehensive risk management training mechanism. Trainings on risk management and internal control are provided to new employees with content covering explanations of hidden dangers, case studies and risk-related questions and answers.

Risk Management Training



In 2022, Teem Group held 17 training sessions on risk management, with 158 participants in total. The training covered basic knowledge of risk management and internal control, risk identification and assessment methods, interpretation of internal control requirements for key processes, internal control assessment principles and practices, etc. With a focus on risk management, such training sessions effectively upskilled risk management personnels and helped all employees know what risks are and how to identify and assess risks.

Hotel Ownership, Operation and Management

Risk management is carried out by the hotel segment in an orderly manner with following measures. Firstly, the existing risk framework and risk lists are analysed and updated. Secondly, common and customised quantitative or qualitative risk warning indicators are set up in consideration of business needs. Thirdly, a process in response to risk warnings is developed as part of the risk alert system. Finally, risk control reports such as the Legal Risk Assessment Report and the Comprehensive Risk Management Report are regularly prepared and submitted. In addition, rectification measures are developed to solve the problems identified in audit findings and rectification process is regularly followed up on by the hotel segment. Risk-related training are also delivered to employees to increase their risk awareness.

Energy Projects

In accordance with policies such as the Internal Control Management Standard, the Internal Control Manual and the Comprehensive Risk Management Standard, Zhongshan GDH Energy continues to improve internal control and risk management. Annual self-assessment of internal control is conducted by Zhongshan GDH Energy to identify internal control deficiencies with measures taken for rectification. Besides, relevant systems and processes are reviewed to ensure compliance with internal control requirements. Moreover, a risk ledger is set up to track and monitor the rectification process of major risk issues on a regular basis. The ledger is updated where necessary. Key risk warnings are tracked by Zhongshan GDH Energy on schedule set based on risk warning indicators. In addition, all departments of Zhongshan GDH Energy are required to make risk analysis and assessment and to prepare risk lists and risk assessment reports accordingly.

To enhance the compliance risk management, Zhongshan GDH Energy has carried out annual risk and compliance assessment in the Reporting Period to check whether the implementation of policies in key business areas and project approval process are in compliance. After compliance risks were identified, assessment responsibilities were assigned after deliberation, and rectification requirements communicated to relevant departments. In 2022, Zhongshan GDH Energy provided one training session on risk control and two training sessions on legal compliance for new employees with a total of 109 employees of Zhongshan GDH Energy participated in compliance exams.

Risk Management Meeting



Zhongshan GDH Energy holds risk management meetings on a quarterly basis, at which the measures to respond to key risks are reported. Besides, highlights and precautions of subsequent key risk control work are clarified to ensure effective risk management.

Roads and Bridges

To enhance risk management, GDH Highway has formulated the Comprehensive Risk Management Measures based on its operation. The Measures standardise procedures and mechanisms for risk assessment, risk analysis and response, risk monitoring and warning, and emergency and crisis handling, supervision and improvement.

Business Ethics

The Group complies with the Criminal Law of the People's Republic of China, the Supervision Law of the People's Republic of China, the Company Law of the People's Republic of China, the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, the Anti-Monopoly Law of the People's Republic of China, the Anti-Unfair Competition Law of the People's Republic of China, the Prevention of Bribery Ordinance of Hong Kong and other laws and regulations. We implement internal and external policies such as the Interim Measures for Supervision and Administration over Job-Related Consumption by Persons in Charge at State-Owned Enterprises, the Anti-corruption Policy of Guangdong Investment Limited and the Code of Business Ethics for Employees of Guangdong Investment Limited. Upholding the highest standards of business ethics, we always take a zero-tolerance approach towards corruption.

The Group has established a supervision mechanism. The Internal Audit Department is responsible for overseeing internal practices in relation to business ethics, reviewing the use and balance authorities of different positions and regularly reporting the related management performance to the Board. To ensure that employees act strictly on business ethics, the Group has defined conduct and laid down the procedures for handling conflicts of interests against the Code of Business Ethics for Employees. Employees are prohibited from directly or indirectly giving or receiving cash, benefits in kind and other benefits or engaging in anti-competition and insider trading. In addition, procedures for whistle-blowing and investigation and measures for the protection of whistle-blowers have been defined in internal policies so as to fairly and properly manage the reports of improper acts or frauds, with the aim of ensuring stable corporate operation. In 2022, no legal cases regarding corrupt practices occurred in the Group.

The Group vigorously uphold an integrity culture and enhance anti-corruption education. We organised trainings on integrity and honesty management for the Board members and employees of GDI and directors of various business segments and arrange them to watch the training video on Business Ethics for Listed Companies so as to raise their awareness on integrity. In 2022, we carried out integrity review and sent questionnaires to 20 suppliers with satisfactory or relatively satisfactory results.

Water Resources

The water resources segment attaches great importance to compliance with business ethics. With "standardised, institutionalised and refined practices" as the goal, the segment builds an information management platform by leveraging big data and other information technologies. The platform is well-designed for integrity building and discipline inspection, which helps ensure the fulfilment of supervision responsibilities. In addition, the segment has implemented internal policies such as the Rules for Whistle-blowing via Petition Letters for Discipline Inspection and the Work Guidelines for Discipline Inspection Committee on Supervision and Discipline Execution. The segment also provides whistle-blowing channels for organisations and individuals to file complaints and reports by ways of letters, visits, phone calls, etc. In addition, the segment guarantees the confidentiality of whistle-blowing information and whistle-blowers' identities to prevent retaliation and protect reporters' legitimate rights and interests.

In order to increase awareness of integrity among employees, the water resources segment actively carries out anti-corruption publicity activities. In addition, the segment engages external experts to give lectures on integrity and organises leaders and newly promoted cadres of subsidiaries to participate in integrity talks.

"Discipline Education Month" Campaign



In 2022, the water resources segment carried out a campaign named "Discipline Education Month". The segment held lectures on integrity, and employees were organised to visit warning education bases. Meanwhile, we complied the Selected Typical Cases of Violations against Laws and Regulations in Engineering Construction and shared cases analysis of violations against laws and regulations by leaders in WeCom Group for departments and subsidiaries to learn, thus enhancing employees' awareness of anti-corruption.

Works creation on the theme of integrity culture

In order to foster integrity culture, the water resources segment organised the activity of work creation on the theme of integrity and collected more than 500 pieces of work. Outstanding pieces of work were selected to participate in provincial competition of calligraphy, painting and photography on the theme of integrity.

Property Investment and Development, Department Store Operation

During the Reporting Period, Teem Group has developed such policies as the Regulations on Discipline Inspection and the Regulations on the Management of Honesty and Integrity of Employees to further specify the employee code of ethics and ensure effective supervision in daily work. Teem Group requires employees at each level to sign the Integrity Responsibility Statement and take part in integrity talks. To speed up the handling of reports, Teem Group published the whistle-blowing hotline and email address on the official website. Complaints, if any, are handled by designated employees with relevant details kept confidential. Besides, a ledger is set up to record, report and handle complaints to ensure all reports are settled in a timely manner.

As part of efforts to foster integrity culture, Teem Group has piloted a series of campaigns on "Promoting a Culture of Integrity in Malls" at Panyu Teemall to create a clean business environment. In addition, Teem Group organises employees to watch videos and read books to uphold integrity.

Energy Projects

In strict accordance with internal and external policies regarding supervision of discipline inspection operations and investments, and job-related consumption by persons in charge, the energy segment carries out supervision in an orderly manner. Besides, Zhongshan GDH Energy provides whistle-blowing channels for employees and customers to report misconducts, and handle reports in a timely manner.

The segment provides employees with training and case studies about integrity to develop integrity culture. In 2022, the segment delivered training on integrity and honesty management to employees and organised 50 employees in critical positions responsible for risk management to visit education bases to learn relevant knowledge and understand the importance of compliance with laws and disciplines. In addition, the segment conducted integrity review on 25 suppliers and partners and no violations were found in 2022.

Roads and Bridges

In strict accordance with internal and external policies, GDH Highway, standardises employee code of conduct on business ethics as part of anti-corruption efforts. Meanwhile, to further standardise the discipline inspection, supervision and whistle-blowing, GDH Highway has formulated the Rules for Whistle-blowing via Petition Letters to lay down whistle-blowing procedures and measures for protection of whistle-blowers. GDH Highway strictly keeps confidential the information of persons who make complaints and are being complained about to prevent retaliation. Those who violate the regulations will be investigated and held accountable, once identified.

GDH Highway actively upholds the culture of integrity. Employees are encouraged to participate in the reading activity themed on "Integrity at GDH Highway" and other integrity publicity campaigns. In 2022, GDH Highway conducted a questionnaire survey on integrity. Besides, GDH Highway conducted integrity review on 35 partners and no violations were found.

Micro-video Solicitation Campaign themed on "My Integrity Behaviour"

In 2022, GDH Highway launched a micro-video solicitation campaign themed on "My Integrity Behaviour", with new media and emerging technologies applied to advocate and foster a culture of integrity.

SAFETY FIRST AND QUALITY OPERATION

Providing safe and quality products and services is essential to the Group's business development. With safety responsibilities lying on our shoulders, we develop our safety management system in all respects to enhance work safety. Upholding the principle of "safety first", we offer our employees training to raise their safety awareness. Additionally, we strive to provide our customers with safe products and services to meet their demands. We also set up our efforts to protect the legitimate rights and interests of our customers and optimise the quality system to improve customers' experience and win their trust.

Safety Assurance

The Group adheres to the concept of "putting life and safety first". We have strictly complied with laws and regulations such as the Labour Law of the People's Republic of China, the Work Safety Law of the People's Republic of China, the Fire Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Prevention and Control of Occupational Diseases and the Occupational Safety and Health Ordinance of Hong Kong. We have also implemented policies, including the Regulations on Work Safety Management of Guangdong Investment Limited, the Measures for Appraisal of Work Safety Management of Guangdong Investment Limited Emergency Response Plans of Guangdong Investment Limited to carry out safety management in an orderly manner and to clarify the safety management responsibilities of employees at all departments. We constantly improve our work safety management system, amplify safety supervision and increase the safety awareness of our employees and relevant parties to ensure the effective operation of production and business activities and protect the health and safety of our employees and other relevant parties.

To reinforce safety management, we have set up respective safety production committees at the Group level and in each business segment to ensure the fulfilment of safety management requirements and responsibilities in a top-down manner. The Vice Chairman of the Board and the Managing Director serve as the Director and the Executive Deputy Director of the Safety Production Committee at the Group level, respectively, responsible for leading, supervising and managing the safety issues within the scope of the Company. And the chairman of each business segment serves as the Director of the Safety Production Committee at the business segment level to supervise and manage work safety within the business scope.

Main Responsibilities of the Safety Production Committee

- Consistently implement national and local laws, regulations, policies and arrangements concerning work safety;
- Make arrangements for setting up the targets and plans for work safety and supervise the implementation;
- Listen to the reports about work safety and analyse, study and judge the situation of work safety and formulate corresponding measures;
- Establish and improve work safety management systems;
- Promptly address major safety issues;
- Assess safety management performance and develop reward and disciplinary mechanisms;
- Guarantee an effective input into work safety;
- Investigate and analyse the causes of safety accidents and make decisions on accident handling.

In the past three years, we had no work-related fatalities. In 2022, we recorded a total of 13 work-related injuries and a loss of 792.5 working days in total, representing a decrease of 18% as compared to 2021.

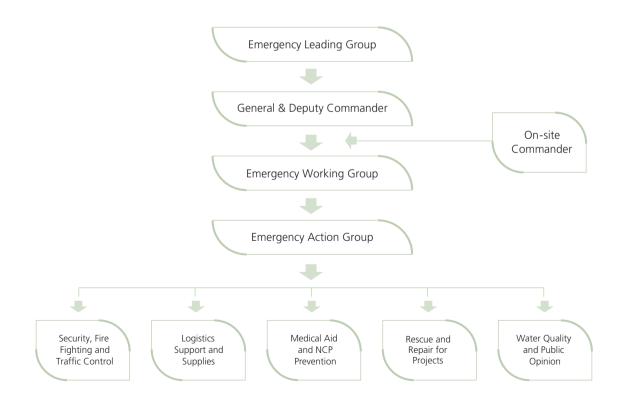
Water Resources

The water resources segment has formulated policies and guidelines such as the Measures for Work Safety Responsibility System, the Measures for Work Safety Management, the Measures for Appraisal of Work Safety Management, the Administrative Measures for Graded Management and Control of Safety Risks and Examination and Control of Potential Risks, the Incentive Measures for Reporting Safety Hazards and the Incentive Measures for All Employees on Safety Hazards Reporting (Trail). The segment also actively organises employees to sign the Work Safety Responsibility Statement to ensure the fulfilment of safety responsibilities.

To optimise the work safety management system, the water resources segment has set up a network to supervise safety performance, in which the safety management personnel are urged to discharge their regulatory responsibilities. The segment has conducted hierarchical management of the personnel to increase management efficiency. In addition, the segment has developed a management mechanism to specify the duties and requirements that supervisory leaders need to fulfil. The segment has also formulated the Guidelines for Pre-shift Meetings to offer 19 templates for "three-minute gatherings" before operation and to clarify the procedures for pre-shift meetings with the implementation of meetings incorporated into the scope of monthly appraisal.

The water resources segment carries out routine investigation and management of safety hazards. The segment has established and implemented a dual prevention mechanism consisting of graded management and control of safety risks and examination and control of potential risks. Under the mechanism, 815 management-related and 4,761 on-site standard risks and hidden hazards have been identified, and 13 categories of safety inspection guidelines have been formulated for personnel at all levels. For recurring risks and hazards in construction projects in progress, the segment upgrades its management priorities to further strengthen safety supervision. For key areas, the segment conducts safety management by appointing personnel to key projects for on-site supervision and guidance. The segment also implements the red list requirements for high-risk areas in accordance with the red, yellow and white lists made by the Group. Meanwhile, the segment compiles a list of high-risk operations and implements strict approval requirements to enhance project management. In addition, the segment conducts centralised management of safety risks for hazardous chemicals and organises inspections on buildings, water supply pipeline networks, hoisting equipment, gas safety, etc. The segment rectifies the risks and hazards detected in the inspections and follows up on rectification progress.

To prevent accidents and ensure the safety of employees as well as properties are preserved, Yue Gang Water Supply has formulated the Emergency Plan for Work Safety Accidents which clarifies emergency response and handling measures for accidents. In the Plan, accidents are classified into four categories based on the nature, severity, controllability and scope of impact. Accordingly, emergency leading groups, working groups and action groups have been accordingly set up to ensure the exigency measures are taken in a timely manner.



Organisational structure of emergency rescue of Yue Gang Water Supply

To increase the ability to handle emergencies, the water resources segment develops drill plans and organises employees to conduct emergency drills to prevent accidents effectively. In the unlikely event that a major accident did occur, we can take immediate rescue actions in accordance with the drill plans so as to handle emergencies in a timely manner. In 2022, the segment conducted 814 emergency drills and reviews, covering firefighting, power tripping, confined space rescue, hazardous chemicals leakage, abnormal water quality and pipeline network repair. Issues identified in the drills were carefully analysed, rectification measures were taken, and emergency plans were revised and adjusted.

The water resources segment also attaches great importance to the safety management of suppliers. For projects involving safety management, the segment specifies safety management requirements and responsibilities in the tender documents and contracts to require suppliers to manage their safety targets, supervision and assessment. In addition, the segment has formulated internal policies such as the Measures for the Management of Joint Bidding, the Measures for Adopting Credit Evaluation System for Contractors and the Measures for the Management of Violations against Work Safety Rules by Contractors. Meanwhile, the segment chooses to cooperate with high-quality suppliers and regularly conducts inspections and assessments on their safety performance to ensure their compliance with safety management requirements.

During the Reporting Period, the water resources segment stepped up its efforts to obtain occupational health and safety management system certification and pass work safety standardisation. In total,

- 56 subsidiaries obtained ISO 45001 Occupational Health and Safety Management System certification
- 3 subsidiaries passed Grade 1 Qualification for work safety standardisation
- 20 subsidiaries passed Grade 2 Qualification for work safety standardisation
- 13 subsidiaries passed Grade 3 Qualification for work safety standardisation
- 1 subsidiary was awarded "National Model Enterprise for Safety Culture Promotion"
- 3 subsidiaries were awarded "Provincial Model Enterprise for Safety Culture Promotion"

The water resources segment constantly strengthens supervision and assessment on daily operations, accident handling and annual signing of the Work Safety Responsibility Statement. Joint inspection and appraisal are carried out every month with the assessment results ranked. Additionally, Water Holdings and Yue Gang Water Supply have established an appraisal mechanism for the primary persons in charge of work safety and use deposit and incentive mechanism to motivate them to perform their safety duties. All these measures are taken to ensure that safety management responsibilities are fulfilled by relevant personnel. In 2022, the water resources segment successfully reached its work safety targets.

2022 Work Safety Targets

- 0 work safety accident with serious injury or above;
- 0 fire accident;
- 0 occupational disease;
- Systematically improve the standardisation of safety management.

In addition, the water resources segment promotes safety culture by carrying out activities and training to enhance employees' safety awareness. In 2022, the segment organised a campaign called "Reward for Spotting and Reporting Hidden Hazards at Work" and an online knowledge contest named "Quiz on the Revised Work Safety Law" and invited external experts to conduct training concerning the newly amended Work Safety Law of the People's Republic of China. The segment also provided employees with training regarding traffic safety and organised them to watch safety videos.

"Work Safety Month"



In June 2022, Yue Gang Water Supply and Water Holdings carried out safety activities with the theme of "Complying with the Work Safety Law and Becoming the Primary Person Responsible for Safety" during the Work Safety Month. These activities included appraisal on 5S management of maintenance sites, emergency skill competitions and safety knowledge contests, at which employees' awareness of the importance of work safety was raised.

"An Kang Cup" Safety Knowledge Contest

In June 2022, Yue Gang Water Supply and Water Holdings organised the "An Kang Cup" safety knowledge contest with 8,859 people participating in and quizzes taken for 658,000 times.



Training to Improve the Ability to Perform Duties



In 2022, Water Holdings developed 57 courses for safety training and organised examinations on performance of safety duties with 452 participants involved. Water Holdings organised employees to study cases, collect and prepare video courses concerning standard operation and accident handling and participate in the training in confined space operations through live streaming so as to constantly improve their safety management skills.

With great importance attached to the management of employees' occupational health, the water resources segment has formulated the Regulations on Occupational Health Management in accordance with relevant laws and regulations to provide employees with a healthy and safe working environment. The segment sets warning signs at the operation sites to inform employees of occupational hazards and corresponding prevention and emergency measures, and specifies hazard factors involved in the positions and preventive measures in employee contracts. The segment organises employees to identify hazards to compile a complete list of hazards and formulates corresponding prevention and emergency rescue measures.

