



GUANGDONG INVESTMENT LIMITED
(粵 海 投 資 有 限 公 司)

Stock Code : 00270



Environmental, Social and
Governance Report
2021







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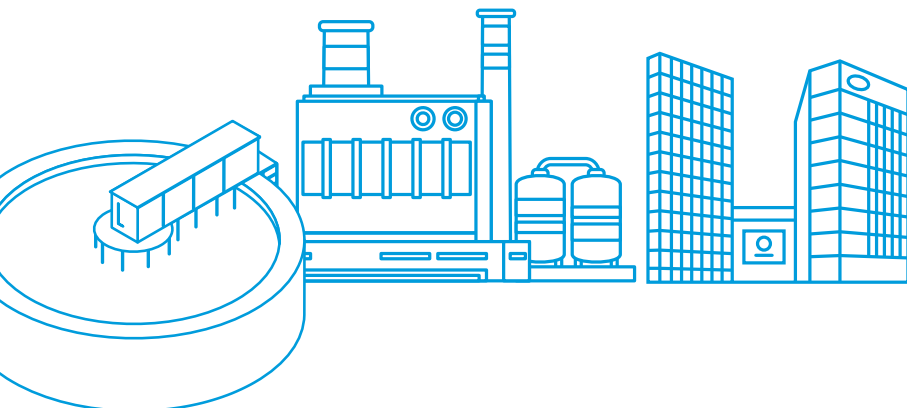


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ABOUT THE REPORT

Guangdong Investment Limited (“GDI” or the “Company”, together with its subsidiaries, collectively referred to as the “Group”, “we” or “us”) is pleased to present to shareholders its Environmental, Social and Governance Report for the year 2021 (the “Report”). The Group engaged an independent third-party adviser and prepared and compiled the Report in accordance with the Environmental, Social and Governance Reporting Guide (the “ESG Reporting Guide”) contained in Appendix 27 to the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the “Listing Rules”).

The Report complies with the four principles of materiality, quantitative, balance and consistency as contained in the ESG Reporting Guide. Apart from disclosing the “comply or explain” matters set out in the ESG Reporting Guide, the contents of the Report are also determined with reference to the materiality and relevance of sustainability issues to the Group and stakeholders. For details, please refer to the section “Sustainable Development Management” in the Report. In addition, we will continue to strengthen our information collection process and improve our future sustainable development performance and disclosure with reference to the Group’s capital market rating.





SCOPE OF THE REPORT

The Report presents the Group's vision of and commitment to sustainable development and showcases the Group's significant progress and achievements in environmental, social and governance aspects from 1 January 2021 to 31 December 2021 by setting out the sustainable development concepts of the Group's six business segments, namely water resources, property investment and development, department store operations, hotel ownership, operation and management, energy projects as well as road and bridge operation.

Always bearing in mind the environment and stakeholders, the Group focuses on long-term and sustainable business development, proactively makes positive contribution and sets directions for management and improvement in respect of issues such as high efficiency and integrity, efficient water supply, green operation, climate risk prevention and control, ecosystem protection, assurance of product quality and safety, safe working environment and community investment.

In addition, Guangdong Land Holdings Limited ("Guangdong Land") (stock code: 00124), a subsidiary directly held by the Group, also published separate report in accordance with the ESG Reporting Guide. Its performance on sustainable development is detailed in the 2021 Environmental, Social and Governance Report of Guangdong Land Holdings Limited (available for download at www.gdland.com.hk).

CONTACT INFORMATION

Should you have any query or feedback on the Report and its contents, please feel free to contact us at:

Address: 28th and 29th Floors, Guangdong Investment Tower, 148 Connaught Road Central, Hong Kong

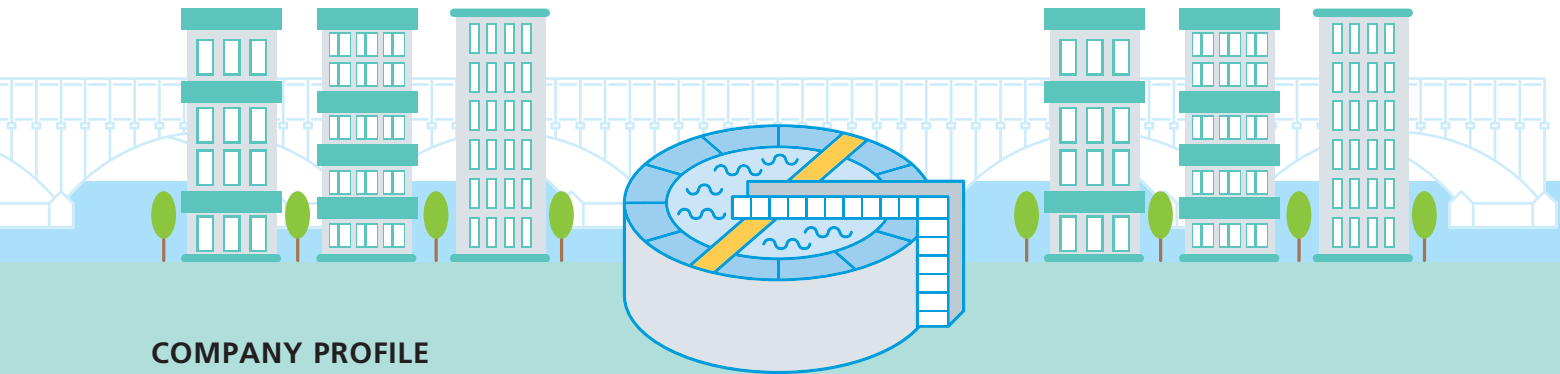
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2 ABOUT GDI



COMPANY PROFILE

The Company, formerly known as Union Globe Development Limited ("Union Globe"), was listed on the stock market in Hong Kong in 1973 (stock code on the Main Board: 00270). In January 1987, an enterprise owned by the Guangdong provincial government acquired a majority stake in Union Globe and changed its name to Guangdong Investment Limited in July 1988. Currently, the Company is a constituent stock of the Hang Seng China (Hong Kong-listed) 100 Index, the Hang Seng China-Affiliated Corporations Index, the Hang Seng Composite Index and the Hang Seng Composite Industry Index – Utilities.