To prevent occupational disease hazards, the water resources segment engages third parties with testing qualifications to detect on-site occupational hazards every year and to issue evaluation reports. The test results are posted at the places where occupational hazards are identified. The segment arranges pre-post, in-post and off-post physical examinations for employees exposed to occupational disease hazards and establishes their health archives. The segment reports the projects entailing occupational disease hazards to relevant local authorities in accordance with relevant regulations and updates information in a timely manner. The indicators for prevention and control of occupational diseases are integrated into the annual assessment of all levels to raise the attention of employees to occupational diseases. In addition, the water resources segment has formulated the Management Measures for Protective Facilities to standardise the management and use of protective appliances. Besides, the segment designates personnel responsible for appliance management with regular checks, records and inspections.

Property Investment and Development, Department Store Operation

Teem Group has developed policies such as the Regulations on Work Safety Management, the Measures for Examination and Control of Potential Risks of Work Safety Accidents, the Work Guidelines for Work Safety Compliance and the Measures for the Work Safety Responsibility System. Teem Group fully implements the work safety responsibility mechanism for all employees and the system of "one position with dual responsibilities" and organises employees to sign the Work Safety Responsibility Statement. All these efforts are made to ensure that the responsibilities and tasks for safety management are allocated to all employees and their awareness of the importance of work safety are well enhanced.

To eliminate safety hazards, Teem Group conducts regular and irregular work safety self-examination and inspection on the fire extinguishing systems, operation of electromechanical equipment and facilities and safety of water and electricity at the malls, and establishes a ledger to record issues identified in the inspection and urge rectification.

To further prevent and control safety risks, Teem Group has adopted an innovative safety management model and implemented a dual prevention mechanism for work safety. Teem Group uses the risk matrix analysis method to perform quantitative analysis of each business premise, makes a list of graded management and control of safety risks and formulates corresponding measures for prevention and control of the risks. Meanwhile, Teem Group has developed a mechanism for the investigation, prioritisation and rectification of hidden hazards, as well as a management ledger to categorise the hazards and delegates responsibilities to persons in charge, thus achieving closed-loop management. Timely rectification for hazards identified in the inspection is performed by Teem Group, with a rectification rate of 100%.

With the preparation of the Measures for Appraisal of Work Safety Management and the establishment and improvement of the work safety incentive and disciplinary mechanism, Teem Group standardises the assessment, rewarding and disciplinary procedures for work safety. Teem Group conducts self-evaluation and on-site assessment on safety input, publicity activities and training, production facilities and equipment, hazard investigation and rectification, hazard sources monitoring, occupational health, and emergency management. In 2022, Teem Group achieved all work safety targets.

2022 Work Safety Targets

- 0 work safety accident with serious injury or above;
- 0 non-personnel injury and work safety accident with direct economic loss of more than RMB100,000;
- 0 occupational disease of employees;
- 0 accident in relation to environmental pollution;
- 0 material dispute, group event or extreme event;
- Work safety performance results meet or exceed the requirements of semi-annual and annual appraisals.

To firmly uphold the concept of safety development, Teem Group holds activities during the Work Safety Month and Fire Safety Publicity Month. Teem Group organises topic-based lectures, safety examinations, emergency drills, hands-on training, knowledge contests and other activities to motivate employees to acquire the necessary knowledge about work safety and increase their safety awareness. At the same time, for the purpose of improving employees' abilities for emergency response, Teem Group provides regular safety knowledge and hands-on training for new employees and managers in charge of safety management at all levels as well as parttime managers in-charge, and organises random quizzes every month to ensure employees master the work safety knowledge they have learned during the training.

"Safety Knowledge Quiz and Practice Competition"

On 24 June 2022, Teem Group organised the activity of "Safety Knowledge Quiz and Practice Competition". The activities, including safety knowledge quiz, use of smoke musk and fire extinguishing competition, put theoretical knowledge into practice, raising employees' safety awareness, improving their operational skills for firefighting and promoting the concept that "I want to be safe, will be safe and can be safe".



To prevent and minimise the damage of emergencies to production and operation, Teem Group has formulated the Integrated Emergency Response Plans to divide the emergency events into four categorises based on the nature, degree of impact on society, controllability and scale of influence, and thus makes corresponding response procedures. Teem Group has set up the Emergency Committee to coordinate and guide emergency management and emergency response.

In addition, Teem Group actively carries out various emergency drills for firefighting and evacuation, hydrogen sulfide poisoning in confined space, flood prevention, electric shocks, etc. The drills improve employees' ability to effectively prevent and deal with all kinds of emergencies, thus minimising and eliminating the adverse impact of emergencies.





Fire safety drills

Hotel Ownership, Operation and Management

The hotel segment strictly implements safety policies such as the Appraisal Measures for Work Safety Management of Guangdong Investment Limited and the Work Guidelines for Work Safety Compliance of Guangdong Investment Limited. The segment revised the Work safety Responsibility System for All Employees, and organised employees to sign the Work Safety Responsibility Statement to ensure the fulfilment of safety responsibility. In 2022, more than 800 work safety responsibility statements were signed, representing a signing rate of 100%. In addition, the segment actively encouraged all hotels to obtain work safety standardisation certification. One of the hotels managed by our hotel management team has been awarded the Grade 2 enterprise certification of work safety standardisation by PRC relevant regulatory authorities.

The hotel segment conduct inspections on safety management to urge all units to perform their duties and promptly identify and investigate safety hazards, thus safeguarding the security and stability of the hotel operation. For safety hazards in buildings, we have carried out inspection to investigate and rectify the hazards. And the segment has developed a plan to rectify hazards identified, formed a ledger to record safety issues and completed the building safety assessment and hazard rectification in a timely manner through conferences and inspections.

In 2022, the hotel segment reached the work safety targets.

2022 Work Safety Targets

- 0 work safety accident with serious injury or above;
- 0 non-personnel injury and work safety accident with direct economic loss of more than RMB100,000;
- 0.001 or below of minor injury rate of employees;
- 0 occupational disease of employees;
- 93.5 points for annual appraisal on work safety performance of the Hotel Operation and Management Department.

To enhance employees' awareness of the importance of safety, the hotel segment organises online and offline safety training, including induction training and fire safety training. Besides, the segment has developed a mechanism of "Safety Knowledge Sharing in Rotation" in which each unit takes turns to impart safety-related knowledge in the WeCom group on a daily basis to encourage active learning among employees. During the Work Safety Month, the segment organised safety publicity activities, training sessions, inspections, drills, examinations and competitions to improve the safety competence of employees.



During the Reporting Period, at the hotel segment,

172 safety training sessions were organised with

1,422 participants

In terms of emergency response, the hotel segment, taking into account the characteristics of safety risks in its business operation, organises various emergency drills such as fire extinguisher or fire blanket exercises, fire evacuation, elevator rescue and typhoon and flood prevention, to evaluate the feasibility of emergency plans and improve the response capability and coordination of emergency response teams.

During the Reporting Period, at the hotel segment

25 emergency drills were organized with

833 participants

To safeguard the occupational health and safety of employees, the hotel segment has established a management mechanism for health checks. The segment organises annual health checks for employees and encourages targeted health checks for early detection of sub-health state and potential diseases. Besides, the segment provides protective equipment and standardises the use of the equipment to keep employees away from injuries and occupational hazards at work, thereby protecting the health and safety of employees.

Energy Projects

The energy segment has developed policies such as the Work Safety Responsibility System for All Employees, the Safety, Health and Environmental Protection Agreement and the Administration Measures for the Application and Utilisation of Work Safety Funds to offer guidance on the standards, responsibilities, management requirements for work safety, thus ensuring the implementation of responsibility for work safety at each position. Zhongshan GDH Energy revised the Work Safety Responsibility Statement with reference to the Management Standards for Work Safety Responsibilities of All Positions, and organised employees to sign the Statements so as to further implement the work safety responsibility. Furthermore, in terms of the work safety standardisation certification, Zhongshan GDH Energy has passed the Grade 1 Qualification of work safety standardisation in the electricity industry and completed the annual self-assessment.

The energy segment steps up its efforts in safety inspection and hazard investigation. The segment organised the departments at all levels to conduct 110 work safety inspections and followed up on the rectification of safety hazards identified during inspections. The segment implements a strict approval system for hazardous operations and apply a working system of on-site supervision by personnel specialised in safety management. Also, regular safety inspection on hazardous chemicals, firefighting and hazardous operations are carried out. To further implement the work requirements for work safety, Zhongshan GDH Energy holds monthly work safety meetings and sets up a working group to collect employees' opinions on how to enhance work safety and improve working conditions as well as discussing and addressing the problems identified in the process. Moreover, Zhongshan GDH Energy provides employees with technical support and response measures to help them identify and analyse system risks.

To enhance the management of work safety of suppliers, contractors and other relevant parties, Zhongshan GDH Energy has established safety evaluation standards and rules for the projects of relevant parties to clarify the responsibilities, rights and requirements for safety, equipment, personnel and health qualification and management. Zhongshan GDH Energy conducts post-project-management evaluation in a timely manner and develops a comprehensive safety evaluation mechanism that provides vital references and suggestions for subsequent project bidding.

In 2022, the energy segment achieved the work safety targets of "Six Zeroes" with stable work safety performance.

2022 Work Safety Targets

- 0 accident with injury;
- 0 general or above equipment accident;
- 0 general or above fire accident;
- 0 general or above environmental incident;
- 0 serious or above traffic accident which incurs liabilities;
- 0 occupational disease.

To disseminate the knowledge about work safety, the energy segment organised more than 40 training sessions, such as three-level safety training¹ for new employees and training regarding operation at height, the Work Safety Law, preholiday safety, fire safety and occupational health, and conducted activities of the "Work Safety Month" and "On-site Work Safety Check in Guangdong", with over 4,000 participants engaged.



Safety training



Training in occupational health

In 2022, Zhongshan GDH Energy engaged a third-party professional agency to revise and review the emergency plan system and conducted the safety evaluation on major hazard sources. The filing of the emergency plan and major hazard sources was completed, so were the assessment and informative filing of the emergency response capacity building. Meanwhile, the energy segment carried out the emergency drills for the typhoon and flood control, liquid ammonia leakage, confined space rescue, firefighting, etc., to increase employee's emergency awareness and emergency response capabilities.

For occupational health and safety management, the energy segment has set up an occupational health management organisation, designated personnel for occupational health management, and implemented a digital management mechanism. During the Reporting Period, Zhongshan GDH Energy engaged a third-party agency to detect and evaluate occupational disease hazards, with the Report on Detection and Evaluation of Occupational Disease Hazards issued. In addition, Zhongshan GDH Energy provided employees with protective equipment against occupational diseases as required and arranged occupational health examinations for employees exposed to occupational disease hazards. In 2022, Zhongshan GDH Energy carried out occupational health publicity, and organised training seminars on occupational health knowledge to increase employees' occupational health and safety awareness and capability, delivering on the commitments to safeguarding occupational health and safety.

¹ Three-level safety training is provided for new employees to master necessary safety knowledge before they work in plants, workshops and teams.

Roads and Bridges

GDH Highway has developed safety management policies such as the Work Safety Management System, the Appraisal Rules for Work safety Management, the Regulations on Investigation and Rectification of Work Safety Hazards, the Management Rules for Emergency Supplies Reserve and the Regulations on Work Safety Responsibility System. Meanwhile, GDH Highway has strictly implemented the work safety responsibility system for all employees, organised employees to sign the Work Safety Responsibility Statement, and built a responsibility system to urge front-line leaders and site operators to perform their safety duties. In addition, GDH Highway continues to promote the work safety standardisation. GDH Highway conducts annual verification and self-assessment on the operation of the Grade 1 work safety standardisation system, which passed the annual verification and was rated as qualified.

GDH Highway has developed mechanisms to enhance the investigation, prioritisation and rectification of hidden hazards. GDH Highway carries out special and seasonal inspections to identify and manage safety hazards and establishes a hazard ledger to take rectification measures. Additionally, GDH Highway evaluates work safety inspection, analyses the causes of safety hazards and tracks rectification progress. In 2022, GDH Highway carried out inspection to investigate and rectify the safety hazards in buildings. GDH Highway commissioned professional agencies to evaluate the safety of buildings and urged relevant construction units to rectify hazards. Meanwhile, GDH Highway used safety hazard ledgers to check whether rectification measures were taken to address issues identified in the inspection and built management archives.



Investigation and rectification of safety hazards in buildings

Besides, GDH Highway invited third-party safety technical consultants to provide professional consulting services and technical support in terms of safety culture promotion, dual prevention mechanism and lines of safety responsibilities of relevant parties, so as to further enhance safety management.

During the Reporting Period, GDH Highway evaluated the work safety performance in an orderly manner. GDH Highway carried out quarterly and annual appraisals on safety training, management and control of safety risks, investigation and rectification of safety hazards, facilities and equipment, and fire safety of all departments. And the assessment results are constituted as part of performance appraisal of departments and employees.

In 2022, no work safety accident occurred in GDH Highway, and the work safety targets were successfully achieved.

2022 Work Safety Targets

- 0 work safety accident with deaths or above;
- 0 work safety accident with minor and serious injuries;
- 0 fire accident;
- 0 occupational disease of employees;
- 0 work safety accident with direct economic loss of more than RMB100,000;
- 0 traffic accident with major liability;
- 100% three-level safety training rate of employees;
- 100% rectification rate of safety hazards;
- Safety management performance results meet or exceed the requirements of the annual appraisal.

With importance attached to the safety training of employees, GDH Highway organises case studies and examinations on work safety on a quarterly basis, provides safety education for new hires and employees who transfer to another position or return to work and establishes safety training ledgers for each employee. In 2022, GDH Highway organised 12 safety training sessions concerning vehicle driving safety and fire safety knowledge and 15 video education sessions on accident warnings to effectively raise employees' safety awareness.

Dual Prevention Mechanism Training

On 3 November 2022, GDH Highway invited experts from companies specialised in safety technical consulting services to provide trainings on general knowledge of a dual prevention mechanism consisting of graded management and control of safety risks and examination and control of potential risks. Experts explained ways to identify and control safety risks to deepen the employees' understanding of the mechanism.



Traffic Safety Awareness Campaign



In 2022, GDH Highway and local traffic police jointly launched traffic safety awareness campaigns with the themes of "Love and Travel" and "Legal Education in Villages, Schools and Companies". They promoted expressway safety policies and regulations to drivers and passengers, explained expressway traffic safety knowledge and emergency response specifications and answered questions related to work, road and traffic safety, so as to raise the safety awareness of the public and foster a culture of "safe traffic".

To further improve the emergency response capability of employees, GDH Highway has developed policies such as the Integrated Emergency Plan, the Specific Emergency Plan, the On-Site Handling Plan and the Emergency Response Plan for Toll Stations to define emergency response measures. GDH Highway has established GDH stations equipped with emergency rescue materials including direction signs, helmets and fire extinguishers and made a list of emergency materials and designated management personnel. Besides, GDH Highway produces and issues "emergency response cards" of key positions to ensure employees are familiar with basic emergency response measures within their posts, organises training in relevant management knowledge and reports the emergency information to relevant industry authorities in a timely and accurate manner. Moreover, GDH Highway carries out regular emergency drills and evaluates the feasibility of emergency plans.

Exercise Activities for the Central Portable Guardrail on Expressway

In 2022, GDH Highway participated in the "Exercise Activities for the Central Portable Guardrail on Expressway" to test whether emergency rescue personnel can quickly demolish and assemble portable guardrails and improve the efficiency of temporary lane change to ensure smooth traffic flow.



To protect the health and safety of employees, GDH Highway identifies potential occupational hazards, and provides employees holding different positions with safety helmets, reflective clothes, police shoulder lamps, gas masks, earplugs and other protective equipment.

Quality Assurance

The Company highly values product and service quality. We have continued to develop our quality system with high standards to strengthen quality management, supervision and assessment, thus providing our customers with high-quality and professional products and services to meet their needs. At the same time, we protect the legitimate rights and interests of customers, constantly enhance their experience and work together with them to deliver sustained value.

The Company attaches great importance to information security. According to the Group's regulations as well as the working practice of GDI's headquarters and the relevant requirements of the Hong Kong Listing Rules, we have formulated internal policies such as the Regulations on the Management of Commercial Secrets and Work Secrets of Guangdong Investment Limited, Regulations on Internal Control and Reporting of Insider Information of Guangdong Investment Limited and Regulations on the Disclosure of Insider Information of Guangdong Investment Limited and Regulations on the Disclosure of Insider Information and training, we have strengthened employee awareness on the importance of information security and create a strong atmosphere of knowing, learning and understanding confidentiality.

Water Resources

As a key business segment of the Group, the water resources segment upholds the philosophy of advanced operation and leverages its cutting-edge technologies and management experience to provide integrated products and services across the whole industry chain. Its goal is to guarantee water supply in an all-round way, ensure the safety and quality of water sources, and continuously improve the water environment.

To improve operational efficiency and fulfil management responsibilities, the segment has established multilayer incentive and assessment mechanisms at corporate and departmental levels for subordinate water companies. The Personal Business Objective Commitment Scheme (PBC) has been introduced to peg the operational performance indicators with the individual performance of persons in charge of respective water companies. Applied to the business of untreated water, tap water and sewage, the operational performance indicators, such as pipeline network leakage rate and comprehensive energy consumption for unit output value, are designed to urge the management to focus on operational efficiency from multiple dimensions.

Water Supply Management

Aware of the importance of high-quality and stable water supply, the water resources segment continues to standardise water supply management. Following the Policy on Water Supply Management of Guangdong Investment Limited, the segment has formulated internal policies and guidelines for water supply, such as the Regulation on Reservoir Operation and the Plan for Reservoir Operation in Flood Season, to offer guidance on water source allocation. Before the commencement of any water project, the segment comprehensively evaluates potential water shortage by conducting water resource reliability analysis, water supply continuity assessment, water quality assessment and downstream water consumption forecast. Meanwhile, the segment works with the local government to conduct preliminary research and planning and make prudent analyses from multiple perspectives to minimise the impact of water shortage. When conducting projects, the segment withdraws water in strict accordance with the water withdraw permit and plans to ensure reasonable water allocations that satisfy the demand along the project area.

The Company encourages the control of the total volume of water withdrawal from the source, enhance the efficiency of water transmission and reduce pipeline leakage to improve the development and utilisation of water resources. The water resources segment has adopted a smart water management system to ensure a stable water supply. As of the end of the Reporting Period, Dongshen Water Supply Project has already adopted a system to automatically predict water demand, make water supply and allocation plans and implement the plans, which reduced human resources, increased monitoring efficiency and maintained system and water flow at a stable level.

The water resources segment also promotes the development and use of alternative water sources and constantly explores ways to improve the recycling rate of sewage. Besides, the segment also carries out publicity and education on water source protection for downstream and end users to raise the water conservation awareness of the public.

Management and Control of Pipeline Network Leakage

Effective leakage control is vital for the operation of the water resources segment. The segment has developed various policies, including the Selection Guide for Materials Used in Municipal Water Supply Pipeline Networks, the Regulations for Maintenance, Repair and Management of Hydraulic Structures and the Guidelines on the Establishment of Pipeline Network Emergency Repair Centre in Guangdong Water Area to standardise the selection of materials used in pipeline networks, the maintenance and repair of hydraulic structures, and cooperative repair of pipeline networks. During the Reporting Period, we revised the Management Procedures for Urban Water Supply Pipeline Networks to further specify requirements for network inspection and metering management and standardise pipeline leakage control.

Guided by internal policies, subordinate water companies make annual plans based on their own situation, further delegate responsibilities for leakage detection and renovate aged pipeline networks. Random metering inspections and leakage detection are carried out to identify and resolve leakage in a timely manner. Special meetings are organised regularly by subordinate water companies to discuss the current situation and existing issues to ensure smooth implementation of leakage control plans.



Leakage detection by Lanhe Water Plant



Renovation of aged pipeline networks by Pingyuan Water Supply

The water resources segment sets a target of "2% reduction in overall leakage rate, with the basic leakage rate lower than 12%" (the second-level assessment criteria set out in the Leakage Control and Evaluation Standards for Urban Water Supply Pipeline Networks) for 2022 and aims to reduce the overall leakage rate for Water Holdings to 13% by 2030. In 2022, compared with the previous year, the overall leakage rate of the segment decreased by 2.03%, that of the key water leakage control companies declined by 2.51%, and leakage volume reduced by 38 million tons.

Water Quality Management

We have formulated the Policy on Water Quality Management of Guangdong Investment Limited and adopted a monitoring program of high standard to ensure water quality. In addition, a series of policies have been formulated at the water resources segment level, such as the Water Quality Management Measures, the Regulations on the Operation and Maintenance Management of the Water Quality Online Monitoring System, the Contingency Plan for Water Quality Abnormal Incidents of the Dongshen Water Supply Project to provide guidance on water quality monitoring, pollution source monitoring and rectification. The segment constantly improves the capability of processing untreated water, enhances intelligent management of water quality and carries out research on water protection so as to protect water quality from multiple perspectives. As at the end of the Reporting Period, the water segment had obtained the ISO 9001 Quality Management System Certification, the ISO 14001 Environmental Management System Certification and the ISO 45001 Occupational Health and Safety Management System Certification. The certifications covered water supply, services and related management activities. Four subordinate water companies obtained the ISO 9001 Quality Management System Certification.

The water resources segment carries out regular water quality monitoring in accordance with relevant standards through online, laboratory and third-party monitoring to ensure water safety. For certain important sections of the segment such as water intake of Dongjiang River, biological nitrification project, Shenzhen Reservoir, the segment develops the mechanism of "on-site and laboratory dual manual monitoring + online monitoring" and schedules projects based on water quality.

Monitoring methods				
Online monitoring	An early warning robot system has been developed to automatically send anomalies to the personnel involved, and regularly remind the on-site management personnel to check on- line monitoring equipment and analyse monthly reports, so as to ensure the accuracy and reliability of water quality data. In addition, the segment encourages the use of online monitoring platforms, builds new online monitoring sites, and installs new equipment at the existing sites to improve the capabilities to monitor water quality online.			
Laboratory monitoring	The water resources segment has developed the Laboratory Information Management System (LIMS), which monitors the water quality of all companies in a timely manner. Besides, the segment regularly organises ability tests for all laboratories, assesses the weakness of each laboratory and arranges training in detection technologies accordingly to further enhance capabilities of all laboratories at Water Holdings.			
Third-party monitoring	To identify the water quality issues, third party detection companies carry out unannounced inspection on the water companies and sewage treatment plants in all regions on a monthly basis. For issues identified, the segment designates personnel to investigate causes and conduct rectification. Afterwards, an unannounced inspection will be carried out again to ensure that water quality meets relevant standards.			

Drone and Unmanned Surface Vessel for Water Quality Inspection

Yue Gang Water Supply fully exerts the Group's "smart water" feature and develops smart inspection system by combining image analysis and AI recognition technology. The water resource segment makes full use of smart technologies such as UAV (Unmanned Aerial Vehicle) and unmanned vessel to conduct intelligence and meticulous inspection of reservoir. Furthermore, the segment promotes the transformation of water quality management from the traditional mode of "man + tool" to the smart mode of "machine + data". While liberating manpower and ensuring safety, the segment also improves the efficiency and accuracy of water quality management effectively.



In terms of the monitoring and remediation of pollution sources, the water resources segment classifies pollution sources along the Dongjiang River and around the Shenzhen Reservoir by category, region and level. Inspection frequency is determined by levels of pollution sources, with key pollution sources being inspected at least once a day and general pollution sources being inspected at least once a month. In addition, the main sections of the upper reaches of the water intake of Dongjiang River are monitored for key indicators once a month and the major pollution sources are investigated for major pollution indicators once a quarter so as to track the changes in pollution sources and ensure water safety.

The water resources segment updates and renovates the outdated processing facilities to ensure the stable operation of the stations and improve capabilities of purifying untreated water. Yue Gang Water Supply also constantly improves its contingency plans for water quality and carries out emergency drills to ensure sufficient emergency supplies reserve. Meanwhile, Yue Gang Water Supply keeps in close contact with government departments and reports findings that may affect water quality in time. Yue Gang Water Supply also coordinates parties involved to deal with water pollution accidents and clean up pollution and drives forward the take-over and enclosed management of the first-grade water source protection zones at Shenzhen Reservoir and Yantian Reservoir.

Yue Gang Water Supply enhances water quality management and actively conducts research on water quality protection. So far, Yue Gang Water Supply has completed the research on the application of the low dissolved oxygen control technology for the inflows of Dongjiang River. By switching on the vacuum breaker valve for greater dissolved oxygen of inflows, the technology ensures a healthy ecosystem of the water supply channels and water safety in Dongshen. Meanwhile, Yue Gang Water Supply continues with technical research on water ecosystem conservation for Shenzhen Reservoir and properly copes with the algal phase shifts in Shenzhen Reservoir. It has also formulated plans for monitoring and early warning and adjusted fry release plans to improve the ecosystem of the reservoir and reduce algal bloom and other water ecological risks.

Guizhou Liupanshui Shuicheng River Operation and Maintenance Project

Water Holdings introduces advanced water treatment technologies and alleviates the issues of the water body of Shuicheng River (stinky water, insufficient flood control management and blocked drainage) through operation and maintenance of sub-projects such as river sewage interception, sewage treatment plants and water reclamation and reuse system. These measures further improve the urban and rural residential environment and benefit nearly 700,000 people in Liupanshui.



Renewal and Renovation Work of Biological Nitrification Project to Ensure Quality Water supplied to Hong Kong

To ensure quality water supplied to Hong Kong, the water resources segment continues to renew the processing facilities of the biological nitrogen channels. We have replaced fillers, gas supply pipes and aeration pipes, reinforced filler brackets, cleaned the sludge at the bottom of the channels and replaced the drainage pump collection well fence. As of the end of the Reporting Period, the segment has completed the renovation work of processing facilities of three channels and achieved the design target of the water purification capacity. In addition, the segment has studied and implemented the schemes of sludge flushing optimization, which solved the problem of siltation in the channels, reduced energy consumption during operations and effectively improved the operation efficiency of the biological nitrification stations.

Technological Innovation and Research and Development

The water resources segment actively develops untreated water and sewage treatment technologies and equipment and harnesses them to improve efficiency. In 2022, Water Holdings formulated the Management Measures for Scientific Research and Innovation, the Measures for Evaluation and Management of Survey and Design Units (Trial) and other policies to regulate the procedures for managing R&D. In addition, Water Holdings also worked with universities on new membrane materials to reduce the cost of applying membrane technology to sewage treatment.

Independent Development of Integrated Equipment for Rural Water Supply

By leveraging the experience in water treatment technologies for years, the water resources segment independently developed a small integrated water supply equipment for rural areas. The equipment is able to operate automatically with functions of water intake, coagulation and dosing, sedimentation, filtration, disinfection, backwashing, mud discharge, and online monitoring. The quality of water treated by the equipment outperforms that specified in the Standards for Drinking Water Quality (GB5749-2006). The equipment helps solve the problems in water source, water quality, transmission, and operation and maintenance in rural water supply, so as to deliver safe drinking water to rural residents.

Working with Universities on Research and Development of New Membrane Materials

As a new membrane material jointly developed by Water Holdings and Harbin Institute of Technology, the organic-inorganic hybrid ultrafiltration membrane is expected to be used for untreated water and sewage treatment. Compared with the commercially available ultrafiltration membranes in the market, the membrane can increase pure water flux² by more than 50% in water treatment applications. Meanwhile, with strong anti-pollution ability, the membrane technology prolongs the backwashing cycle and reduces the use of backwashing agent, which can further decrease the cost of application.

Independent Development of Ultrahigh-pressure Automatic Sludge Plate Frame Equipment

Given the problems of ordinary plate frames, such as low pressure in squeezing, high moisture content of sludge, poor self-control and long operation cycle, Yue Gang Water Supply has developed an Ultrahighpressure Automatic Sludge Plate Frame Equipment and launched a demonstration project at the Zhongzhou Island Sewage Treatment Plant in Yangjiang. The equipment improves the efficiency of sludge dewatering, realizes automatic processes such as automatic sludge discharge and automatic cleaning and solves the problems like insufficient capacity of sewage treatment plant and high sludge concentration in biochemical basin which significantly improved the sludge treatment efficiency.

When promoting university-industry collaboration, the water resources segment strives to put research results into practice. The segment strengthens the application and management of intellectual property rights to drive its long-term development. In 2022, the segment had applied for 11 invention patents, licensed 2 invention patents, and achieved 2 science and technology awards.

² Pure water flux refers to the volume of water per unit time through the unit membrane area under unit pressure.

Customer Services

The water resources segment organises training and introduces incentive mechanism to improve customer service. In 2022, the segment conducted 2 training sessions to improve the service quality of call centre and field staff. Two customer service skill competitions were organised for subordinate water companies, and the outstanding companies were rewarded. Customer service-related indicators, such as the answer rate of call centre, the timeliness of handling complaints and after-sales service, are included in the assessment performance of the subordinate water companies. Subordinate companies that fail to meet the requirements will be held accountable. Besides, the water resources segment checks the call records on a weekly basis and provides specific instructions to subordinate companies. The customer service issues identified will be reported at the monthly meeting to encourage subordinate companies to learn from each other.

In addition, to promote the management and operation indicators across the segment, all water companies have been connected to the smart operation management system with the smart customer service system and the national customer service hotline (952525) covered. In 2022, at Water Holdings, the answer rate of call centre was 92.46%, 99.03% of complaints were handled immediately, and 98.97% of after-sales issues were solved promptly.

In 2022, Water Holdings also engaged third-party companies to conduct customer satisfaction surveys. Water Holdings distributed questionnaires and conducted in-depth interviews and mystery customer surveys to collect customers' opinions and suggestions about services. The indicators of services were analysed to form the final customer satisfaction report.

Privacy Protection, Information Security and Intellectual Property

The water resources segment continues to strengthen information management and data protection to protect customer privacy. Water Holdings has formulated the Provisions on Confidentiality Management, and it revised the Regulations on the Management of Trade Secrets, Work Secrets and Internal Documents in 2022 to further enhance information security and confidentiality. With reference to the policies established by Water Holdings, subordinate companies formulate their own policies to strictly manage access to information, thus protecting customer privacy and information security.

Water Holdings has increased its capabilities to safeguard network environment, server environment and software system, and its revenue system has passed the assessment for the Classified Protection of Cybersecurity Test Level 3. To protect user privacy, sensitive information is encrypted when stored and desensitised when exposed to employees. In addition to the emphasis on customer information security protection and privacy in daily work, the water resources segment carries out confidentiality training every year and conducts the popularisation of laws, regulations and internal provisions with case analysis to raise employees' awareness of privacy protection.

Property Investment and Development, Department Store Operation

Teem Group is committed to providing customers with quality services and tenants with high-quality operating environment. Teem Group has formulated a series of policies, including the Management Measures for Leasing Business Operation, the Management Measures for Rent, Deposits and Overdue Payment and the Management Measures for Brand Membership of Teem Group to regulate operation process, ensure quality service and promote compliant marketing. Teem Group actively supports tenants in operation and uses digital technologies to improve operation quality to explore the potential of quality operation. In addition, to enrich the consumer experience, the Teem Group works with tenants to launch new marketing activities that cover a wide variety of scenarios.

Service Quality Assurance

Teem Group strictly adheres to relevant laws and regulations, such as the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, the Product Quality Law of the People's Republic of China and the Food Safety Law of the People's Republic of China. To guarantee the quality of products and services, the department store operation segment has formulated the Sales Management System Manual and the Offline Store Management System Manual and other policies to standardise business processes at all stages and prevent risks arising before, during and after the sale. Before products are delivered to warehouse or hit the shelves, Teem Group checks their quality and labels and performs spot inspection on each store every month. For any unqualified products identified, the stores are required to remove the goods for rectification immediately. After rectification, the stores will be subject to strict re-inspection. In terms of service quality, Sheraton Guangzhou Hotel provides new and experienced employees with service culture training to enhance their awareness of the importance of quality and provide customers with superior services. Teem Group has obtained the ISO 9001 Quality Management System Certification so as to provide customers with quality products and services.

Panyu Teemall's Daily Inspection

To build the brand image of the mall and create a sound and orderly operating environment, Panyu Teemall inspects the operation of tenants every month since the opening. The inspection covers internal policies of the tenants, identification and labelling of products, service life of products/food, source code of cold-chain food, on-site services and civilised language of shop assistants. Meanwhile, Panyu Teemall engages thirdparty companies to inspect on-site operation. Panyu Teemall issues a notice to require tenants and suppliers to complete timely rectification and arranges re-inspection afterwards, so as to strengthen the closed-loop management and improve the operation quality.



Digital Operation

84

Teem Group actively promotes digitalisation transformation for business. In 2022, Teem Group developed a digital transformation plan, unified traffic entrance and established "Teem+", a mini program designed for members, in an attempt to interact with customers and provide online and offline experiences and transactions across different projects and businesses. Teem Group also developed the "Teem+" on the UnionPay App to digitalise closed-loop marketing covering customer acquisition, motivation, retention, transformation and referral, thus increasing online traffic.

In 2022

- "Teem+" was officially launched, with an average of 30,000 daily active users.
- Merchants that use online platforms to promote marketing account for above 90% of the total in the mall.

Teem Group believes that digital tools can be used to significantly improve the experience of tenants. By the end of the Reporting Period, tenants' sales data was collected and verified through mobile phones by Wanya Investment Management Company, greatly enhancing the efficiency of data collection and verification. In addition, to resolve the problems existing in the traditional approach of routine inspection, such as high costs of hardware and software, difficulties in supervision and data collection and inefficiency of follow-up, Wanya Investment Management Company has applied a QR code management system to effectively management routine inspection.

Innovation-driven Operation

Teem Group actively promotes business innovation. In 2022, the Guidelines for the Operation of the Community of Practice (COP) were issued to further improve innovation management and promote the implementation of COP operation. In 2022, a total of 3 COP projects were approved and implemented efficiently with dynamic management of progress and incentive mechanism, providing new ideas and approaches for Teem Group's high-quality development.

In 2022, Teem Group held the sixth Innovation Competition themed "Innovation for Excellence", with 93 pieces of work received. Teem Group also opened a ledger to manage the feasibility of the final works in 2021 for subsequent follow-up and supervised the implementation of 25 final works. During the Reporting Period, a total of 10 innovation projects were approved, including smart parking lots, an AI-based customer management system and a live navigation system.

Co-branding for Innovative Experience

With booming pet economy, Wanya Investment Management joined hands with tenants to organise activities for pet owners, including camping with pets, pet market, and pet playground, where they can walk pet and post photos online. In addition, Wanya Investment Management worked with brands in Teemall to launch live singing broadcasts. It was a visual feast for customers and a good promotion for the brands on social media.



New Energy Vehicle (NEV) Block by Tianjin Teemall

Tianjin Teemall invested greatly in innovative business models, and built the first NEV Block in Tianjin, bringing elements of modern science and technology to the mall.



Operating Characteristics at Comic City



Comic City accelerated the adjustment of business planning by introducing brands in animation industry, upgrading the shops in the mall further through project renovation to highlight the animation-themed business characteristics. In addition, Comic City introduced exclusive brands to increase the occupancy rate of surrounding shops.

Customer Satisfaction and Complaint Management

Teem Group attaches importance to the opinions of tenants and vigorously conducts tenant satisfaction surveys to collect feedback for rectification to constantly provide a better quality of services for the tenants. Teem Group also values customers' consumption experience. Surveys are carried out regularly to collect customer feedback on Teemall's environment and supporting facilities. In 2022, all stores of Teemall Department Store were rated as "very satisfied". Teem Group prepared a report on negative feedbacks and required relevant stores to optimise services, hardware, products or other aspects.

The department store operation segment has formulated the Sales Management System Manual to standardise customer complaint handling processes. Upon receipt of complaints, details are recorded and handed over to relevant personnel to follow up. After customer complaints are resolved, telephone follow-ups will be arranged for better complaint handling. In addition, the department store operation segment organises training regarding customer complaint handling process to further enhance the quality and efficiency of complaint handling. In 2022, Teem Group received 922 consumer complaints, and we have taken timely corrective actions to ensure that the relevant complaints are properly resolved.

Registration at Official Online Platform 12315 by Tianjin Teemall

Tianjin Teemall is the first shopping mall in Tianjin to register at the official online platform 12315. It cooperates closely with market regulators and offers a more convenient and open channel to handle complaints efficiently and safeguard the interests of both tenants and consumers.

Marketing Compliance

Teem Group attaches great importance to brand management and marketing compliance. Teem Group has formulated and implemented policies such as the Guidelines for Brand Specifications of Teem Shopping Mall, the Marketing Management System Manual, the Administrative Measures for Publicity and Promotion Activities and Fee Management, the Administrative Measures for Online Marketing Platform Operation, and the Administrative Measures for Online Marketing plans of the commercial real estate business are required to be approved. In addition, advertisements must be strictly managed in compliance with national regulations to ensure the content of advertisements are compliant and positive.

Privacy Protection and Information Security

Teemall Department Store has formulated policies such as the Measures for Membership Operation and Management and the Membership Manual to standardise the protection of customer privacy. Designated personnel are arranged to manage member information and operational data and relevant information security and privacy protection training is carried out. Access to the customer relationship management (CRM) system is strictly controlled, and approval is required for opening, changing, and blocking member accounts in the system. In 2022, Teem Group formulated the Network Security Management System to clarify the responsibilities of the personnel in charge of cybersecurity and carried out inspection on the information security of subsidiaries. In addition, Teem Group has developed a sound website security protection system to ensure information security through cryptographic technology, identity authentication, access control and security audits. In 2022, Teem Group continued to enhance the security of information systems and obtained classified protection certification. Sheraton Guangzhou Hotel also requires employees to sign the "Information Security and Protection Agreement" and completes the online "Global Data Privacy" training as well as the offline "Information Security and Protection Agreement" training, in an effort to increase employees' awareness of information security and privacy protection.