As at the date of publication of the Report, the Company's ultimate controlling shareholder, 廣東粵海控股集團有限公司 (Guangdong Holdings Limited, hereinafter referred to as "Guangdong Holdings"), holds approximately 56.49% shareholding interest in the Company through its wholly-owned subsidiary, GDH Limited (hereinafter referred to as "GDH"). 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.

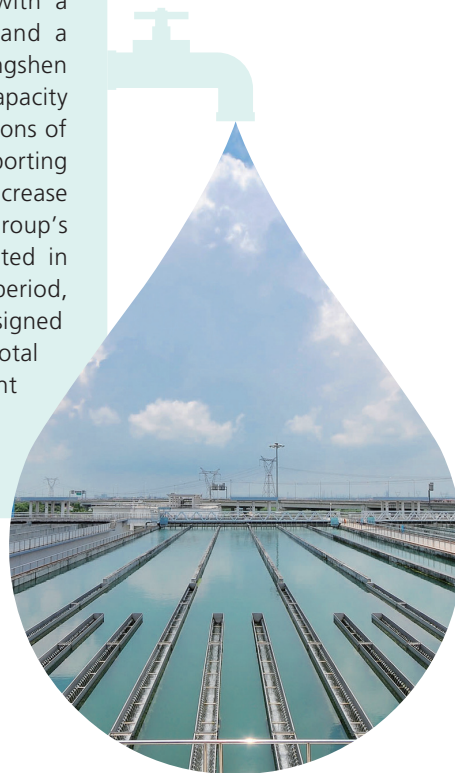
As of 31 December 2021, GDI recorded a market capitalisation of approximately HK\$64,790 million, employed 9,909 employees and had approximately 197 wholly-owned and controlling companies. It holds approximately 73.82% of the issued share capital of Guangdong Land.

BUSINESS SEGMENTS

GDI is committed to becoming a leading enterprise in the industry, constantly developing its core businesses and strengthening its business capabilities. The Group operates its businesses in the Mainland China, Hong Kong and Macau and its core businesses comprise the following six business segments:

WATER RESOURCES

The Group's water resources segment, including Guangdong Yue Gang Water Supply Company Ltd. ("Yue Gang Water Supply") and Guangdong Water Holdings Limited ("Water Holdings"), contributed 59.9% of the Group's revenue in 2021. This segment's businesses mainly include untreated water supply, tap water supply, sewage treatment and waterworks construction, which are operated by approximately 60 subsidiaries and associated companies, with a customer base exceeding tens of millions in Hong Kong and a number of provinces in Mainland China. In particular, Dongshen Water Supply Project, with a designed annual water supply capacity of 2,423 million tons, supplied an aggregate of 2,355 million tons of water to Hong Kong, Shenzhen and Dongguan during the reporting period (2020: 2,205 million tons), which represented an increase of 6.8%. Aside from Dongshen Water Supply Project, the Group's water resources projects in Mainland China are mostly located in Southern China and Eastern China. During the reporting period, for the Group's other water resources projects, the total designed water supply capacity of the water supply plants and the total designed sewage processing capacity of the sewage treatment plants were 13,783,200 tons per day (2020: 12,412,000 tons per day) and 2,635,200 tons per day (2020: 1,739,200 tons per day), respectively.



2. ABOUT GDI (CONTINUED)

PROPERTY INVESTMENT AND DEVELOPMENT

The Group's property investment and development business contributed 26.5% of the Group's revenue in 2021. The Group is engaged in property investment and development business in Hong Kong, Guangzhou, Shenzhen, Tianjin, Panyu, Jiangmen, Zhuhai, Foshan and Zhongshan. The Group's headquarter is located at Guangdong Investment Tower, Connaught Road Central, Hong Kong, with a total gross floor area ("GFA") of approximately 18,956 m² attributable to the Group. The other properties held by the Group mainly include Teem Plaza, Tianjin Teem Shopping Mall and GDH Plaza (formerly known as Panyu Wanbo CBD Project). In particular, Teem Plaza comprises a shopping mall, an office building and a hotel. Favourably located in the prime area of Guangzhou, Teem Plaza covers a total GFA and lettable area of approximately 160,000 m² and 106,000 m², respectively. Situated at a convenient location above underground railroads and opened in June 2017, Tianjin Teem Shopping Mall stands as one of the leading shopping and leisure destinations in the renowned "Binjiang Dao – Heping Road" Commercial District in Tianjin, with a total GFA and lettable area of approximately 205,000 m² and 145,000 m², respectively.



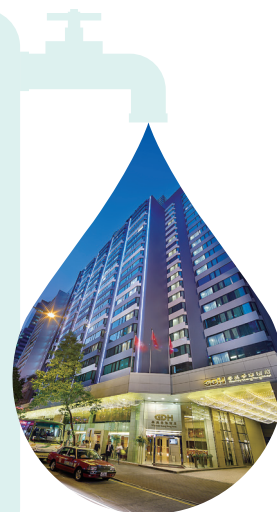
DEPARTMENT STORE OPERATION

The Group's two subsidiaries, namely 廣東粵海天河城商業有限公司 (GDH Teem Commercial Co., Ltd.) and 廣州市粵海天河城百貨商業有限公司 (collectively referred to as "Teemall Department Store") are engaged in department store operation, collectively generating 2.2% of the Group's revenue in 2021. During the reporting period, GDH Teem Commercial Co., Ltd. and 廣州市粵海天河城百貨商業有限公司 operated a total of six stores, including Teemall Store, Wan Bo Store, Ming Sheng Store, Dong Pu Store, Ao Ti Store and Nanhai Store (ceased operation in October 2021). As of 31 December 2021, the aggregate leasable area was approximately 123,900 m² (2020: 125,800 m²).