Hotel Ownership, Operation and Management

The hotel segment strictly complies with laws, regulations and industry standards, such as the Industry Code of Tourist Hotels in China and the Classification & Accreditation for Star-rated Tourist Hotels. In 2022, in accordance to the Group's internal policies, such as the Measures for Business Plan Management of Guangdong Investment Limited and the Measures for the Management of Business Performance Assessment of Guangdong Investment Limited, the segment revised 45 policies in an attempt to integrate compliance review into daily work and ensure the compliant and orderly operation of the segment.

Quality Services

The hotel segment regards service quality as the top priority, utilises the hotel quality control system and tools, as well as other available platforms to provide customer-oriented services and improve service quality. Jointwisdom, a third-party system, is used to track customer satisfaction and collect online customer opinions on their hotel experience. Therefore, the segment has a better understanding of the opinions and take targeted measures to improve its service quality. In addition, all hotels are required to collect customer comments from major OTA (Online Travel Agency) websites to identify weaknesses in operation and conduct a root cause analysis to improve service quality. Customers can also submit suggestions or complaints by phone, email or fax. Upon receipt of complaints, the Operation Service Department will follow up, comfort the customer and provide solutions. Once the complaints are resolved, a return visit to customers is made to get subsequent feedback, and proper records are kept.

Digital Operation

The hotel segment puts emphasis on digital transformation. During the Reporting Period, digitalisation plans are set up to ensure the smooth connection with the Group's management systems, including but not limited to the smart legal system, the finance sharing system, and the work safety management system. The hotel segment also optimises PMS (Property Management System), CRS (Central Reservations System) and other information systems. In addition, relying on InterContinental Hotels Group's robust information technologies, Zhuhai GDH Hotel deploys PMS and POS (Point of Sales System) to support hotel operation, supported by advanced management tools and business supporting systems.

Privacy Protection and Information Security

Protecting customer privacy and information security is the bottom line of the hotel segment and an essential part of daily operation. A privacy statement has been published on the official website to demonstrate the segment's determination to protect the privacy of customers and business partners. In addition, access to the systems is strictly controlled with technologies such as cloud PMS, whitelists and strong passwords. Customer data are stored in the Intranet to reinforce security management. The segment promotes the adoption of copyrighted software and establishes relevant records. Meanwhile, the segment provides guidance and organises on-site checks on the adoption of copyrighted software by subordinate hotels to prevent information security risks arising from pirated software.

Energy Projects

The energy segment strives to provide customers with safe and high-quality energy services. In 2022, Zhongshan GDH Energy improved the Standard for the Management of Heat Supply Network Operation to lay down higher requirements for the network operation management and routine inspection, including but not limited to increasing inspection frequency and optimising inspection routes. Meanwhile, in order to ensure a stable and safe steam supply, the energy segment conducts door-to-door safety inspections. If equipment failures and safety hazards are identified, the segment provides rectification suggestions for its customers.

Management of Pipeline Loss

Controlling pipeline loss is essential to the business quality of the energy segment. To reduce heat supply losses, the segment optimises the operation of the heat Supply networks, improves steam supply parameters, and implements unified operations by coordinating specific lines. At the user end, the segment checks potential hazards and follows up on rectification measures, requiring users to repair the pipeline dripping, dropping and leaking of front-of-the-meter pipelines within specific time limits. With respect to pipeline construction, the segment pilots the use of new materials. For example, nano aerogel, a new environmental friendly material, is used for insulation layer. The material can realise superior heat insulation when used with high-temperature glass wool designed for low energy consumption in long distance transport. The energy segment set the target pipeline loss rate at 6.5%. In 2022, the pipeline loss rate of the year was 6.33%.

Urgent Repair of Heat Supply Networks

During the Tomb-Sweeping Holiday, a 36-hour urgent repair was coordinated by the energy segment. Materials were prepared overnight and steam supply was cut off at dawn. The repair team worked shifts to repair the compensator at Zhengxing Section of Nantou Pipeline. The repair was completed before the end of the holiday, ensuring the operation of customers' enterprises.

In July 2022, Fusha Pipeline was relocated due to the reconstruction of Nansan Highway. Zhongshan GDH Energy endeavoured to minimise the impact and conducted centralised relocation at multiple points to reduce pipeline cut-offs. At the sweltering summer, the work was delivered with efficiency and high quality.

Customer Service Improvement

The energy segment leverages its technical advantages to assist customers in saving energy through optimisation and transformation. In 2022, Zhongshan GDH Energy visited customers with steam supply demands to learn about their production and operation, and proposed suggestions on energy conservation. The segment runs a 24-hour service hotline by which customers' messages are received, transferred and replied by the front-line personnel of heat supply, which shortens handling time, improves the service quality, and resolves customer complaints in a timely manner.

Customer Services

Zhongshan GDH Energy actively assisted customers in equipment upgrading, put forward energysaving suggestions and help reduce the losses from dropping, dripping and leaking to reduce production costs. Regarding the complaint that exits and doors were blocked by steam pipelines, Zhongshan GDH Energy carried out multiple on-site visits and analysed reconstruction plans with the design institute. The rectification was completed efficiently and steam supply was resumed earlier than expected, providing robust support for customers' operation.

Information Security

The energy segment attaches great importance to information security, especially cybersecurity. To ensure information security, the segment conducts cybersecurity testing to assess risks and increase related capabilities and carries out training and emergency drills. The segment regularly reviews control nodes and inspection items, conducts inspection and rectification to fix vulnerabilities, thus safeguarding cybersecurity. In 2022, Zhongshan GDH Energy provided online training concerning the Cybersecurity Law of the People's Republic of China and the Personal Information Protection Law of the People's Republic of China, and shared learning materials through OA system to effectively enhance the information security awareness of employees.

Roads and Bridges

In compliance with the Highway Law of the PRC, GDH Highway has formulated internal policies such as the Measures for Highway Maintenance Management to specify the requirements for highway maintenance and promote the development of highways. Policies have also been formulated to guide daily management, such as the Administrative Measures for Vehicles Allocation and Usage and the Administrative Measures for Obstacle Removal Operations.

During the Reporting Period, the "three systems" essential for tolls are maintained as planned. GDH Highway inspects all the electromechanical equipment and replaces aged parts in advance before major holidays to ensure collection of tolls. GDH Highway regularly inspects truckload measurers at the entrance to improve accuracy and avoid toll disputes and monitors the condition of road surface to reduce safety risks. In 2022, no major incidents that affect the toll collection occurred.

Digital Operation

GDH Highway makes full use of information technologies in operation and management to provide higherquality and smarter services for safe travel. In 2022, GDH Highway installed monitors at accident-prone locations

to improve the capabilities to handle accidents and recognise congestion events in rainy weather. In addition, GDH Highway has upgraded the existing traffic monitoring systems, and developed an integrated management platform that incorporates all isolated information systems of the road surface renovation project. The platform enables multiple parties to better identify and monitor traffic accidents on the same road and improves scheduling capabilities, contributing to the goal of "improving traffic efficiency and reducing potential accidents". With the platform, the time from the occurrence to the discovery of traffic accidents is shortened from 30 minutes to 5 minutes, the arrival time down by 20%, and the handling time reduced by 30%. Higher handling efficiency reduces reoccurrence of accidents and ensures safe transportation.



Interface of Traffic Monitoring System

Customer Satisfaction

Valuing communication with customers, GDH Highway has developed standardised procedures for complaint handling and customer satisfaction assessment to improve service quality. GDH Highway has defined requirements for the customer service platform hotline "96333" in the Compilation of Guidelines for Toll Service Management and the Measures for the Management of Customer Service Hotline 96333 of Guangxi Highways to standardise public highway services and improve emergency response capabilities.



92

Public Service Platform Hotline 96333

- 87 suggestions received
- 701 business enquiries handled
- 1,269 rescue dispatches arranged
- 100% completion rate

Service Satisfaction Questionnaire

- 1,420 on-site vehicle visits
 - 100% customer satisfaction with the services of GDH Highway

GDH Highway cares about customers and delivers sincere services. In 2022, GDH Highway organised a series of voluntary activities, such as "Care for Truckers on Bagui Highway", "A lovely journey in warm winter with transportation volunteers", "Learn from Lei Feng" volunteer service, and "Five-Hearts" Service Day. In the course of services, volunteers provided hot ginger tea for drivers and passengers, offered traffic guidance, publicised tips for NCP and driving safety, disseminated knowledge about the Highway Law, and explained the toll policies. These voluntary services facilitate communication with drivers and passengers and helped GDH Highway build good public reputation and corporate image.

Sustainable Supply Chain

The Group continuously optimises supply chain management and works with its business partners and suppliers to promote sustainable development. We adhere to the Government Procurement Law of the People's Republic of China on Tenders and Bids and other relevant laws and regulations. We have implemented the Policy on Sustainable Supply Chain of Guangdong Investment Limited in earnest to standardise supplier access, assessment, exit and other processes. We not only encourage and prioritise cooperation with suppliers who have environmental and safety certifications but also advocate sustainable development practices among suppliers and draw their attention to their own environmental and social risks.

We require the suppliers of products and services in all business segments to sign integrity agreements and inform them of our bidding and procurement policies and the relevant penalties for violations. We uphold the principle of fair price comparison and independent procurement to provide suppliers with a level playing field. Besides, we strictly prohibit any person from contacting suppliers privately and accepting benefits and will immediately terminate the contracts with those violating the rules once identified.

We hold our suppliers to the highest standards of labour and human rights and oversee any potential risks within our supply chain. We require suppliers not to force labour and not to hire anyone who is under the legal minimum age of employment in the place of operation. We regularly review and assess our suppliers to ensure their compliance with relevant laws and regulations.

Under the same conditions and principles, we offer priority to local suppliers with the aim of reducing the negative impact on the environment caused by long-distance transportation and driving local economic development.

Number of suppliers by region	Supplier data of 2022 (Company)
North China	387
Northeast China	42
East China	601
Central China	158
South China	3,960
Southwest China	60
Northwest China	19
Hong Kong, Macao and Taiwan	176

Water Resources

The water resources segment regulates the bidding and procurement process in strict accordance with the Management Measures for Tendering and the Management Measures for Procurement. Besides, the segment defines the responsibilities of the person in charge and related personnel involved in the bidding and procurement as part of its efforts to prevent improper behaviours in the bidding and procurement process. The segment also conducts regular audits on tendering and bidding to validate whether relevant systems and processes are reasonable and effective.



Water Holdings has formulated and released the Measures for the Management of Joint Bidding. Following the principle of strict access, survival of the fittest, and timely supplementation, Water Holdings reviews suppliers from their qualification certificates, professional and technical capabilities, commercial credit, etc. After their access, Water Holdings implements dynamic management on credit evaluation and updates the information so as to select high-quality engineering and construction suppliers for further cooperation. Besides, when choosing suppliers, Water Holdings also takes into account the environmental and social responsibility performance, including resource conservation, recycling and low-carbon practices, and suppliers providing environmentally friendly products and services are preferred.

In an attempt to safeguard product quality and supply chain stability, Water Holdings has established an assessment and evaluation group to regularly evaluate engineering and construction suppliers from their safety, quality and progress management, integrity and green construction in accordance with the Measures for the Assessment and Management of Engineering and Construction suppliers and the Measures for Suppliers' Information Database.

Property Investment and Development, Department Store Operation

Teem Group has defined procedures and standards for managing access, evaluation and exit of suppliers in the Supplier Management Measures. Teem Group evaluates suppliers of engineering projects and records the performance of contractual suppliers of departments and subsidiaries in an orderly and dynamic manner. Besides, Teem Group timely updates assessment results of suppliers so as to adjust the blacklist as well as the list of suppliers which are not recommended for cooperation.

In order to prevent fraud in the bidding and procurement process, Teem Group adopts online channels to select suppliers, and the whole process of projects with high budget are monitored and recorded. The judges participating in the evaluation are also required to sign the Disciplinary Commitment and the Confidentiality Commitment. Furthermore, channels and methods of complaints are made public to ensure compliance and transparency throughout the procurement process. After the bid, tendering and procurement personnel are required to fill in optimised integrity files, and all suppliers are asked to sign the Commitment to Honesty and Integrity so as to ensure transparency in the tendering and procurement process.

Teem Group attaches great importance to the assessment and management of environmental and social risks of suppliers. When a project is approved and initiated, Teem Group lays down green construction and safety measures in the bill of quantities for the project and requires construction units to take green construction practices in line with current national and industry requirements. Besides, Teem Group assigns personnel to manage and supervise construction progress on site and ensures green construction measures are taken as required. Moreover, in accordance with the requirements of ISO 14001 Environmental Management Systems, Teem Group signs environmental protection agreements with outsourcing suppliers and procurement suppliers for more specific environmental management responsibilities and codes of conduct so as to form a greener supply chain.

Hotel Ownership, Operation and Management

The hotel segment has formulated the Guidelines for Procurement Management, to ensure tendering and procurement procedures are implemented in an open and transparent manner, and the whole process of procurement is supervised by other departments and audits to ensure its transparency.

The hotel segment defines standards for supplier access, assessment, and exit in the management of the supplier list. In the phase of supplier access, the segment reviews the qualification certificates, business reputation, performance and quality assurance system of suppliers. In the phase of supplier assessment, the segment sets up an assessment group to evaluate the service quality of suppliers by assessing their attitude, response time, work quality, etc. The segment also implements the elimination mechanism in which suppliers who get involved in administrative penalties and business ethics violations will be blacklisted.

Energy Projects

The energy segment has formulated policies such as the Tendering Management Standard and Coal Procurement Management Standard. The segment has also established standardised and transparent tendering and procurement procedures to ensure that related work can be carried out in an orderly manner. In the Reporting Period, Zhongshan GDH Energy revised the safety, health and environmental management agreements with contractors, suppliers and other relevant parties to further clarify rights and obligations for both sides. Meanwhile, Zhongshan GDH Energy lays down responsibilities and assessment rules for breach of contracts and adds work safety management agreements with more than two units operating in the same area. Besides, Zhongshan GDH Energy has established a mechanism for safety credit rating to assess and record the performance and work safety management of contractors and suppliers in each project, thus provide better management before, during and after projects. Other than that, Zhongshan GDH Energy has also established a mechanism in which relevant parties with safety-related misconducts are likely to be removed from the list.

Zhongshan GDH Energy is equipped with an Enterprise Asset Management (EAM) system which automatically initiates supplier evaluation procedures in which warehouse administrator, procurement managers and other relevant personnel can score the appearance, packaging, quality, and completeness of quotations and suppliers' capacities to execute contracts, delivery progress, services, business quotation advantages, after-sales services and other aspects. Zhongshan GDH Energy has also put in place a strict elimination mechanism. At the end of each year, suppliers rated unqualified will be removed from the list.

In order to build a clean and transparent supply chain, Zhongshan GDH Energy has formulated the Management Standard for Procurement. Zhongshan GDH Energy carries out spot check on procurement at irregular intervals and deals with any problems found in strict accordance with relevant regulations. In the Reporting Period, personnel holding key positions of Zhongshan GDH Energy were organised to participate in integrity talks and visit the education base for combating corruption. Procurement management personnel were also organised to watch the video on integrity every quarter for better self-discipline.

Roads and Bridges

GDH Highway has established policies such as the Management Measures for Tendering and the Management Measures for Procurement for full-process management of key businesses. In the bidding phase, GDH Highway issues tender documents and draws up the Work Safety Contract and the Integrity Contract, in which rights and obligations of both parties in terms of work safety and integrity and liability for breach of contracts are defined so as to standardise supplier management.

GDH Highway takes green procurement practices and prefers to purchase office supplies, safety appliances and other related materials from local suppliers to reduce vehicle exhaust emissions during the transport of materials as part of its efforts to construct a green and low-carbon supply chain.

CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE³

The Group values talent as the core drives for enterprise prosperous development. We are desperate for talents and spare no effort to develop our talent pool. We unleash employees' potential by conducting advanced systems for recruitment, promotion and training, and as such, we are able to provide better services for our customers and create more value for society.

In full compliance with the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, the Social Insurance Law of the People's Republic of China, the Employment Promotion Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Minors, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, as well as the Sex Discrimination Ordinance, the Employment Ordinance, the Employees' Compensation Ordinance and the Occupational Safety and Health Ordinance of Hong Kong and other laws and regulations concerning recruitment and promotion, remuneration packages, working hours, holidays, equal opportunity, diversity, anti-discrimination, and other benefits and welfare, the Group respects and protects employees' legitimate rights and interests.

Employment

The Company strictly abides by local employment laws and regulations. We have published internal recruitment policies, including the Administrative Measures for Recruitment Management and the Administrative Measures on the Avoidance of Relatives to ensure that the recruitment processes are standard and transparent. Based on this, the Company applies the concept of employment equity with a fair, impartial and open approach. We highly value employees' abilities, eliminate any form of discrimination, and treat all employees equally regardless of their region, nationality, religion, age, gender, marital status and physical conditions. To ensure the implementation of such beliefs, we have set up a whistle-blowing hotline for public supervision and reporting on discrimination.

The Group strictly adheres to labour laws. During the Reporting Period, we had no incidents of child or forced labour.

The Group pursues market-oriented recruitment by using methods of campus and social recruitment, which attracts talents through online recruitment, headhunting, internal referral and other channels so as to constantly increase talent reserves. The Group also actively carries out a professional managers system and tenure and contracts system of managerial personnel. We motivate employees and explore their potential through post-competition. Furthermore, we provide equal employment opportunities for disabled people, which helps them integrate into the society.

³ The scope of social KPI data collection in 2022 is consistent with that in 2021, including: headquarters of GDI, water resources segment, Zhongshan GDH Energy, Teem Group, hotel segment, and GDH Highway.

	Total number of employees ⁴	Total number of resigned employees			
Employee data of 2022	(Persons)	(Persons)	Turnover rate ⁵ (%)		
Total number of employees by gender					
Male	6,227	266	4.27		
Female	3,670	208	5.67		
Total number of employees by employee cate	egory				
Senior	290	12	4.14		
Intermediate	899	42	4.67		
Junior	8,708	420	4.82		
Total number of employees by geographical	region				
Mainland China	9,734	423	4.35		
Hongkong SAR	163	51	31.29		
Total number of employees by age group					
30 or below	2,269	198	8.73		
31-40	2,954	141	4.77		
41-50	3,065	78	2.54		
Above 50	1,609	57	3.54		
Total number of employees by employment type					
Formal contract	9,721	474	4.88		
Outsourced contract	162	0	0.00		
Temporary and short-term contracts ⁶	14	0	0.00		

Water Resources

The water resources segment hires talents through social and campus recruitment. In terms of social recruitment, the segment focuses on assessing candidates' work experience and expertise so as to select like-minded and experienced talents. As for campus recruitment, the segment builds a reserve pool of talents through a combination of internship trainings and graduate recruitment.

98

In 2022, the segment hired 42 employees through social recruitment, met current needs of talent.

⁴ "Total number of employees" is the number of all employees of the Group's business segments as of December 31, 2022.

⁵ Turnover rate = total number of resigned employees/ total number of employees*100.

⁶ In 2022, "temporary and short-term contracts" only classifies to "employment type", which does not classify to "employee category".

Presentation for campus recruitment



As of the end of 2022, the water resources segment held 20 offline presentations and 30 online presentations for 2023 campus recruitment, covering more than 100 universities. As of December 2022, 63 employees are hired through campus recruitment.

Corporate – University Partnership

The water resources segment, in partnership with Guangdong Polytechnic of Water Resources and Electric Engineering, launched a collaborative education programme for pre-employment training. On 22 September 2022, 200 students participated in the presentation held in Guangdong Institute of Water Resources and Hydropower, and 21 students enrolled in the programme as interns.

Water Holdings actively implements the recruitment policy for professional managers. According to the employment policies such as the 2021- 2023 Plan of Water Holdings for the Implementation of the Policy of Hiring Professional Managers and the Employment Agreement for Professional Managers, new professional managers are required to sign employment agreements by positions. The employment agreement includes terms regarding duties, tenure performance targets, remuneration, and employment termination.

Property Investment and Development, Department Store Operation

To optimise the talent pipeline, Teem Group expands talent sourcing channels, and hires highly competent management talents for key positions through social recruitment. Besides, Teem Group promotes cooperation with universities and sources talents by establishing internship practice bases and providing job opportunities for outstanding graduates. In the future, Teem Group will further enhance cooperation with universities to improve the comprehensive capabilities of the reserve talents.

Recruitment data	By the first half of 2022, Teem Group hired 274 employees through social and campus recruitment.
	In November 2022, Teem Group signed a strategic cooperation agreement with Guangdong Vocational Institute of Public Administration, aiming to fill talent pipelines of its subordinate commercial and hotel operations with outstanding graduates.

Hotel Ownership, Operation and Management

Striving to build a professional, younger and high-quality talent team, the hotel segment fully implements the market-oriented employment and sticks to the concept of open, fair, impartial and competitive recruitment. To build a lean management framework for human resources in favour of corporate development, the segment has formulated and implemented recruitment policies including the policies on open recruitment and competition for positions of managerial personnel.

To maximise benefits and efficiency of employment, the hotel segment clarifies positions, headcount and responsibilities in a prudent manner. Thus, departments operate in a lean and efficient manner with effective and reasonable positions. In addition, the segment is improving its management model and operation process to enable a mode in which serval responsibilities are taken over by a single position. Moreover, the segment always put people first and manage the labour-management relations in a proper and prudent manner.

During the Reporting Period, the hotel segment comprehensively implemented the management of tenure and contracts of managerial personnel and conducted tenure management and target assessment. Furthermore, the segment established an incentive mechanism which based on evaluation of business performance, position value, ability and quality, performance and market price.

Energy Projects

The energy segment has formulated the Management Standards for Personnel Selection and Appointment, the Management Standards of the Rank System (Trial), the Regulations on Competition for Positions of Managerial Personnel and the Management Measures for Adjustment of Management Positions (Trail). The segment optimises the allocation of human resources by implementing competition for positions and internal adjustment based on the belief of ability first. Therefore, the energy segment fully motivates employees' working enthusiasm and ensures efficient operation of the segment.

Roads and Bridges

In 2022, Zhongshan GDH Highway revised policies such as the Human Resources Management Regulations and the Recruitment Management Measures to further improve the management system for human resources and regulate the process of recruitment. During the Reporting Period, Zhongshan GDH Highway recruited 52 employees through open recruitment, including two middle-level managers and one technological professional, which improves the comprehensive management ability and professional technical skills of the Segment.

Employee Development

The Group strictly complies with internal policies such as the Staff Management Regulations of Guangdong Investment Limited, the Human Resources Management Regulations of Guangdong Investment Limited, and the Trainings Management Measures of Guangdong Investment Limited. Guided by the strategic development objectives, the Group provides employees with training and promotion opportunities according to the strategic planning of human resources. We encourage employees to take an active part in internal and external training and invite internal and external professionals or institutions to conduct training. Our training categories include compliance training, mandatory qualification training, vocational study, job adaptability training and professional seminars. In addition, we set up online learning platform to provide more comprehensive training for employees through digital way.

In order to further strengthen compliance awareness and maintain respect for the system, the Group attaches great importance to compliance training, actively follows the progress of regulatory changes and provides various legal and compliance trainings to the directors and all employees of the Group. We are sure to walk steadily on the road to becoming a listed company in Hong Kong with significant investment value, regarding legal compliance as the anchor and corporate governance as the rudder. Among the trainings, the General Counsel and Company Secretary of GDI, as the lecturer, conducted the trainings on listing compliance for all employees of the Group to explain important knowledge of listing compliance in the laws and rules of Hong Kong, including the Securities and Futures Ordinance, the Listing Rules and the Companies Ordinance, and etc. The training studied and discussed the key and difficult issues in listing compliance practices and enhanced the listing compliance awareness of all employees of the Group. In addition, the Group also invited external legal counsels to conduct continuous compliance training for all functional departments and subsidiaries of GDI. The training covered a wide range of areas such as legal interpretation and compliance policies. During the trainings, we studied and discussed key and difficult issues in legal, compliance and internal control practices, which further strengthened legal, compliance and internal control.

Training of 2022	Unit	Data		
Total training hours	Hour	307,591.68		
Average training hours per employee ⁷	Hour	32.01		
Average training hours by gender ⁸				
Male	Hour	29.75		
Female	Hour	33.34		
Average training hours by employee category ⁸				
Senior	Hour	36.34		
Intermediate	Hour	34.75		
Junior	Hour	30.53		
Percentage of trained employees by gender ⁹				
Male	%	97.61		
Female	%	96.19		
Percentage of trained employees by employee category ⁹				
Senior	%	99.66		
Intermediate	%	95.55		
Junior	%	97.15		

Water Resources

The water resources segment regularly implements transparent recruitment processes and regards competition for positions as an important way of talent selection. This facilitates the exchange of talents between the headquarters and project companies, thus fully stimulating vitality of teams. The segment strengthens tracking on the performance of cadres after appointment, and to motivates employees by promoting a system in which the competent are promoted, the outstanding are rewarded, the mediocre are demoted, and the incompetent are dismissed. The segment has formulated the Guidelines on Management Training for New Management Personnel to Adapt to Positions to support our new management personnel to master necessary knowledge and key skills, which helps them quickly understand their responsibilities.

⁷ Average training hours per employee = total training hours/total employees trained.

⁸ Average training hours by related employee category = total training hours by related employee category/total employee number of related employee category.

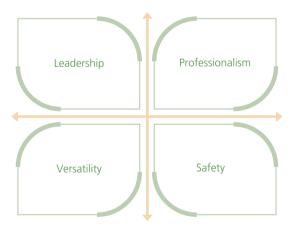
⁹ Percentage of trained employees of related employee category = total number of trained employees of specific category/total number of employees of specific category*100.

The water resources segment has revised the Management Measures for Employee Performance Appraisal based on the relevant policies of the Group. Based on this, the water resources segment requires employees to sign the PBC Annual Performance Contract to manage employee's performance by stage and level. In addition, the segment customises quantitative indicators based on duties of positions and applies a market-oriented incentive mechanism in bonus allocation, so as to enhance employees' self-motivation.



In 2022, Water Holdings issued 28 notices on competition for positions, organised 21 interviews for open recruitment, with promotions of 154 employees.

The water resources segment has designed a training model of "Four Capabilities", namely leadership, professionalism, versatility and safety aiming to provide employees with all-round training from the four dimensions and lay a foundation for the career development paths of employees. Meanwhile, the segment has set up a digital training platform named "GD Water College" for all employees. More than 500 courses of various categories are available on the platform, covering professional and safety knowledge, management and general skills and other content, providing employees with more opportunities to acquire knowledge.



"Four Capabilities" Training Model

Training data

As of the end of 2022, Water Holdings conducted 17 firm-wide training sessions. These training sessions involved 1,200 participants, with an average satisfaction rate of 96.1%.

In addition to training employees for more skills, the water resources segment provides targeted training for employees at different stages of their careers. Based on the growth path from new employees and junior managerial personnel to senior managers, the segment has designed key training programs for talents, including "On-boarding Programme", "Specialty Programme" and "Pilot Programme".



On 9 June 2022, GD Water Academy and Innovation Centre invited Chen Qihui (distinguished professor of Tsinghua University and former vice president of TCL Communication Holdings) to offer a training session themed on "Digital Transformation and Practice" to more than 160 employees of Water Holdings and its subordinate companies to broaden employees' horizons.

Training programme	Trainees	Contents and forms	Achievements
On-boarding Programme	New employees	 "On-boarding Programme" is designed for new employees hired through campus recruitment. Face-to-face courses, thematic tasks, outdoor activities and other activities have been carried out in the programme. The programme aims to help the new employees hired through campus recruitment quickly fit into the workplace. 	In total, more than 180 employees through campus recruitment attended 9-days training, and the overall satisfaction rate reached 96.5%.
Specialty Programme	Front-line managers	 "Specialty Programme" is a training camp for newly promoted and front-line managerial personnel who have been promoted for less than two years. The programme covers 7 training sessions on management through live broadcast. The programme aims to help the employees quickly get familiar with primary-level management work and to improve work efficiency. 	Until now, the Specialty Programme has been held twice. 170 new managerial personnel of the Water Holdings received the training, and the overall satisfaction rate reached 94.4%.
Pilot Programme	Top executives	Exclusively designed for senior operational employees, "Pilot Programme" aims to cultivate management talents with strong leadership and empower expatriates to comprehensively improve their management skills.	115 students from Pilot Programme completed 28 internal and external courses and seminars, and the overall satisfaction rate reached 94.86%.

Property Investment and Development, Department Store Operation

Teem Group has formulated the Measures of GDH Teem (Holdings) Limited for the Implementation of Redeployment of Managerial Personnel (Trial) and actively implemented a regular mechanism for promotion and demotion of managerial personnel. Teem Group applies a dual ladder career system that allows employees to choose career paths through the managerial ladder or the technical ladder. Teem Group continues to implement employee assessments that focus on work performance and links assessment indicators to remuneration, thus actively motivating employees and stimulating their passion for work.

In 2022, Teem Group launched an online learning platform. There were thousands of courses on leadership, professionalism, versatility, corporate culture and internal training. During the quarantine period, the platform delivered training courses on a daily basis and organised online learning for quarantined employees, creating a positive learning atmosphere.

Teem Group provided targeted training for employees at different career stages:

- For new employees, Teem Group organised 2 sessions of orientation training to help employees quickly fit into the workplace. The training covered basic knowledge and general abilities required, such as the Introduction to GDH Teem, the Risk Management and Internal Control, the Discipline Education, the Business Etiquette and the Safety Production Knowledge.
- Teem Group provided training for general employees on common skills, including formal writing and work safety. Besides, Teem Group surveyed and summarised the training needs of each employee, covering continuing education of the registered cost engineers and training on finance and industrial technology. Then Teem Group invested in relevant courses to fully meet employees' development demands.
- For middle-level cadres and managers, Teem Group vigorously launched the "Leading Goose Programme" to provide specific talent cultivation schemes, thus perfecting the building of talent pipelines.

Leading Goose Programme: Improvement Programme for Advanced Operation



By taking evaluation through four dimensions, namely potential, capability, experience and performance, Teem Group selected high-potential employees who have high willingness from middle-level cadres and managers. Teem Group offered targeted training and coached personal development plans, based on actual needs of these employees, to cultivate a compound reserve of talents integrating strengths in politics, thinking, strategy, finance and organisation.

Hotel Ownership, Operation and Management

The hotel segment implements a performance management system whereby quantitative assessment was applied for every employee and accountability of goal realisation was clarified. The segment clearly refines the target baseline and rating rules for individual assessment indicators and implements a firm-wide performance appraisal system. Adhering to a principle of hierarchical management and classified assessment that is performanceoriented, the segment has completed individual performance assessments for 2022 based on key performance indicators in an objective and fair manner. The segment makes full use of the performance assessment to motivate employees and enhance the execution efficiency of the segment's overall strategic objectives.

The segment offers online and offline training to effectively empower talents. The segment has set up an online learning platform. Relying on the online training and education platform, the segment develops the "Internet + Training" model. In terms of offline training, the segment has held 19 internal thematic training sessions covering such topics as work safety, intellectual property protection, integrity education, legal risks, and human resources, to further enhance the professionalism of employees. As at the end of the Reporting Period, the training hours of the segment accumulated to 6,631.5.

Energy Projects

Zhongshan GDH Energy conducts employee selection and nomination by following the principle of "employees may be demoted as well as promoted". Zhongshan GDH Energy has conducted the annual assessment for promotion, cadre selection and appointment and competition, and adjustment of production departments in strict accordance with the employee promotion related policies and management standards of the rank system. This year, the energy segment included a written test in the promotion assessment to enhance the effectiveness and credibility of talent selection. In addition, Zhongshan GDH Energy has revised and released the Management Standards of Performance Assessment to implement a system of performance assessment for all employees. The segment objectively assessed the performance of employees and linked employee performance with remuneration to optimise the incentive allocation mechanism and motivate their enthusiasm.

Upholding the talent development philosophy of "focusing on Growth", Zhongshan GDH Energy encourages employees to apply for professional title evaluation and obtains vocational skills certification for further improvement of technical talents cultivation. In 2022, 10 employees obtained the qualification for the professional technical engineer and 14 the assistant engineer. Meanwhile, the segment obtained the vocational skill level identification qualification of duty officer for power generation and centralised control, equipment inspectors and electricians, and 12 employees passed the electrician (technician) skill level qualification.

Zhongshan GDH Energy provides online and offline training for professional and technical personnel and combines continuing education platform for technical professionals and general employees to convey the latest industry knowledge, including carbon peaking and carbon neutrality, digital transformation and project management. Apart from the online learning platform, Zhongshan GDH Energy also adopts the mechanism of professional technique evaluation and online examination to ensure learning efficiency and collect feedback from trainees to improve training quality on a sustained basis.

In 2022, Zhongshan GDH Energy carried out 65 training programmes at the company level, with a total of 1,060 participants. The participation rate and completion rate were 100% and 94% respectively, with 1,201 learning hours accumulated.



Training for Professional and Technical Personnel

Roads and Bridges

GDH Highway has revised and issued the Management Measures for Performance Evaluation to fully implement an accountability evaluation system. In 2022, GDH Highway organised all departments to prepare and sign strategic performance contracts and issued departmental and individual performance contracts. The performance targets were set for every employee to promote performance-oriented assessment, which depends on individual contributions. Except for performance assessment, GDH Highway promotes a talent rotation system and carries out internal competition for positions to drive career development.

GDH Highway continues to improve the training system that integrates internal and external resources, including presentations on corporate culture, safety, discipline and personnel policies, and training on charge service and other topics for management personnel in 2022. Based on this, GDH Highway is able to comprehensively enhance the cohesion and loyalty of employees. Moreover, GDH Highway develops and implements the "Highway Lecture" training plan with eight arranged lectures to effectively promote the building of a talent reserve. GDH Highway also actively encourage employees to acquire and strengthen professional skills. Meanwhile, GDH Highway have revised and issued the Implementation Rules for the Management of Employee Skills Enhancement and Rewards to clarify incentives for individual skill enhancement, thus creating a culture of learning.



108

In 2022, the Implementation Rules for the Management of Employee Skills Enhancement and Rewards was released and highly recognised by employees. A total of 14 employees applied for skills improvement.

Employee Care

In order to provide a harmonious, healthy and pleasant working environment, the Group advocates for worklife balance. We carry out various festive celebrations and cultural and sports activities to enhance the sense of belonging and cohesiveness of employees for the purpose of creating a positive group atmosphere. Being concerned for all employees, GDI purchases supplementary medical insurance and arranges an annual physical examination and influenza vaccination to ease employees' medical burden. In addition, breastfeeding room and parental leave are provided. Further, GDI offers assistance to employees with difficulties in line with appropriate procedures, effectively satisfies their immediate needs.

Water Resources

The water resources segment strives to build harmonious labour relations. Yue Gang Water Supply has formulated the Regulations on Democratic Management to optimise the democratic management system of the enterprise. Realising the importance of work experience of new employees, Water Holdings conducts a mentor satisfaction survey through the OA system monthly, so as to constantly improve the onboarding experience of new employees and enhance employee happiness.

The segment focus on employees' mental and physical health and devotes itself to providing a harmonious working environment for them. The segment delivers Employee Assistance Program (EAP) to help employees relieve negative emotions and pressure. Through the "Mental Health Workshop", the segment organises online lectures and offline gatherings, such as "mental health caring and whiteboard", to improve their well-being and mental health. Meanwhile, the segment remembers employees' contribution and carry out diverse consolation activities to make them feel warm and share development outcomes.

Mental Health Workshop

To provide mental health guidance, trainings and consulting for employees by professional personnel and encourage employees to have a positive attitude towards life and work, Water Holdings carried out EAP activities of "Mental Health Workshop".



Consolation Activity



During the spring festival, employees who did not return home are invited to have reunion dinner. Moreover, consolation activities in major projects are conducted during summer, lectures with the topic of health are held in autumn, and consolation was provided to employees during water cut-off period in winter. Furthermore, consolation activities for festivals, birthdays, marriage and birth, and retirement are also conducted.

Property Investment and Development, Department Store Operation

Teem Group holds regular employee meetings to review human resources policies, such as the Employee Performance Management Measures, the Staff Management Regulations, the Human Resources Management Manual and the Implementation Rules for Total Wage. Teem Group also opens various channels, including labour union hotlines, the OA system and company mailboxes, for employees to express their opinions.

Teem Group implements flexible work schedules on demand. During COVID-19, Teem Group allowed employees to arrange work schedules based on their actual situation so as to avoid mass gatherings and reduce the risk of infection. In addition to social insurance, housing fund and regular physical examinations, Teem Group continues to perfect the supplementary medical insurance system that covers all employees, such as "Secondary Inpatient Medical Insurance", "Mutual Health Insurance for Female Employees", thus protecting employees' physical health in all aspects.

Teem Group also cares for the family life of our employees. In strict accordance with the Regulations of Guangdong Province on Population and Family Planning, Teem Group has revised the Management Regulations on Working Hours, Leaves and Welfare. Meanwhile, the maternity leave system allowing nursing and parental leave has been put in place and baby care rooms have been set up. In addition, Teem Group helps employees with their children's education problems.

To foster a positive corporate culture, Teem Group offers gifts and extends greetings to employees at festivals and sets up employee clubs. Besides, Teem Group regularly conducts various activities such as Employee Photography Competition, Summer Mind Sports Meeting, Staff Appreciation Week, Month of Protecting the Rights of Female Employees and monthly birthday parties to enrich the spiritual life of employees.