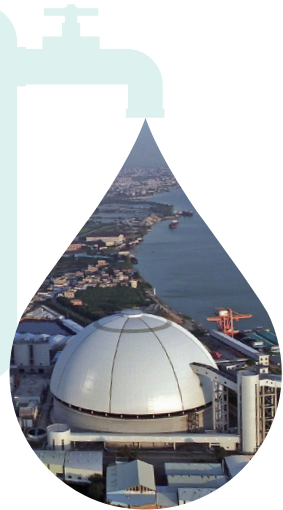
HOTEL OWNERSHIP, OPERATION AND MANAGEMENT

During the reporting period, the Group's hotel management team ("Hotel Management Company") managed a total of 27 hotels (2020: 37 hotels), of which three were located in Hong Kong, one in Macau and 23 in Mainland China, collectively generating 1.3% of the Group's revenue in 2021. Among the Group's five star-rated hotels, four are managed by its hotel management team except the one located in Guangzhou, namely Sheraton Guangzhou Hotel which is managed by other hotel management group. During the reporting period, the average occupancy rate of Sheraton Guangzhou Hotel was 74.8% (2020: 66.1%) and that of the other four star-rated hotels was 57.6% (2020: 34.2%). In addition, one hotel situated in Zhuhai is being renovated by the Group.



ENERGY PROJECTS

The Group's energy business includes the project of 中山粵海能源有限公司 (Zhongshan GDH Energy Co., Ltd.) ("Zhongshan GDH Energy Project") and the project of 廣東粵電靖海發電有限公司 (Guangdong Yudean Jinghai Power Generation Co., Ltd.) ("Yudean Jinghai Power Project"), collectively generating 5.4% of the Group's revenue in 2021. Zhongshan GDH Energy Project has two 300 MW heat and electricity generators with a total installed capacity of 600 MW. Sales of electricity amounted to 2,969 million kWh during the reporting period (2020: 2,877 million kWh), representing an increase of 3.2%. Yudean Jinghai Power Project (in which the Group holds a 25% effective interest) has four power generators with a total installed capacity of 3,200 MW. Sales of electricity amounted to 16,742 million kWh during the year (2020: 13,214 million kWh), representing an increase of 26.7%.



ROAD AND BRIDGE

The Xingliu Expressway Project held by 廣西粵海高速公路有限公司 (Guangxi GDH Highway Co., Ltd.) ("GDH Highway") contributed 4.7% of the Group's revenue in 2021. The highway is located in Guangxi Zhuang Autonomous Region and comprises a main line which is approximately 100 km in length and three connection lines (to Xingye, Guigang and Hengxian respectively) with an aggregate length of approximately 53 km. During the reporting period, the average daily toll traffic flow of the Xingliu Expressway was 22,710 vehicle trips (2020: 14,305 vehicle trips), increasing by 58.5%. In addition, the Group entered into a cooperation agreement with 東莞市謝崗鎮人民政府 (Dongguan City Xiegang Town People's Government) for the development of certain A-grade highways, connecting roads and municipal roads (not being toll roads) (the "Project Roads") in 銀瓶創新區 (Yinping Innovation Zone) in Dongguan, Guangdong Province. As of 31 December 2021, out of a total of eight Project Roads, four Project Roads were completed and one Project Road was under construction.



2. ABOUT GDI (CONTINUED)

CORPORATE STRATEGY

The Group remains committed to enhancing the operational development of its existing businesses and expanding its core businesses so as to generate continuous and steady investment returns for shareholders. The Group will further expand its competitive strengths and improve its influence on the market through optimising asset portfolio, enhancing capital management, leveling up management standard and improving corporate governance, with an aim to provide strong support for the enterprise's long-term, steady and sustainable development.

In line with its strategic development plan, the Group will continue with its investments in water resources management, property investment and development as well as infrastructure business in a proactive and prudent manner. The Group will also actively explore investment opportunities in untreated water and urban water supply, sewage treatment and integrated water environment management projects, accelerate the pace of project acquisitions and enhance its capability in developing new business. In addition, it will further expand its core business scale and strength, optimise its asset portfolio and resource allocation, and proactively seek potential development opportunities arising from "The Greater Bay Area Initiative". Meanwhile, we will arouse awareness on ecological environmental protection and biodiversity conservation, both within the organisation and at the community level, to ensure the Group operates in a sustainable manner while balancing our impacts on natural habitats.

Against the backdrop of globalisation, the Group will continue to capitalise on Hong Kong's strength as an international financial centre and a capital raising platform, improve capital utilisation efficiency, strengthen capital management capabilities and foster effective value enhancement of capital. At the same time, the Group will also optimise human resources build-up, further improve management expertise and step up its efforts in strengthening corporate culture so as to enhance corporate core competitiveness.

For more information on the business operation and financial position of the Group, please refer to the 2021 Annual Report of the Group, which is available for download at the website of the Company at www.gdi.com.hk.

CORPORATE GOVERNANCE

To be consistent with the needs and requirements of its businesses and the best interest of all its stakeholders, the Group always adheres to the highest standard of corporate governance and has applied the relevant provisions of the Corporate Governance Code contained in Appendix 14 to the Listing Rules so as to ensure the Group's stable and efficient operations.

The Chairman provides leadership to the Board and oversees the overall functioning of the Board. Acting in the best interests of the Group, the Board is responsible for leading the Company's development, establishing its strategic objectives and ensuring that the Group has access to the necessary financial and other resources to achieve its objectives by formulating the Group's overall strategies and policies. It also oversees the work of the Group's management and reviews the business performance of the Group. The Board has established various committees to advise on various aspects of the Group's development and policy planning to ensure sound and effective operation of the Group. The Nomination Committee is responsible for identifying candidates for directorship and considering appointment and succession planning, while the Remuneration Committee assists in determining the remuneration packages for directors and senior management. The Audit Committee assists the Board in monitoring the Group's risk assessment, control and management processes and conducts a detailed review of the risk management and internal control systems annually to ensure their effectiveness.

As at the date of publication of the Report, the Board of the Company comprises five executive directors, three non-executive directors and five independent non-executive directors. The Group has received confirmation of independence from the independent non-executive directors, and assessed and confirmed the independence of all the independent non-executive directors. Meanwhile, the Group recognised that they all have a wealth of experience in diverse fields and possess the upright character and considered that they can make valuable contributions to the Board and the Company by offering independent and constructive advice.

In addition, the Group recognises and embraces the benefits of having a diverse Board and perceives increasing diversity at Board level as an essential element in contributing to the attainment of the Group's strategic objectives and sustainable development. All Board appointments are based on meritocracy, taking into consideration its own business model and specific needs from time to time and having due regard to the benefits of diversity on the Board against objective criteria. The Nomination Committee has set the measurable objectives based on five focused areas: gender, age, length of service, professional experience and skills and knowledge for the implementation of board diversity of the Group, and reviews the Board Diversity Policy to ensure its continued effectiveness from time to time.

The following is a breakdown of the members of the Board of the Company by nature:

Gender	Male: 12		Female: 1
Age	40-49: 4	50-59: 5	60 or above: 4
Length of service	Less than 5 years: 5	5-10 years: 2	Over 10 years: 6
Directorship in other listed companies	Nil: 9	2 companies: 1	3 companies or above: 3

For more information about the corporate governance of the Company and the work of the Board, please refer to the section "Corporate Governance Report" in the 2021 Annual Report of the Group and the webpages regarding Corporate Governance and Board of Directors on the Company's website.

3 SUSTAINABLE DEVELOPMENT MANAGEMENT



GDI always adheres to the principle of sustainable development and regards it as the foundation of its sustainable operation. The Group continues to optimise the risk identification, assessment and decision-making mechanism, and is committed to establishing a governance structure with a clear distinction between authority and responsibilities to enhance its core competitiveness and safeguard the interests of the Group's stakeholders.

SUSTAINABLE DEVELOPMENT STRATEGY

Societies around the world are experiencing rapid urbanisation. Population growth in cities will bring multi-faceted sustainability challenges to land use planning, natural resource consumption and urban construction and development needs. As a responsible corporate, the Group firmly believes that its operations not only create values for shareholders, but also contribute to the sustainable development of the Group and the society at large. The Group integrates sustainable development and stakeholder expectations into the company's business decision-making process by developing and utilising green and sustainable technologies.

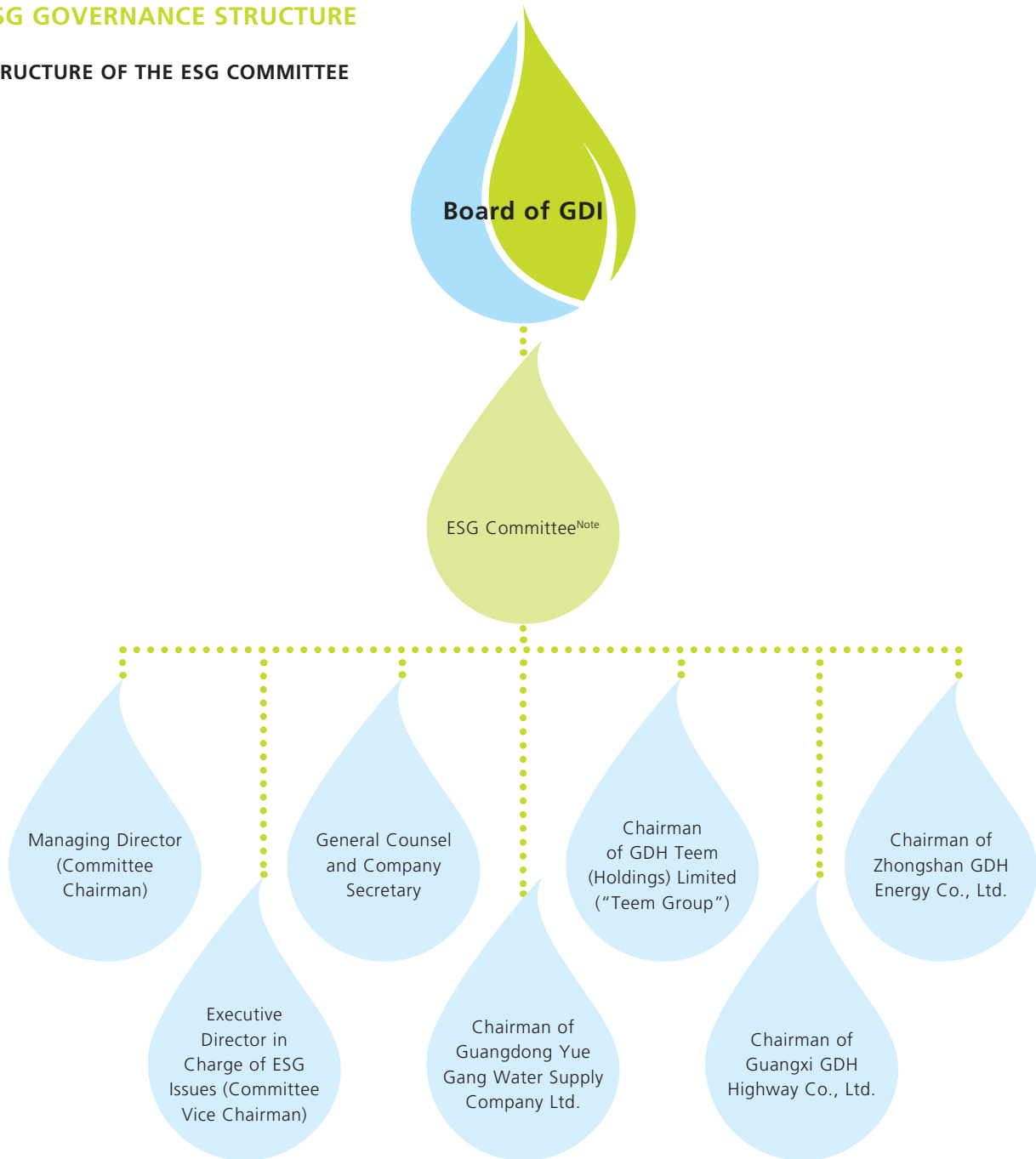
GDI gathers the expectations and suggestions on ESG-related issues from its internal and external stakeholders on a regular basis via its regular communication mechanism in conjunction with on-site interviews and online questionnaires. Meanwhile, we also seek to determine material issues relating to sustainable development through stakeholder engagement. This serves as objective and reliable reference for the preparation of the annual ESG report and the formulation of our directions and objectives of sustainable development in the future in a bid to respond to stakeholder expectations on the Group's management and disclosure performance.