Summer Mind Sports

To enhance corporate cohesion and interaction among employees from various departments and enrich their spare time, Tianjin Teemall held 2022 Employee Summer Mind Sports Meeting to fully motivate the enthusiasm of employees. Tianjin Teemall carried out sports contests including table tennis and snooker, and fun mind competitions involving gobang, chess and bulls and cows.



Staff Appreciation Week



In May 2022, the hotel branch of the Teem Group celebrated Staff Appreciation Week in forms of conquers games, masked singers and nostalgia markets, hoping that employees would be better involved in their follow-up work with light heart.

Hotel Ownership, Operation and Management

Giving top priority to employees' opinions, the hotel segment constantly improves employee communication and encourages question-asking. The segment has set up offline feedback mailboxes and held monthly general manager dialogue to collect feedback from employees. In addition, the segment has established an incentive mechanism and provided rewards for employees who put forward constructive suggestions.

The hotel segment is devoted to establishing a long-term assistance and caring mechanism to help employees in need. Under the environment of COVID-19, during the Reporting Period, the segment distributed holiday gifts and extended greetings to employees who constantly work at the front line on Chinese New Year, Mid-Autumn Festival, National Day and other important festivals, striving to provide a better holiday experience for them.

The hotel segment actively promotes flexible work schedules. Breastfeeding employees are entitled to an additional one-hour breastfeeding leave per day apart from the statutory maternity and parental leave. To protect the physical and mental health of employees, the segment organises regular health checks and arranges targeted examinations based on employees' physical conditions. Moreover, the segment organises monthly birthday parties, risk knowledge quiz, outdoor activities and other interesting activities from time to time to enrich employees' leisure.

Energy Projects

Our energy segment attaches importance to communication with employees. The segment published email addresses, telephone numbers, contacts and other information of relevant departments and set up feedback boxes for employees' real-time feedback on the expectations and requirements of the segment. Besides, Zhongshan GDH Energy hold seminars of labour unions and employees and working meetings of departments to effectively follow up on responses to feedback and proactively cares for employees.

Zhongshan GDH Energy has issued the Internal Retirement Management Standards for Employees, the Special Rules on the Labour Protection of Female Employees and other employee welfare policies. On top of social insurance, various health-care plans such as "Comprehensive Mutual Support Plan for Inpatient Medical Care" and "Comprehensive Support Plan for Inpatient Medical Care" has been included to satisfy the actual needs of employees.

The energy segment also offers employees holiday benefits, including gifts and allowance. In addition, the energy segment implements the EAP to promptly help employees with negative emotions and facilitate their sense of well-being. To enrich employees' leisure, Zhongshan GDH Energy have formed several special communities, including reading and guitar clubs and organised a variety of community activities such as dry land curling competitions, mid-autumn events and basketball games, creating a friendly and harmonious enterprise environment.

Employee Care

Zhongshan GDH Energy insists on caring employees. The labour union paid 23 visits to employees who were sick or whose direct family members had passed away, and offered them allowance and gifts amounting to RMB33,432.31.

Care for Retired Employees

All departments from Zhongshan GDH Energy presented retired employees with flowers on their birthday in gratitude for their long services and contributions to the energy industry over the past few decades.

Roads and Bridges

The leader team of GDH Highway gets an in-depth understanding of the demands of front-line employees through on-site research and works out solutions in a timely manner to effectively respond to employees' needs. Besides, GDH Highway helped employees solve difficulties in life by paying regularly visits to employees who are sick and in difficulties, and extended holiday greetings to groups, such as veterans.

During the period from August to September 2022, GDH Highway distributed the Employee Questionnaire to front-line toll collectors with 92 responses received. According to the results, employees were satisfied with the overall situation of the company and their salaries, benefits and promotion.

Woman's Day Activity

To create a better working environment for female employees, GDH Highway organised a garden party to celebrate the International Women's Day on 8 March, which enriched their leisure time. The activity also enabled female employees to work with a more vigorous attitude towards work.



The Activity for Veterans



GDH Highway developed a tradition of supporting veterans and their families. The company organises symposiums for veterans on the Army Day and distributes holiday gifts. Besides, GDH Highway makes constant efforts in improving the lives of veterans.

Assistance to Employees in Difficulties

GDH Highway visited employees who were sick and in difficulties for a total of 15 times throughout the year, and distributed subsidies of RMB3,200. Moreover, GDH Highway helped employees in difficulties to apply for hospitalisation reimbursement in serious diseases with a total of RMB40,000.



ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION¹⁰

To fully implement the requirements of governments' environmental protection policies, the Company actively assumes responsibility for environmental governance. We have established the internal environmental management system and comprehensively improved the ecological management. We integrate the green concept into the whole process of the construction and operation of all businesses. Moreover, we continuously strengthen the management of emissions and resources and implement the concepts of clean production, circular economy and ecological protection. Consequently, we commit ourselves to turning the desire for a better environment into concrete actions to achieve a coordinated development of economic and environmental benefits.

Energy Conservation

The Group applies the concept of energy conservation in all aspects of its production and operation and encourages every business segment to make full use of its own advantages. We optimise energy structure, improve production technology and apply green technology to improve the efficiency of energy utilisation and save energy.

Greenhouse gas emissions and		
intensity ¹¹ data ¹²	Unit	2022
GDI Headquarters		
Greenhouse gas emissions (Scope 1) ¹³	Tonnes CO ₂ e	10.51
Greenhouse gas emissions (Scope 2) ¹⁴	Tonnes CO ₂ e	98.80
Water Resources		
Greenhouse gas emissions (Scope 1)	Tonnes CO ₂ e	2,550.41
Greenhouse gas emissions (Scope 2)	Tonnes CO ₂ e	351,481.38
Greenhouse gas emission intensity	Tonnes CO ₂ e/	0.21
	Ten thousand HKD income	
Zhongshan GDH Energy		
Greenhouse gas emissions (Scope 1)	Tonnes CO ₂ e	2,656,067.93
Greenhouse gas emissions (Scope 2)	Tonnes CO ₂ e	115.96
Greenhouse gas emission intensity	Tonnes CO ₂ e/	14.05
	Ten thousand HKD income	

¹⁰ The scope of environmental KPI data collection in 2022 is consistent with that in 2021, including: headquarters of GDI, water resources segment, Zhongshan GDH Energy, Teem Group, hotel segment, and GDH Highway.

¹¹ Intensity values are calculated by dividing the sum of the Group's operating income for the Year, and that of Teem Group is calculated by dividing the sum of the operating and management area.

¹² The data conversion methods and coefficients is mainly referred to the *Appendix 2: Reporting Guidance on Environmental KPIs of the HKEX's How to Prepare an ESG Report*, with several exceptions where the data conversion methods and coefficients are in the notes below.

¹³ The GHG emissions (Scope 1) are generated from the use of gasoline, diesel, piped natural gas and liquefied petroleum gas.

¹⁴ The GHG emissions (Scope 2) are generated from internal consumption of purchased electricity. The GHG emission coefficient of purchased electricity in China's mainland is referred to the Average carbon dioxide Emission Factor of China's Regional Power Grid in 2011-2012 issued by the Ministry of Ecology and Environment of the People's Republic of China.

Greenhouse gas emissions and		
intensity ¹¹ data ¹²	Unit	2022
Teem Group		
Greenhouse gas emissions (Scope 1)	Tonnes CO ₂ e	2,136.41
Greenhouse gas emissions (Scope 2)	Tonnes CO ₂ e	49,333.24
Greenhouse gas emission intensity	Tonnes CO ₂ e/	0.04
	Square meter operating area	
Hotel segment		
Greenhouse gas emissions (Scope 1)	Tonnes CO ₂ e	292.28
Greenhouse gas emissions (Scope 2)	Tonnes CO ₂ e	7,048.65
Greenhouse gas emission intensity	Tonnes CO ₂ e/	0.19
	Ten thousand HKD income	
GDH Highway		
Greenhouse gas emissions (Scope 1)	Tonnes CO ₂ e	149.78
Greenhouse gas emissions (Scope 2)	Tonnes CO ₂ e	891.49
Greenhouse gas emission intensity	Tonnes CO ₂ e/	0.02
	Ten thousand HKD income	

Total energy consumption ¹⁵		
and intensity data	Unit	2022
The Group		
Direct energy consumption	Thousand kWh	8,146,163.86
Direct energy intensity	Thousand kWh/Ten thousand	3.56
	HKD income	
Indirect energy consumption	Thousand kWh	767,003.48
Indirect energy intensity	Thousand kWh/Ten thousand	0.34
	HKD income	
GDI Headquarters		
Total Petrol consumption	Thousand kWh	36.83
Total Diesel consumption	Thousand kWh	0.00
Total electricity consumption	Thousand kWh	121.18
Water Resources		
Total Petrol consumption	Thousand kWh	6,783.54
Total Diesel consumption	Thousand kWh	2,130.12
Natural gas consumption	Thousand kWh	44.51
Total electricity consumption	Thousand kWh	666,821.07
Renewable energy consumption	Thousand kWh	4,467.58

¹⁵ The (direct) calorific value coefficient of non-renewable fuels is referred to the *Guideline of the Greenhouse Gas Emissions Accounting* and Reporting for Enterprises in Other Industries and GB/T 2589-2020 General Rules for Calculation of the Comprehensive Energy Consumption.

Total energy consumption ¹⁵		
and intensity data	Unit	2022
Zhongshan GDH Energy		
Total Petrol consumption	Thousand kWh	154.18
Total Diesel consumption	Thousand kWh	498.85
Natural gas consumption	Thousand kWh	54.07
Total coal consumption	Thousand kWh	8,124,104.40
Total electricity consumption	Thousand kWh	220.00
Teem Group		
Total Petrol consumption	Thousand kWh	157.15
Total Diesel consumption	Thousand kWh	23.23
Natural gas consumption	Thousand kWh	10,424.19
Total electricity consumption	Thousand kWh	87,400.66
Hotel segment		
Total Petrol consumption	Thousand kWh	262.02
Total Diesel consumption	Thousand kWh	443.35
Natural gas consumption	Thousand kWh	505.57
Total electricity consumption	Thousand kWh	10,749.27
Renewable energy consumption	Thousand kWh	3.88
GDH Highway		
Total Petrol consumption	Thousand kWh	365.91
Total Diesel consumption	Thousand kWh	67.48
Liquefied petroleum gas consumption	Thousand kWh	108.47
Total electricity consumption	Thousand kWh	1,691.31

Water Resources

The water resources segment actively implements the concept of energy conservation and constantly improves water supply efficiency. The segment has formulated business standards for operation and management, operational indicators and annual assessment targets for energy conservation. Therefore, the segment is able to conduct energy consumption of projects through multiple dimensions, such as energy management, energy replacement and equipment renovation.

To better manage production and operation and promote energy conservation, Water Holdings has formulated various policies, including the Technical Regulations for Operation and Management of Urban Sewage Treatment Plants, the Technical Regulations for the Operation and Management of Urban Water Supply Plants and the Management Measures for the Star Evaluation of Water Plants. Based on the actual situation of each subordinate water company, Water Holdings has formulated energy conservation plans for each plant in a bid to provide technology and management support. To encourage its subordinate water companies to enhance energy consumption management, Water Holdings populates electricity data into its production monitoring platform and rates the water plants that meet the energy conservation requirements as "star water plants".

Designated personnel are assigned to closely monitor energy consumption indicators, conduct monthly analysis on various data, including electricity consumption in production and electrical power system balance, and calculate water consumption, the efficiency of each system and pump station and other indicators so that the operation and management personnel can assess energy consumption performance. Meanwhile, the water resources segment prepares guidelines for an energy conservation assessment of pump stations to help the water companies closely monitor their own energy conservation indicators. The segment also engages thirdparty energy-efficiency rating agencies to regularly monitor the energy consumption of equipment at each pump station to help each subordinate water company identify areas that need improvement in energy consumption and determine the approaches accordingly.

In 2022, the water resources segment carried out technical renovation and maintenance projects, such as energy efficiency enhancement to transformers and water pump equipment motors and renovation and maintenance of water transmission structures. Those projects improved energy efficiency and reduced unnecessary power consumption.

Distributed Photovoltaics

The Company actively responds to the national strategy of developing renewable energy by formulating an innovative development strategy of "Water Resource plus Distributed Photovoltaic". According to the Group's strategy, the segment started construction of distributed photovoltaic facilities in provinces including Guangdong, Hainan, Yunnan, Jiangsu, and Guangxi by making use of advantages of water treatment plants, which are numerous, widespread and spacious spare space. Therefore, GDI can contribute to the achievement of national strategy goal of "carbon peaking and carbon neutrality".

Meanwhile, Water Holdings have formulated the Management Guidelines of Water Holdings for the Construction of Distributed Photovoltaic Projects of Subordinate Water Companies based on the actual conditions of each station to provide management and technological basis for each water plant, therefore, facilitate distributed photovoltaic projects' construction and development.

The distributed photovoltaic projects began in July 2022, which planned to build 80 distributed photovoltaic power plant with a forecast of 71.87 MW total installed capacity and around 71.86 million kWh annual electric energy production. After the fully operation of the project, the equivalent of about 23,000 tons of standard coal usage and 78,700 tons of greenhouse gas emissions will be reduced every year. At the end of Reporting Period, Water Holdings built 31 distributed photovoltaic power plants with 23.4 MW total installed capacity and 48.94 million kWh annual electric energy production.

In the future, Water Holdings is going to continuously promote the ecological priority, conservation, green and low-carbon development by constructing distributed photovoltaic power plant, which fulfil its duty of state-owned enterprise to coordinate with national strategy goal of "carbon peaking and carbon neutrality".



Distributed Photovoltaics

Facility Renovation

Water Holdings vigorously carries out facility renovation and selects energy-efficient equipment. Water Holdings requires the core parts of water pumps, such as impellers and vortex shells, should be designed via the three-dimensional inverse solution, and the water pump should be configured with international top brand motors, while high-power water pumps should be equipped with frequency converters when necessary. For the selection of blowers, the traditional Roots blower has been replaced by air suspension blowers and magnetic suspension blowers. In terms of aeration in the biochemical basin, the air volume and pressure of the blower based on the variation of inflow load are promptly adjusted by a precise aeration system.

Through the above measures, the operation energy consumption of facilities and equipment at Water Holdings was significantly reduced compared with the traditional operation mode under the same working conditions. The operation energy consumption of water pumps was reduced by 10% to 15%, while the operation energy consumption of blowers and biochemical tanks aeration was reduced by 30% and 10% respectively.

In 2022, through technology improvement and equipment replacement, the energy consumption per unit of water companies that higher than "Star water plant" decreased by 10.79%, and drug consumption of water companies that higher than Water holdings' average drug consumption was down by 13.52%.

Property Investment and Development, Department Store Operation

To carry out energy conservation and environmental protection activities in an orderly manner, Teem Group has made energy conservation and environmental protection plans to improve the efficiency of energy utilisation comprehensively. Teem Group strives to create a green and low-carbon shopping mall by applying various environmental protection technologies and renovating lighting, air conditioning, facilities and equipment.

To improve energy consumption performance, Teem Group regularly assesses its operation energy consumption to identify areas that need improvement. In May 2022, Teem Group conducted electricity balance tests based on the mall's electricity consumption data of the month. According to the test, the electricity consumption of tenants in the mall accounted for 44% of the total, while lighting, cooling, lifts and others made up 8%, 34%, 3% and 11%, respectively. It indicated that the electricity consumption of the mall was mainly from tenant electricity consumption, refrigeration, and lighting in the mall. Therefore, while reducing its own energy consumption, Teem Group constantly carries out publicity to raise tenants' awareness of managing and reducing electricity consumption.

Equipment Management

Based on the electricity balance analysis, Teem Group improves the cooling equipment management in the mall. For example, Teem Group enhanced air conditioning management in the Panyu Teemall by controlling temperature setting of air conditioners to effectively reduce the power consumption of air conditioning cooling in the mall. In 2022, the power consumption of cooling via air conditioning was reduced by 18.43% year on year. Meanwhile, through reasonable allocation or reduced running time of 4 LED screens, Teem Group saved a monthly electricity consumption of about 15,900 kWh compared with the previous year.

Elevator Renovation

In April 2022, Teem Group carried out the elevator renovation project in Guangzhou Teemall, which is to complete the upgrading of 19 elevators in the mall within one year. After upgrading, Teem Group can convert the kinetic energy generated by the elevator goes up with no load and down with full load into electric energy, and fed back the electric energy to the building's power grid through the inverter system for the usage of other electrical equipment. In this case, Teem Group is expecting a maximum of 25% energy consumption reduction.

Hotel Ownership, Operation and Management

The hotel segment responds to the national call for energy conservation and low-carbon lifestyles by setting up a hotel energy conservation management team to strengthen communication among departments and actively carries out inspection and analysis of energy consumption, energy-saving renovation and other work to constantly improve energy utilisation management performance.

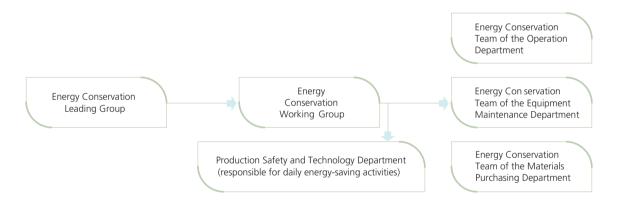
The hotel segment takes various measures to conserve energy:

- Energy consumption analysis: Formulate energy consumption standards for hotels and follow up on the actual monthly energy consumption of each hotel; conduct a comprehensive analysis on hotels which failed to meet the energy consumption standards and require these hotels to take rectification measures as soon as possible.
- Ledger management of major equipment: Constantly monitor the operation of major equipment at the hotels and provide subordinate hotels with suggestions concerning reasonable renovation and maintenance based on service hours, operation status, efficiency ratios and other indicators of equipment.

- Temperature management of air conditioning: Set differentiated cooling/heating time and air conditioning temperatures at different functional areas of the hotel in different time periods to better reduce energy consumption.
- Training on energy conservation: Regularly carry out activities such as training on emission reduction, case sharing and on-site instruction to encourage employees to save energy and reduce emission in their daily work and life actively.

Energy Projects

Striving to grow its business in a green and sustainable way, Zhongshan GDH Energy has formulated policies such as the Standards on Supervision and Administration of Energy Conservation and the Standards on Supervision and Administration of Environmental Protection Technology in accordance with a series of laws and regulations, such as the Law of the People's Republic of China on Conserving Energy, the Cleaner Production Promotion Law of the People's Republic of China, the Circular Economy Promotion Law of the People's Republic of China, and the Renewable Energy Law of the People's Republic of China. Under such policies, Zhongshan GDH Energy has established a three-tier management structure consisting of the company, departments and teams, and improved internal evaluation and appraisal mechanism. By doing so, a more scientific and effective internal supervision and management system has been established to further enhance the energy management.