We continuously carry out work pertinent to sustainability issues which are highly relevant to the Group in an orderly manner, strengthen the management and review the effectiveness of relevant measures, including ensuring stable water supply, maintaining with water quality standard, active energy consumption and emission reduction, improving product and service quality, and safeguarding the interests of the Group's stakeholders such as employees, suppliers and community groups. We have also formulated long-term and meaningful goals by supplementing and improving policies related to sustainable development at the Group level and refining the Group's requirements and standards for the business segments and related personnel in the daily operation and sustainable development.

In addition, we actively respond to the challenges brought by climate change to our business operations. In addition to the existing work related to climate change for the water resources and energy projects segments, we further conducted the identification and management practices of risks and opportunities for property investment and development and department store operation during the Year, and made meaningful disclosure. The identification and management practice of climate risks and opportunities will further enhance the awareness and understanding of climate change and other environmental issues within the Group.

ESG GOVERNANCE STRUCTURE

STRUCTURE OF THE ESG COMMITTEE



ESG Working Groups of Subsidiaries

- Setting ESG targets
- Executing ESG work
- Reporting ESG information

Note: The general manager of the relevant company shall serve as a member of the ESG Committee when the position of the chairman of the subsidiaries becomes vacant

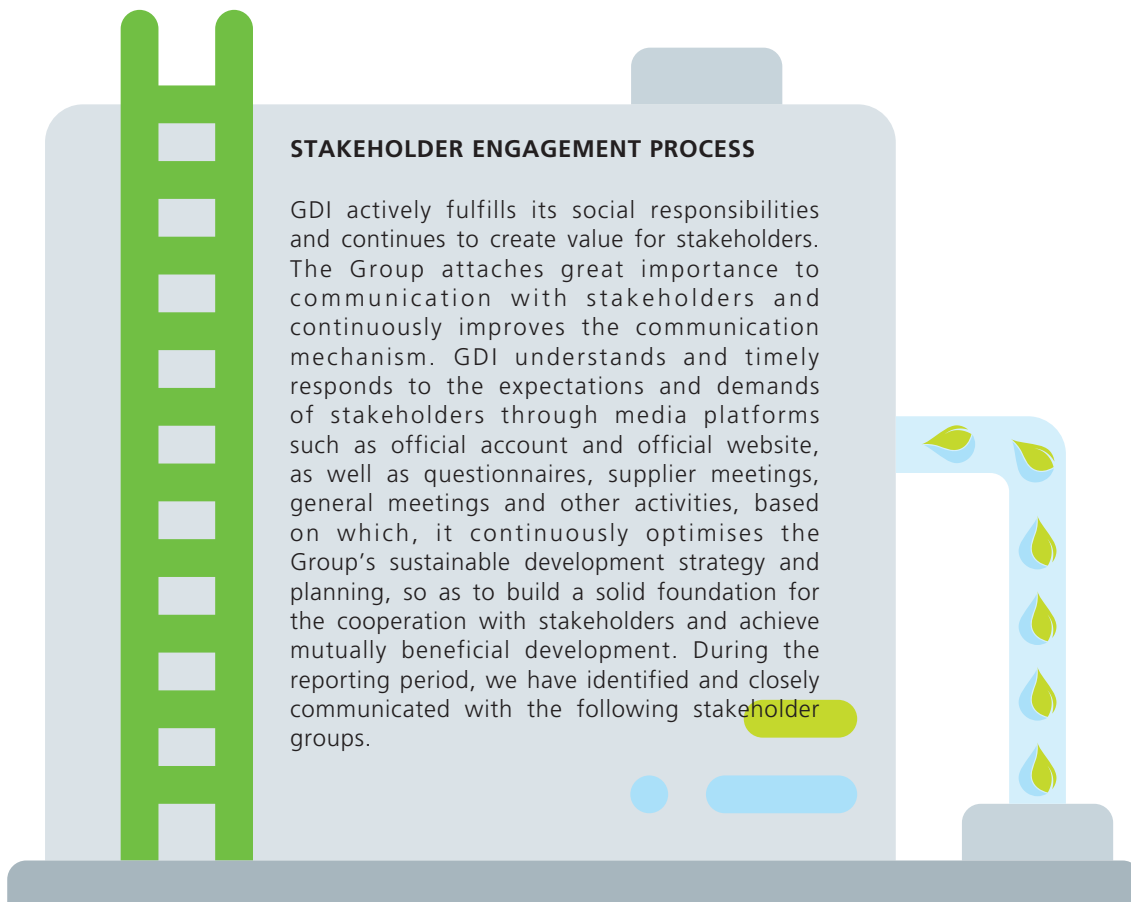
3. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

A governance structure with clear responsibilities is the foundation for the smooth implementation of sustainable development and the key to corporate operation. Being the highest decision-making body in the Group's ESG structure, the board of directors of the Company is responsible for the leadership, decision-making and supervision of the Group's ESG performance and relevant resource allocation. The Environmental, Social and Governance Committee (the "ESG Committee") under the Board is composed of the Executive Director in charge of ESG matters, General Counsel and Company Secretary and senior management personnel from all business segments of the Company, and is chaired by the Managing Director of the Company. The ESG Committee assumes full responsibility for monitoring, coordinating and evaluating the Group's ESG-related issues and risks, reviews the direction of sustainable development strategies in accordance with relevant laws, regulations and major trends of peers and public opinions and timely reports relevant work to the Board at least once a year. Based on the ESG Committee's report, the Board confirms the results of the Group's ESG materiality analysis and leads the Company to formulate appropriate and effective risk management approach and measures as a whole. The ESG Committee is also responsible for conducting regular reviews of various relevant ESG policies and practices at the Group level. For details, please visit the website of GDI.

The ESG Committee is in charge of establishing the ESG working groups (the "ESG Working Groups") for the subsidiaries of GDI to undertake relevant daily work and coordinates, directs and supervises the responsibilities and work arrangements of the ESG Working Groups. The subsidiaries and their relevant departments are responsible for implementing the ESG work arrangements assigned by the Board, formulating practical ESG work plans, setting corresponding targets, continuously monitoring the implementation progress and performance, collecting information and data and reporting to the headquarters for communication and coordination, which the ESG Committee uses to coordinate the preparation of the Group's annual ESG report. In addition, the Group requires members of the ESG Working Groups under different segments to sign the "Letter of Undertaking of ESG Information Disclosure" to ensure the credibility of information disclosure.

STAKEHOLDER ENGAGEMENT PROCESS

GDI actively fulfills its social responsibilities and continues to create value for stakeholders. The Group attaches great importance to communication with stakeholders and continuously improves the communication mechanism. GDI understands and timely responds to the expectations and demands of stakeholders through media platforms such as official account and official website, as well as questionnaires, supplier meetings, general meetings and other activities, based on which, it continuously optimises the Group's sustainable development strategy and planning, so as to build a solid foundation for the cooperation with stakeholders and achieve mutually beneficial development. During the reporting period, we have identified and closely communicated with the following stakeholder groups.



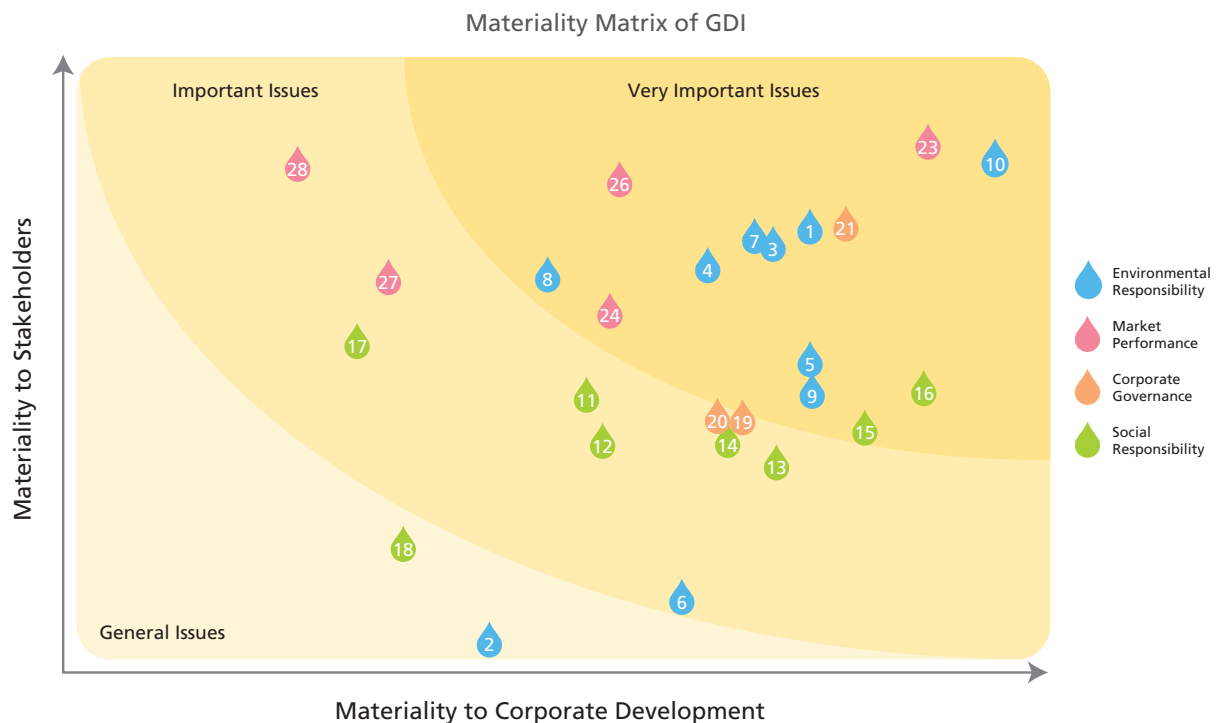
Stakeholders	Engagement Objectives	Primary Engagement Channels
Employees	Understand employees' ESG focuses and views towards the Group Collect employees' recommendations for improving ESG work Enable employees to better understand the Group's work on ESG development	Group and departmental meetings Staff meetings Staff caring activities Questionnaires Internal training Physical meetings of labour union
Consumers	Understand consumers' ESG focuses and views towards the Group Provide products that cater to consumers' needs Offer more dedicated services to consumers Formulate marketing strategies that align with consumer expectations	Corporate official account Corporate open days Questionnaires
Suppliers, contractors and service providers	Establish long-term rapport Create mutually beneficial partnerships Create an atmosphere of mutual trust and cooperation Jointly address ESG issues	Supplier meetings On-site technological knowledge exchanges and inspections Questionnaires Seminars
Investors, shareholders and analysts	Understand the Company's ESG development and core focuses Demonstrate the directions and focuses of the Group's ESG work Understand the latest interpretations of investors, shareholders and the market about ESG matters and their expectations towards the Company	Annual general meetings Interim and annual reports Results presentations Investor meetings News and announcements Questionnaires
Media partners	Showcase the highlights of the Group's ESG work Disseminate the core values of the Group's ESG management	News and announcements Corporate official account Questionnaires
Government departments and regulatory authorities	Showcase the Group's reputation for compliant business operations	Physical meetings with the government Site visits Questionnaires
Local communities	Understand the focuses and trajectories of the Group in shouldering its social responsibility Demonstrate the Group's confidence in creating social value in the places where it operates Enhance mutual trust with local communities and residents in places of operations	Corporate open days Charitable activities Corporate official account Questionnaires