Zhongshan GDH Energy establishes various production energy consumption assessment indicators such as electricity consumption rate of production factories, average electricity supply, steam temperature and equipment efficiency to ensure that the energy conservation activities were carried out actively. In addition, the energy segment achieves real-time monitoring through the monitoring system of the power plant (Supervisory Information System, or SIS system) to strictly control energy consumption. Furthermore, Zhongshan GDH Energy also formulated the Competition Management Measures on Performance Indicators to regularly carries out competitions. The results of the competitions are linked with the monthly appraisal of individuals to motivate the operation team to reduce energy consumption during production and operation. In 2022, by optimising and renovating condensation pump technologies, cooling tower processes, air preheaters and plasma ignition systems, Zhongshan GDH Energy further reduced the coal consumption of power generation and enhanced the operation reliability of generating units. Zhongshan GDH Energy also optimised heat network ends, relevant equipment, interconnection of pipe networks and other equipment to further improve the economic efficiency and reliability of pipe network operation and reduce energy consumption. In 2022, the plant electricity consumption rate was 5.75%, successfully reaching the annual target of 6%. And the coal consumption of power supply was 305.18g/kWh, reaching the annual target of 307g/kWh.

The Multi-Energy Complementary System Integrating Thermal and Solar Storage

Making full use of the space of its plants, Zhongshan GDH Energy has developed the multi-energy complementary system integrating thermal and solar storage which configures 2 sets of energy storage systems, with a cumulative power generation of 38,000 kWh. Zhongshan GDH Energy has set up a smart energy management system based on the method of "generates self-use power while reserve the remainder" to conserve energy and reduce carbon emission.

Roads and Bridges

GDH Highway actively respond to the "14th Five-Year Plan for Green Transportation" issued by the Ministry of Transport by taking an active part in exploration of green and low-carbon approaches, advocating energy conservation and promoting the use of new energy vehicles. In 2022, GDH Highway purchased 2 new energy vehicles and planned to purchase 4 new energy vehicles in the coming year, aiming to reduce energy consumption and further reduce vehicle exhaust emissions and protect the atmospheric environment.

Water Resources Protection

GDI has formulated the Policy on Water Supply Management of Guangdong Investment Limited in compliance with national policy requirements for water resources. To continuously improve water utilisation efficiency and relieve the pressure of water shortage, GDI conducts scientific management of the water resource development and utilisation of each business segment and encourages each business segment to enhance technological innovation and develop water-saving technologies to make full and reasonable use of water. Moreover, we actively explore water recycling and regeneration technologies, and set up a water reclamation and reuse system to improve water recycling efficiency. In addition to water conservation in our operations, we take an active part in popularising water conservation knowledge to raise public awareness and encouraging the public to protect water resources.

Water consumption and intensity data	Unit	2022
GDI Headquarters		
Total water consumption	Tonnes	476.77
Water Resources		
Total water consumption	Tonnes	53,631,269.12
Total water consumption intensity	Tonnes/	31.64
	Ten thousand HKD income	
Zhongshan GDH Energy		
Total water consumption	Tonnes	6,959,623.00
Total water consumption intensity	Tonnes/	36.81
	Ten thousand HKD income	
Teem Group		
Total water consumption	Tonnes	855,893.13
Total water consumption intensity	Tonnes/	0.70
	Square meter operating area	
Hotel segment		
Total water consumption	Tonnes	120,723.00
Total water consumption intensity	Tonnes/	3.12
	Ten thousand HKD income	
GDH Highway		
Total water consumption	Tonnes	30,020.00
Total water consumption intensity	Tonnes/	0.45
	Ten thousand HKD income	

Water Resources

In accordance with the Group's requirements, the water resources segment has formulated internal water supply management policies and guidelines. In 2022, the water resources segment set water efficiency targets to comprehensively carry out water resources management from various aspects, including optimising water resource consumption, managing water environment and enhancing water conservation awareness.

Water Consumption Reduction

Under the premise of ensuring the safety and quality of water, Water Holdings constantly optimises the production process by recycling the backwashing water, prolonging the backwashing cycle, enhancing the efficiency of sludge suction machines and strengthening the seepage control of pool. As a result, the water consumed in the process of production and operation is strictly controlled and the utilisation efficiency of water resources is optimised.

In 2022, the rate of accumulative water consumption by Water Holdings' subordinate water companies was 3.69%, meeting the requirement of maintaining a rate of no more than 4% (\leq 4%) as specified in the Performance Assessment Standard for Urban Water Supply and Water Use.

Enhancement of Water Conservation Awareness

Taking advantage of its own business characteristics, Water Holdings carries out a series of awareness campaigns themed on water cherishing, water saving and water safety to encourage the public to save and protect water resources.

"Water Safety" Quiz Game

During the China Water Week (22-28 March 2022), Water Holdings launched a quiz game themed on "water safety" through its WeChat public platform, which integrated various water usage scenarios in daily life with water safety knowledge to help users gain knowledge and identify the water safety hazards around them through interesting quizzes. The activity attracted more than 30,000 users, among which over 10,000 of them passed the challenge. Accumulatively, more than 600 gifts were given out in the activity.

Water Plant Open Day

On 22 March 2022, to celebrate the 30th "World Water Day", subordinate water companies such as Meizhou Guangdong Water, Wuzhou Guangdong Water and Liupanshui Guangdong Huanbao collaborated with local governments and media to organise the "Water Plant Open Day" activity and invited local residents to visit these water plants. The invitees were allowed to watch the whole process of tap water production and sewage treatment, which made them realise the values of water resources. Meanwhile, they could also gain more information regarding water safety and water environment protection through water safety posters, interactive games and expert explanation.

Carrying Out the Water Safety Activity in The Community

To promote water conservation and safe use of water, subordinate water companies such as Nansha GDH Water, Danzhou Guangdong Water and Shantou Guangdong Water collaborated with local governments and media to carry out publicity activities about water safety in communities and rural areas. Through various forms such as exhibitions, game interaction, science popularisation classes and on-site water quality testing, we conveyed the concepts of water cherishing, saving and protection to local residents and popularised water safety knowledge.

Property Investment and Development, Department Store Operation

Teem Group constantly monitors its water consumption and incorporates water consumption data inspection into its daily work. Teem Group sets up a special evaluation team to conduct water balance analysis based on water meter data and other estimated data. Based on the analysis, the water equipment and pipelines in the mall are gradually renovated, and various kinds of water conservation equipment, such as water flow restrictors, automatic taps and automatic flushing bedpans are installed to reduce the overall water consumption.

In 2022, Teem Group mainly took the following measures to save wate:

- Regularly recorded the water consumption statistics of tenants and public areas and established water consumption data files. The Engineering Department analysed and compared the water consumption data and promptly followed up on the abnormal water consumption data identified.
- Regularly checked the status of water equipment, taps and valves in the shopping mall and the building and promptly repaired the water equipment in case of breakdowns. Prevented water leakage of water equipment to improve water efficiency.
- The sanitary wares in the toilets of the shopping mall were all replaced with new models to save water resources.

Hotel Ownership, Operation and Management

To reduce water consumption, the hotel segment has formulated the 2022 Water Usage Targets and Related Standard, whereby the Engineering Operation Director is responsible for the overall water management of the hotel, and dedicated personnel are appointed to monitor water consumption and collect relevant statistics. The Hotel Operation and Management Department has set reference standards for water consumption in each area of hotels. All GDI hotels analyse the daily utilisation of each area and promptly adjust their water consumption plans based on the actual consumption so as to eradicate water waste.

In 2022, the hotel segment strengthened water management during the operation by regularly conducting spot check on water appliances and water supply pipelines within hotels. Secondary and tertiary meters were installed to detect damage and leakage, so that the damaged facilities would be promptly repaired or replaced to prevent water leakage. Meanwhile, the electric current and rotate speed of central air-conditioning cooling towers of hotels were adjusted through frequency converters based on changes in weather and temperature to reduce the evaporation of cooling water, which further conserved water resources.

Energy Projects

Attaching great importance to the management and utilisation efficiency of water resources, Zhongshan GDH Energy has complied with the Water Law of the People's Republic of China and formulated the Water Conservation Management Standards and other policies. In 2022, Zhongshan GDH Energy set a water withdrawal target with reference to past data and industry peers benchmarking, aiming to reduce the water withdrawal for power generation (ton/MWh) of the energy resources segment by 11% in 2030 against the FY2020 baseline.

To reduce the water consumption of equipment during operation, Zhongshan GDH Energy takes various water conservation measures, such as replacing fresh water with reclaimed water, recycling water consumed in production and using water conservation equipment. Furthermore, it regularly overhauls its water supply system and equipment to avoid water leakage. Meanwhile, Zhongshan GDH Energy has set up monthly indicators of water withdrawal quota for operation and links the indicators with employees' individual performance assessment to raise employees' water-saving awareness efficiently.

By taking these measures, Zhongshan GDH Energy's water consumption per unit power generated in 2022 stood at 1.94 m³/MWh.

Environmental Impact

As a public utility, GDI has always adhered to the concept of green development. The Company strictly follows the environmental protection laws and regulations such as the Environmental Protection Law of the People's Republic of China, the Law of the People's Republic of China on Conserving Energy, the Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, the Law of the People's Republic of China on Prevention and Control of Water Pollution, and the Law of the People's Republic of China on Prevention and Control of Water Pollution, and the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste. Based on this, the Company has made efforts to optimise resource utilisation, reduce waste discharge and mitigate the potential negative impact of its operation on the ecological environment. GDI and its business segments had no major pollution incidents or violations against relevant laws and regulations in 2022, nor were they subject to complaints, penalties or sanctions for major environmental pollution or violations against environmental regulations.

Emission types and related discharge data	Unit	2022
GDI Headquarters		
SOx emission ¹⁶	Tonnes	0.000059
NOx emission ¹⁷	Tonnes	0.001976
Water Resources		
COD emission	Tonnes	10,936.43
COD emission reductions	Tonnes	107,024.15
Total phosphorus emission reductions	Tonnes	190.54
Total phosphorus emission reductions	Tonnes	1,825.24
NH ₃ -N emission	Tonnes	529.56
NH ₃ -N emission reductions	Tonnes	13,743.34
Sludge treatment	Tonnes	167,961.46
Zhongshan GDH Energy		
SOx emission	Tonnes	236.05
NOx emission	Tonnes	460.88
Smoke emission	Tonnes	35.18
Teem Group		
SOx emission	Tonnes	0.000287
NOx emission	Tonnes	0.008303
Hotel segment		
SOx emission	Tonnes	0.001121
NOx emission	Tonnes	0.016850
GDH Highway		
SOx emission	Tonnes	0.000698
NOx emission	Tonnes	0.036221

¹⁶ Sulfur oxide emissions are generated from the fuel consumption of official vehicles and the consumption of liquefied petroleum gas.

¹⁷ NOx emissions are generated from the fuel consumption of official vehicles, piped natural gas and liquefied petroleum gas.

Waste data	Unit	2022
GDI Headquarters		
Hazardous waste generated	Tonnes	0.04
Hazardous waste recycled	Tonnes	0.04
Non-hazardous waste generated	Tonnes	0.92
Non-hazardous waste recycled	Tonnes	0.00
Water Resources		
Hazardous waste generated	Tonnes	45.19
Hazardous waste recycled	Tonnes	0.02
Non-hazardous waste generated	Tonnes	285.38
Non-hazardous waste recycled	Tonnes	157.20
Zhongshan GDH Energy		
Hazardous waste generated	Tonnes	9.54
Hazardous waste recycled	Tonnes	8.98
Non-hazardous waste generated	Tonnes	424,537.61
Non-hazardous waste recycled	Tonnes	406,335.85
Coal cinder generated	Tonnes	45,600.00
Coal ash generated	Tonnes	293,000.00
Gypsum generated	Tonnes	85,600.00
Teem Group ¹⁸		
Hazardous waste generated	Tonnes	1.88
Hazardous waste recycled	Tonnes	0.42
Non-hazardous waste generated	Tonnes	10,685.61
Non-hazardous waste recycled	Tonnes	10,074.79
Hotel segment		
Hazardous waste generated	Tonnes	0.28
Hazardous waste recycled	Tonnes	0.25
Non-hazardous waste generated	Tonnes	80.66
Non-hazardous waste recycled	Tonnes	69.86
Kitchen waste generated	Tonnes	79.12
GDH Highway		
Hazardous waste generated	Tonnes	0.23
Hazardous waste recycled	Tonnes	0.23
Non-hazardous waste generated	Tonnes	28.13
Non-hazardous waste recycled	Tonnes	28.13

¹⁸ Teem Group has expanded the collection scope of non-hazardous waste and added the collection of construction waste compared to 2021.

Water Resources

Environmental Management

In accordance with related laws and regulations such as the Environmental Protection Law of the People's Republic of China, relevant requirements of business locations and the ISO management system (the "three systems") that integrates environment, quality and safety, the water resources segment has developed an internal environmental management system to define workflows and responsibilities of environmental management. In 2022, the water resources segment was awarded ISO 14001 certification, involving Water Holdings, Yue Gang Water Supply and subordinate water companies.

Emission and Waste management

The water resources segment has implemented the sustainable development concept that "lucid waters and lush mountains are invaluable assets", and has been dedicated to reducing discharge of sewage, waste and exhaust gas, thus minimising our environmental impact.

The segment strictly controlled the discharge of solid waste and sewage in the construction and operation phases of projects. During the project construction phase, Water Holdings, Yue Gang Water Supply and subordinate water companies actively promote information systems and the application of intelligent construction sites to improve the overall efficiency and management level of construction projects. For projects under construction, they implemented civilised construction by closely monitoring water consumption, electricity consumption and noise indicators, and putting emphasis on the recycling of construction by-products (e.g., solid waste and other construction wastes), so as to minimise the impacts on surrounding communities and the environment during construction.

During the project operation phase, sludge is the main solid waste generated from the segment. Water Holdings accelerated the construction of sludge treatment systems for waterworks to ensure compliance in sludge treatment and reduce pollution. The segment takes the need of sludge disposal, such as conditioning, thickening and dewatering into consideration for new designing of new water supply plants. In addition, water plants without sludge disposal facilities shall be retrofitted with sludge disposal equipment. Moreover, water supply plants with compact sites were equipped with integrated treatment devices for sludge thickening which applies the swirl granulation technology.

In terms of sewage management, Water Holdings uses online monitoring equipment to effectively control the indicators such as chemical oxygen demand (COD) and ammonia nitrogen content in water bodies and strictly monitors and treats the pollutants therein to ensure legitimate discharge and avoid damage to the natural environment and the healthy drinking water for residents.

Ecological Conservation

The water resources segment has constantly strengthened water pollution control, actively engaged in collaborative ecological restoration governance and developed innovative technologies of ecological restoration to meet the government and public demand for improving the ecological environment.

Joint Ecosystem Health Assessment with Jinan University

Water Holdings worked with the Research Centre of Hydrobiology of Jinan University to research the application of biodiversity and network structure characteristics in ecosystem health assessment. They monitored the water ecology of the two reservoirs in the Dongshen Water Supply Project and made a dynamic evaluation. Based on the evaluation results, ecological fish farming, water quality dispatch and other measures were adopted to improve water ecology. At present, the water ecology of the two reservoirs has been maintained at a low-risk level for a long time, and the management effect is obvious.

Research on Techniques for Prevention and Control of Cladophora

Cladophora is a widespread alga that grows in water bodies such as lakes, rivers and landscape water bodies. With strong propagative capacity, it poses a great risk to water bodies and biosecurity. Water Holdings cooperated with the Changjiang River Scientific Research Institute of Changjiang Water Resources Commission to research techniques for the prevention and control of Cladophora in open channels. Currently, in the site trial of the Dongshen Water Supply Project in Tangxia, Cladophora is significantly inhibited by the technique applied, which is expected to become one of the new techniques for the prevention and control of Cladophora in open channels of the project.

Property Investment and Development, Department Store Operation

Teem Group improves its environmental protection management systems by establishing an internal environmental management system to define the responsibilities of each functional department. In addition, through education activities and regular inspections on energy conservation and environmental protection, Teem Group is able to prevent environmental protection accidents in all aspects and build green shopping malls.

Emission and Waste management

The major emissions of Teem Group are solid waste and sewage from property construction works, catering tenants and daily operations of its properties. In strict compliance with relevant regulations such as the Management Regulations for Construction Waste of Guangzhou and the Management Regulations for Classification of Domestic Waste, Teem Group has implemented relevant policies. In addition, professional organisations were engaged to collect and treat wastes to ensure proper disposal and minimise the negative environmental impact. Apart from strengthening the management of wastes generated by itself, Teem Group guided merchants in proper garbage sorting to reduce household garbage at sources. Garbage classification is included in the scope of daily inspection, and the quantities of all kinds of domestic wastes are reported on a monthly basis.

In addition, Teem Group promotes the knowledge of environmental protection among employees and tenants via multi-level and multi-channel publicity activities, such as monthly training on environmental protection, to raise their environmental awareness.

Hotel Ownership, Operation and Management

The hotel segment advocates a green lifestyle and promotes the custom of practising frugality by putting a resolute stop to food waste and firmly pushing forward waste management. In response to the Guiding Opinions on Accelerating the Establishment and Improvement of a Green and Low-carbon Circular Development Economic System issued by the State Council, the segment has formulated and implemented internal policies to clarify the responsibility of each department and strictly control waste generation, reducing the impact on the environment.

The major emissions of the segment are solid waste and sewage from construction works, catering and daily operations. The hotel segment established a waste sorting group to conduct garbage classification and waste management. Furthermore, waste sorting bins are placed in hotel lobbies, guest rooms, office buildings and other places, and professional third parties are engaged to collect and treat wastes for proper disposal.

Energy Projects

In strict compliance with relevant laws and regulations such as the Environmental Protection Law of the People's Republic of China on Prevention and Control of Atmospheric Pollution, Zhongshan GDH Energy has formulated a number of environmental management systems to regulate its daily environmental protection, including the Supervision and Management Standards for Environmental Protection Technology, the Management Standards for Reporting Information on Exceeding Environmental Limits, the Solid Waste Management Standards and the Operation Rules for Environmental Protection. Zhongshan GDH Energy has built a comprehensive treatment system for sewage, exhaust and waste, realising enclosed management over the coal transportation system and coal yards. In this way, Zhongshan GDH Energy achieved the environmental targets of centralised sewage treatment, integrated and efficient utilisation of solid waste and gas emissions in compliance with standards.

Emission and Waste management

The pollutants generated by Zhongshan GDH Energy are mainly air pollutants from fossil fuel combustion, including nitrogen oxides, sulphur oxides and dust. Zhongshan GDH Energy strictly complies with the Air Pollutant Emission Standard for Thermal Power Plants and the Notice on Issues Related to the Implementation of the Ultra-low Emission Electricity Price Support Policy for Coal-fired Power Plants. Based on this, the energy segment controls the emission concentration of air pollutants from coal-fired power generation units to ensure that the emission limit requirements of gas units are met.

To reduce the density of sulfide and nitration in the flue gas from coal-fired generation units, Zhongshan GDH Energy has adopted the dual-cycle flue gas desulphurisation process of limestone-gypsum method and the selective catalytic reduction (SCR) system to desulphurisation to denitrify the flue gas emissions from the equipment. For the dust in the flue gas, Zhongshan GDH Energy has installed several electric bag dust removal devices and a dust removal system to reduce the dust content. In 2022, Zhongshan GDH Energy set up a special quality control team to conduct research on specific subjects, with a view to effectively controlling the dust and sulphur dioxide content in the flue gas by reducing chlorine content in the gypsum slurry.

Besides, to get a clearer picture of emissions, Zhongshan GDH Energy not only monitors smoke and dust, sulphur dioxide and nitrogen oxides through an online monitoring system, but also regularly engages third-party testing agencies to monitor mercury content, blackness, noise at the boundary, fugitive emissions, circulating cooling water and domestic sewage in exhaust gas on a quarterly basis.

Upgrading Plan for Denitration Process

In 2022, in response to the requirements of the National Energy Administration, Zhongshan GDH Energy officially launched a denitration project, with an estimated investment of approximately RMB30 million, which is scheduled to be completed by the end of 2024. Zhongshan GDH Energy has invited major environmental protection agencies in China to exchange opinions and discuss the advantages and disadvantages of different processes in detail. Moreover, through technical exchanges with neighbouring power plants at the same grade that have completed the transformation, a research report is prepared to improve technological reserves for the transformation in the next stage.

Ecological Conservation

According to a series of laws and regulations, including the Law of the People's Republic of China on Environmental Impact Assessment, the Law of the People's Republic of China on Land Administration, the Law of the People's Republic of China on Soil and Water Conservation, the Regulations on Environmental Protection Management for Construction Projects and the Regulations on Environmental Impact Assessment of Plans, Zhongshan GDH Energy supervises the whole life cycle of the project to eliminate potential ecological damage. With full consideration of the potential damage of project operation to the surrounding ecological environment and biological habitats, Zhongshan GDH Energy proactively restores the disturbed land and habitats, so as to minimise its negative impact on the ecological environment during construction and operation.

Water Intake Relocation Project of GDH Energy for the Conservation of the Natural Environment

In order to ensure the safety of drinking water sources for Zhongshan city and avoid impact of coal terminals to water near water intakes, Zhongshan GDH Energy launched the water intake relocation projects of Nantou (Huangpu) Town and Huangpu Water Supply Plant. Zhongshan GDH Energy set up a special organisation to continuously coordinates and communicates with government departments and promote the relocation project through multiple channels. All relevant departments of Zhongshan GDH Energy followed up the project process of construction units in a timely manner to help solve the urgent and difficult problems encountered in the project to the maximum extent possible, thus speeding up the construction of the water intake relocation project. As of the end of December 2022, all four stages for the Water Intake Relocation Projects of Nantou (Huangpu) Town ("Nantou Project") and Huangpu Water Supply Plant ("Huangpu Project") have been completed. Therefore, the safety of drinking water in Zhongshan is further guaranteed.

Roads and Bridges

The wastes generated by GDH Highway mainly include used road materials, waste guardrails, waste columns, household garbage and sewage. In strict compliance with the national laws and regulations for various emissions and wastes, GDH Highway has developed the Guidelines for Environmental Protection Compliance to regulate the prevention, control and treatment processes of sewage, exhaust gas and solid waste. In addition, GDH Highway recycles recyclable items to minimise waste. For example, crushing boards generated during road improvement work are used for the backfilling of farm roads, rural roads and housing foundations and the construction of simple retaining structures such as highway drains. At the same time, GDH Highway has signed agreements with waste and used materials dealers to recycle metal wastes on a regular basis, including waste road guardrails and columns, so as to reduce metal waste and minimise environmental impact.

Green Office

The Company advocates green office and actively explores energy-saving measures to reduce energy and material consumption in the workplace. We promote a culture of energy conservation through regular publicities. Water and electricity saving tips are posted in offices, meeting rooms and toilets to raise awareness of green office among all employees. Moreover, we use energy-efficient office and lighting devices and advocate remote video conferencing and paperless office mode. In addition, we encourage employees to commute by public transport, thus contributing to carbon emission reduction for society.

Our measures for green office are as follows:

- Reduce consumption of batteries and office supplies through on-demand application.
- Manage laboratories, customer service work orders, official document circulation and other businesses via an online information management system to reduce paper consumption and waste.
- Place garbage bins in fixed locations of the office and production areas for waste classification and collection.

ENGAGING IN COMMUNITY BUILDING AND GIVING BACK TO SOCIETY

The Company always take its responsibility to maintain the harmony and stability of community. We continue to inject positive energy into social development by taking a range of measures to support community building. Meanwhile, we give back to society and contribute our own efforts to create a warm and friendly atmosphere within the community.

Community Building

As an active advocate of corporate social responsibility, GDI reaches out to the communities where it operates and the underprivileged groups to understand their needs, so as to carry out public welfare activities and contribute to society. We have formulated the Policy on Charity and Public Welfare Activities Management to standardise all business segments' management of public welfare activities. We intend to create a caring and supportive community environment through multi-themed and multi-faceted public service campaigns. During the Reporting Period, the total hours of volunteer activities conducted by the Group for the community was 94,977.80.

Water Resources

The water resources segment actively fulfils its social responsibility by donating supplies to local community to promote rural revitalization.

Property Investment and Development, Department Store Operation

Teem Group spares no effort to improve the happiness of underprivileged families and special needs groups by conducting care projects. In 2022, Teem Group donated supplies for people in Jieyang City and conducted activities such as the "Happiness Project" and "Lightchasers Anchor" for groups with special needs to create a warm atmosphere among the local community.

"Happiness Project"

We hold the philosophy that "more remarkable enterprises should assume more corporate social responsibilities" to secure a sustainable future. To support poor mothers, Teem Group mobilized subsidiaries for donation, which raised funds of RMB22,000, and donated it to the mothers in need in Aba Tibetan and Qiang Autonomous Prefecture, Sichuan Province.

"Lightchasers Anchor"

On 11 January 2022, Comic City joined hands with GuangdongTem Radio and Television station and Yueting APP to launch the "Lightchasers Anchor" programme to provide a showcase for the visually impaired. The program calls the public's attention to this group with special needs and helps them better integrate into society.



Festival Care

During the Spring Festival in 2022, Teem Group visited Shanhu Village, Jiexi County, Jieyang, as part of a paired assistance programme and donated supplies to local people in need to fulfil Teem Group's commitment to public welfare.

Energy Projects

The energy segment has devoted itself to establishing friendly relations with communities while developing its own business. During the Reporting Period, Zhongshan GDH Energy organised employees to participate in charity activities such as the "Charity Walk", the "Staff Relief Month", and the "Mother's Day & Happiness Project" to engage more employees in public welfare activities, which attracted a total of 700 participants with RMB7,176 donated.

Employee Care and Poverty Alleviation

At the time of Spring Festival and Mid-Autumn Festival in 2022, Zhongshan GDH Energy, under the pairing assistance programme, spent RMB200,000 purchasing agricultural products such as peanut oil, rice, passion fruit, and grapes, and RMB10,000 agricultural products such as dried radish and bamboo shoots from Liupanshui, Guizhou, paired with Zhongshan, and Jiexi, Guangdong, paired with GDI, which helped farmers increase their revenue.

Care for Children in Need



In 2022, 5 members of the Zhongshahn GDH Energy Volunteer Team visited the disabled children and children from families receiving minimum living subsidies from Huangpu community in Zhongshan and delivered presents and holiday greetings.

Visit Nursing Home

On the Double Ninth Festival in 2022, 6 volunteers from Zhongshan GDH Energy visited nursing home in Huangpu Town. They had friendly chats with the elderly and delivered festival greetings.



Blood Donation



In 2022, Zhongshan GDH Energy organised 2 blood donations, involving a total of 21 employees, which cultivated employees' sense of social responsibility.

Promoting Public Health of Community

In full support of the national efforts to prevent and control the NCP, the Group strictly follows the national policies on NCP prevention and control with high vigilance and determined confidence. The Group established a leading group for NCP prevention and control to ensure the implementation of various measures in strict accordance with the Emergency Response Plan for Novel Coronavirus Pneumonia Prevention and Control of Guangdong Investment Limited. We united all business segments together to safeguard the health of community.

Water Resources

In the face of the pandemic, the water resources segment answered the call of the local government by organising volunteer teams to help prevent and control the NCP. By taking such action, the segment contributed its efforts to safeguarding public health and safety.

Support to community for preventing and control the NCP

As the NCP spread across multiple areas in Shenzhen, healthcare workers were in shortage. To help solving the problem, Yue Gang Water Supply organised employees and donated RMB100,000 to support the Huangbeiling community in Luohu district in NCP prevention and control.



Efficient Construction of mobile cabin hospitals

Water Holdings actively answered local government's call by organising engineering team to support the construction of mobile cabin hospitals in multiple locations, such as Danzhou, Hainan and Nansha, Guangzhou Due to the efforts, letter of thanks were given by local government. In addition, Water Holdings also helped Shantou, Maoming and other places in NCP prevention and control, which was well received by local governments and the public.



Property Investment and Development, Department Store Operation

In an active response to the national call, Teem Group continues to take routine NCP prevention efforts. When responding to the pandemic, Teem Group reached out to employees and local communities to guarantee their needs for resuming normal life by resolving their difficulties and providing convenience services. In 2022, Teem Group spent a total of RMB79,500 purchasing supplies to guard company' public health during the pandemic.

Hotel Ownership, Operation and Management

Supporting Policies for Tenants

Teem Group responded actively to the Notice on Issues Concerning House Rental Concessions for Provincial SOEs in 2022 issued by the State-owned Assets Supervision and Administration Commission of the State Council and the Implementation Plan of House Rental Concessions in 2022 published by the Group. Teem Group has developed various plans to provide rental concessions by stages, projects, forms of business, and types of organisations in 2022. As a result, concessions totalling RMB232,183,300 were offered to tenants and suppliers as economic support during the difficult time.

Teem Group released a series of policies to help Teemall tenants' businesses get out of the predicament of shutdowns caused by the pandemic. In addition, Teemall opened morning and evening markets and attracted metro passengers to the mall to increase customer visits and thus the sales. From 19 April to 31 May 2022, the total sales of 7 tenants participating in the open markets amounted to RMB105,400. Such policies not only effectively united Teemall tenants, but also encouraged them to get through difficulties.

Organising Vaccination for Tenants

Tenants had difficulties in scheduling vaccination appointments during the pandemic. After recognising this problem, Wanya Investment Management Company worked with relevant departments to organise employees and commercial tenants to get vaccinated. On the scheduled day, a total of 267 employees and tenants were inoculated.

Regular Disinfection in Malls

To provide clean and sanitised shopping space in malls, Comic City organised all employees to regularly disinfect the malls to resolve the problem of shortage of front-line NCP prevention workers, delivering a total of 800 service hours. In this way, Comic City safeguarded customers' safety and fulfilled their commitments of "taking the initiative to serve the community"



The hotel segment has updated relevant policy documents such as the Guidelines of Hotel Operation and Management Department for Novel Coronavirus Pneumonia Prevention and Control at Headquarters, the Guidelines for Novel Coronavirus Pneumonia Prevention and Control after Work Resumption, and the Guidelines for Novel Coronavirus Pneumonia Prevention and Control. The segment urges subsidiaries to promptly revise relevant policies to offer guidance on NCP prevention and control. The segment organises subordinate units to promptly adjust NCP prevention measure and conduct nucleic acid testing, NCP extermination and NCP prevention supply guarantee. Moreover, the segment strictly follows the 3-level on duty requirement during the pandemic. In addition, the segment encourages the third dose of vaccination, and guide those who meet the vaccination requirements to receive the fourth dose to better prevent the NCP. By the end of the Reporting Period, the inoculation rate of employees who received the third dose reached 97.02%, and all employees (100%) eligible for vaccination have access to it.

At the critical moment in the fight against the NCP, the segment participated in the volunteer programme of building a civilised Shenzhen by setting up a volunteer team, so as to leverage its advantages to provide voluntary services to communities within its capability.

"Yijiaren" Volunteer Team

With keeping public needs in heart, the hotel segment jointly set up the "Yijiaren" volunteer team with the Party Working Committee of Jiabei Community at Nanhu street, Luohu district, Shenzhen, to comfort residents through online and offline channels and supported residents in need in the communities, contributing the segment' efforts to support the local community.

Training in NCP Prevention

The hotel segment carried out training session on the Novel Coronavirus Pneumonia Response Plan and emergency drills on NCP prevention and control for all employees to improve their emergency response capability and familiarity with relevant processes. The purpose of training and emergency drills is to protect the health of employees and customers and build a safe and sound community.



Environmental Protection

Enterprises play an important part in environmental protection. Therefore, the Group have initiated a series of low-carbon and environmentally friendly activities to encourage our employees and the public to protect the environment for a greener future.

New Uses for Unwanted Items



Panyu Teemall attaches great importance to recycling materials. With this, Panyu Teemall carried out several campaigns for customers of all ages, such as interactions with customers on resource recycling, marine waste recycling testing, wasted bottle, woven bag making, environmental protection voices workshop, and "Donations of old items for Love". The campaigns have helped those involved know better and lead "low-carbon lifestyles for environment protection".

Artistic Showpiece Themed on Marine Environment Protection

From 24 September to 6 November 2022, Panyu Teemall, collaborating with young artists from the Greater Bay Area, made an artistic showpiece themed on marine environment protection. The activity not only aims to provide a visual experience for customers, but also to popularise the concept of eco-environment protection.



Environmental Protection Awareness Campaigns



Teem Group advocated the environmental protection concept in a series of activities like "Earth Hour", the "World Earth Day" (22 April), the "World Environment Day" (5 June), and the "Guangdong Energy Conservation Week" to promote environment protection idea and build a green future.

The Company honours its commitment to community building and public welfare undertakings in a series of campaigns. We cared for the elderly and the children, solved problems for employees and residents, assisted in NCP prevention and control, and advocated environmental protection. In the future, by joining hands with employees and partners, we will continue to facilitate equal communication and mutual support in the community while delivering vitality to society with the effort of GDI.

APPENDIX ESG REPORTING GUIDE INDEX

ESG Indicator		Chapter
Mandatory Disclosure Requirements		
Governance Structure		
(i)	a disclosure of the board's oversight of ESG issues;	ESG GOVERNANCE STRUCTURE
(ii)	the board's ESG management approach and strategy, including the process used to evaluate, prioritise and manage material ESG-related issues (including risks to the issuer's businesses); and	ESG GOVERNANCE STRUCTURE
(iii)	how the board reviews progress made against ESG-related goals and targets with an explanation of how they relate to the issuer's businesses.	ESG GOVERNANCE STRUCTURE
Reporting Principles		
Materiality	The ESG report should disclose: (i) the process to identify and the criteria for the selection of material ESG factors; (ii) if a stakeholder engagement is conducted, a description of significant stakeholders identified, and the process and results of the issuer's stakeholder engagement.	REPORTING PRINCIPLES
Quantitative	Information on the standards, methodologies, assumptions and/or calculation tools used, and source of conversion factors used, for the reporting of emissions/energy consumption (where applicable) should be disclosed.	REPORTING PRINCIPLES
Consistency	The issuer should disclose in the ESG report any changes to the methods or KPIs used, or any other relevant factors affecting a meaningful comparison.	REPORTING PRINCIPLES
Reporting Boundary		
process used to identify which	orting boundaries of the ESG report and describing the n entities or operations are included in the ESG report. If e, the issuer should explain the difference and reason for the	REPORTING SCOPE

ESG Indicator		Chapter
"Comply or explain" Provisions		
Aspect A1: Emissions		
General Disclosure	Information on:(a)the policies; and(b)compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.Note:Air emissions include NOx, SOx, and other pollutants regulated under national laws and regulations. Greenhouse gases include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. Hazardous wastes are those defined by national regulations.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.1	The types of emissions and respective emissions data.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.5	Description of emissions target(s) set and steps taken to achieve them.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target(s) set and steps taken to achieve them.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION

APPENDIX ESG REPORTING GUIDE INDEX (CONTINUED)

ESG Indicator		Chapter
Aspect A2: Use of Resources		
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
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.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	The Group is not involved in business that consumes any packaging materials.
Aspect A3: The Environment and Natural Resources		
General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
KPI A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them.	ENERGY CONSERVATION AND ENVIRONMENTAL PROTECTION
Aspect A4: Climate Change		
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	FEATURED TOPIC: EFFORTS TO ADDRESSING CLIMATE CHANGE
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.	FEATURED TOPIC: EFFORTS TO ADDRESSING CLIMATE CHANGE

ESG Indicator		Chapter
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. 	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B1.1	Total workforce by gender, employment type (for example, full- or part- time), age group and geographical region.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
Aspect B2: Health and Safe	ety	
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.	SAFETY FIRST AND QUALITY OPERATION
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	SAFETY FIRST AND QUALITY OPERATION
KPI B2.2	Lost days due to work injury.	SAFETY FIRST AND QUALITY OPERATION
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	SAFETY FIRST AND QUALITY OPERATION

APPENDIX ESG REPORTING GUIDE INDEX (CONTINUED)

ESG Indicator		Chapter
Aspect B3: Development and Training		
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities. Note: Training refers to vocational training. It may include internal and external courses paid by the employer.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B3.2	The average training hours completed per employee by gender and employee category.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
Aspect B4: Labour Standard	ls	
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.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	CARING ABOUT EMPLOYEES AND BUILDING A STRONG WORKFORCE
Aspect B5: Supply Chain Ma	anagement	
General Disclosure	Policies on managing environmental and social risks of the supply chain.	SAFETY FIRST AND QUALITY OPERATION
KPI B5.1	Number of suppliers by geographical region.	SAFETY FIRST AND QUALITY OPERATION
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.	SAFETY FIRST AND QUALITY OPERATION

ESG Indicator		Chapter	
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	SAFETY FIRST AND QUALITY OPERATION	
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	SAFETY FIRST AND QUALITY OPERATION	
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.	SAFETY FIRST AND QUALITY OPERATION	
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	The Group's products and services are not subject to recalls for health and safety reasons.	
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	SAFETY FIRST AND QUALITY OPERATION	
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	SAFETY FIRST AND QUALITY OPERATION	
KPI B6.4	Description of quality assurance process and recall procedures.	SAFETY FIRST AND QUALITY OPERATION	
KPI B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored.	SAFETY FIRST AND QUALITY OPERATION	

APPENDIX ESG REPORTING GUIDE INDEX (CONTINUED)

ESG Indicator		Chapter	
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. 	ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION	
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.	ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION	
KPI B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored.	ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION	
KPI B7.3	Description of anti-corruption training provided to directors and staff.	ENHANCING RISK MANAGEMENT AND COMBATING CORRUPTION	
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.	ENGAGING IN COMMUNITY BUILDING AND GIVING BACK TO SOCIETY	
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	ENGAGING IN COMMUNITY BUILDING AND GIVING BACK TO SOCIETY	
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	ENGAGING IN COMMUNITY BUILDING AND GIVING BACK TO SOCIETY	