3. SUSTAINABLE DEVELOPMENT MANAGEMENT (CONTINUED)

ESG MATERIALITY ASSESSMENT

GDI regularly identifies or updates ESG issues that have a significant impact on stakeholders and the Group's business development through the Company's current status of sustainable development, benchmarking analysis with peer companies and communication results with stakeholders. We investigate, collect and analyse stakeholders' expectations and suggestions on GDI's ESG work through interviews, online questionnaires and other methods. We assess the importance of each sustainability issue to stakeholders and the Group through sorting, classification, screening and ranking. At the same time, based on the ranking of the materiality of sustainability issues by stakeholders and senior management, we have classified the identified 26 sustainability issues into four major areas, namely environmental responsibility, market performance, corporate governance and social responsibility, so as to build a materiality matrix of ESG issues for GDI to respond to the demands of stakeholders.

In 2021, GDI further optimised the list and materiality matrix of ESG issues based on factors such as the actual operation of each business segment, policies, measures and information completeness to enhance the consistency of the report. The ESG Committee reviewed the Group's sustainable development gateways. During the year, GDI removed two issues, namely economic performance and industry exchange, and lowered the ranking of three issues, namely safeguarding intellectual property rights, customer privacy, workforce diversity and equal opportunity. At the same time, we raised the ranking of three issues, namely employee welfare, employee training and career development opportunities, and the use of renewable energy, to enhance relevant work planning and disclosure.



List of Material ESG Issues of GDI in 2021

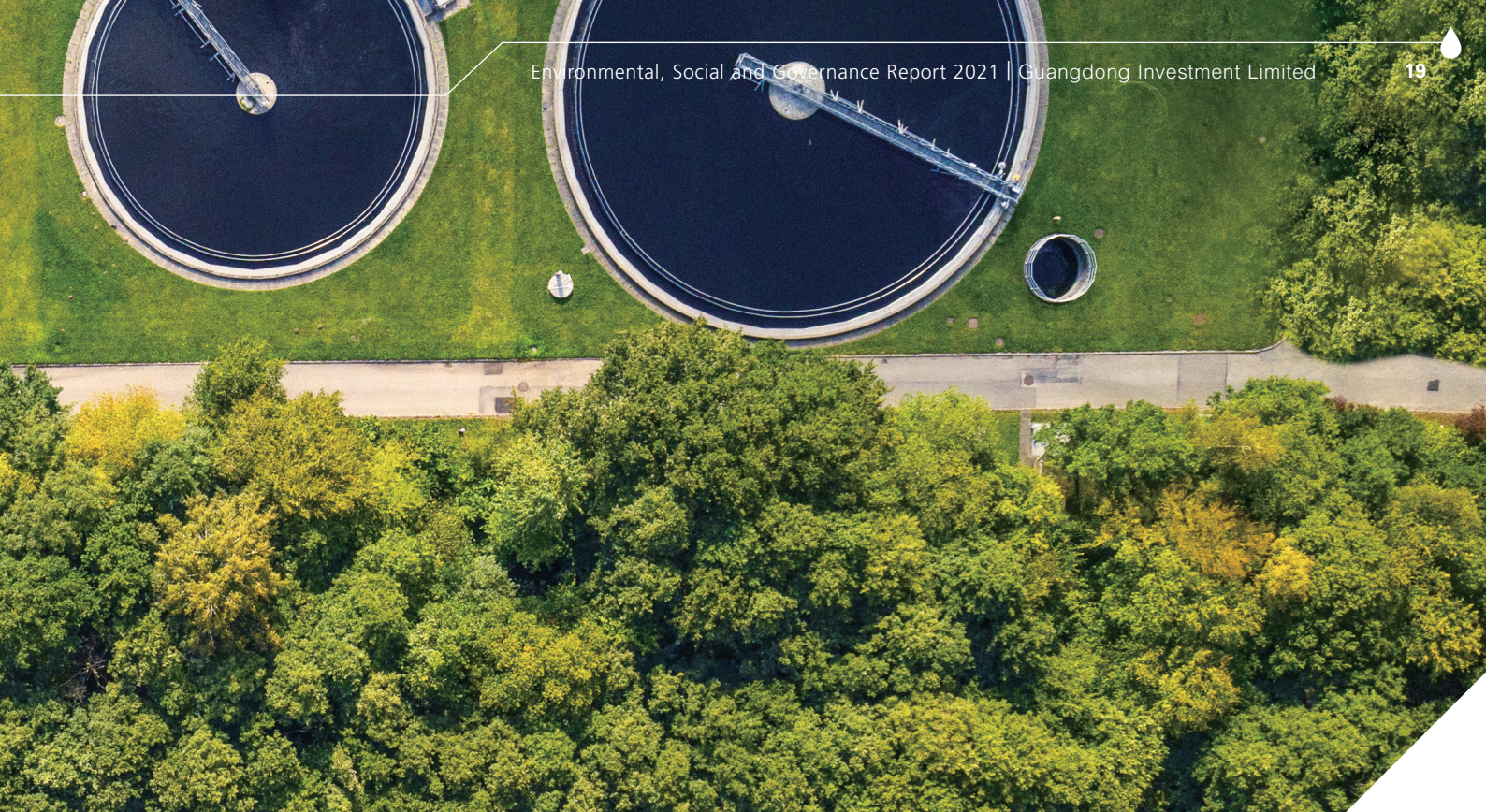
Materiality	No.	Issues
Very Important Issues	10	Compliance with relevant environmental protection regulations
	22	Reliable products and services
	21	Anti-corruption
	16	Protection of labour rights
	1	Greenhouse gas emissions
	3	Wastewater treatment and water reuse
	7	Water consumption and conservation
	15	Healthy and safe working environment and ancillaries
	5	Energy consumption and conservation
	9	Climate change
	4	Waste management
	24	Customer relations
	23	Technological innovation
	8	Ecological environment and biodiversity protection
Important Issues	19	Responsible and sustainable procurement
	20	Supply chain management
	13	Employee welfare
	14	Employee training and career development opportunities
	6	Use of renewable energy
	11	Workforce diversity and equal opportunity
	12	Employee relations
	25	Customer privacy
	26	Safeguarding intellectual property rights
	17	Community contribution
General Issues	2	Air pollutant emissions
	18	Minimising the impact on communities

4 2021 PERFORMANCE HIGHLIGHTS



Environment:

- Conduct climate change-related risks and opportunities analysis for property investment, development and department store operations during the year
- For Yue Gang Water Supply, the annual energy consumption per unit was 3.7 kWh/kTm, lower than the Company's target of 4.0 kWh/kTm and industry standard of 4.53 kWh/kTm
- The annual coal consumption of Zhongshan GDH Energy for each unit of power supply was 306.4 g/kwh, successfully achieving the annual target of 307.8 g/kwh
- The overall leakage rate of the water pipeline networks of Water Holdings decreased by 1.85% as compared with the previous year, and the number of water companies with leakage problems that require extra attention has decreased by 3.22% compared to the last year.
- The overall water quality passing rate of 25 water supply companies was above 99%; the passing rate of the national standard of treated water disinfectants was 100%; the passing rate of internal control on the turbidity of treated water was higher than 95%.
- Water Holdings reduced water leakage by 17 million tons in total.



Market:

- The overall customer satisfaction score/rate was 98.5% for Water Holdings, 95.85% for Teem Group and 92.59 for the Hotel Management Company respectively.
- Four subordinate water companies and Teemall Department Store have obtained the ISO 9001 Quality Management System Certification. Guangdong Hotel (Shanghai) and Guangdong Hotel (Shenzhen) have carried out the certification procedures of the ISO 9001 Quality Management System certification. All hotels have passed the ISO 18001 Quality Management System Certification.



Social:

- Percentages of male and female employees who received training reached 96.16% and 94.05% respectively
- Achieved all production safety targets for all business segments
- The total number of hours of the Group's volunteer activities reached 234,575 hours and the total donation amount exceeded RMB10,000,000.



5.1

MANAGING AND ADDRESSING CLIMATE CHANGE

Climate change is one of the global concerned issues. In response to the challenges brought by climate change, governments around the world have introduced different countermeasures and policies. The Chinese government has also proposed two progressive visions of achieving carbon emissions peak by 2030 and carbon neutrality by 2060, aiming to achieve the goal of controlling global temperature increase within 1.5 degrees Celsius in the Paris Agreement. Climate change and extreme weather not only bring potential risks to our business operations, but also present opportunities for business and technology development. In order to understand and assess the risks and opportunities brought by climate change, the Group has conducted climate change risk identification and assessment. In 2020, we have carried out risk and opportunity identification and analysis for the water resources and energy segments in a comprehensive way. We have also carried out the same for the property investment and development as well as department store operation segments during the year so as to enhance the climate resilience and adaptability of each business segment in the future.

To better communicate to stakeholders about the Group's approach on climate change adaptation and mitigation, we make disclosures under the core areas of "Governance", "Strategy" and "Risk Management" with reference to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

CLIMATE CHANGE GOVERNANCE

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 change-related issues. The ESG Committee regularly reviews and updates the profiles of climate change-related risks and opportunities identified and reports the results to the Board. In addition, the ESG Committee is also responsible for directing all business segments to develop and adopt appropriate measures to cope with climate change and integrate climate change-related risks and opportunities into the enterprise risk management mechanism and operations strategy to improve the Group's adaptability to climate change.

The management and relevant departments of each business segment within the existing ESG governance structure are responsible for assisting in the identification of climate change-related risks and opportunities at the operational level. They carry out a multi-dimensional risk and opportunity identification from the perspective of the daily responsibilities of business departments and analyse the physical and transition risks and associated opportunities and responsibilities so as to assist the ESG Committee and the Board in planning future strategies and formulating countermeasures.

CLIMATE CHANGE STRATEGY

The Group has developed the Climate Change Policy of Guangdong Investment Limited to standardise 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 and provides guidelines for subsidiaries and suppliers to incorporate climate change, energy conservation and emissions reduction and other considerations into every phase of their business operating cycle, such as project investment, design, development and operation so as to strengthen climate change management and mitigate the impact of climate change on business, environment and society. This shows our support to the 14th Five-Year Plan of China and the goal of achieving carbon emissions peak by 2030 and carbon neutrality by 2060.

The Group understands that climate change presents opportunities for its business which promotes the low-carbon transition of the Group's business. We therefore conduct business in strict compliance with policies and regulatory requirements. Each business segment will formulate respective business development and performance improvement plans in response to the market demand for green and low-carbon products and services, and will continue to improve performance through innovation and technological upgrading so as to achieve sustainable and low-carbon operation.

CLIMATE CHANGE RISK AND OPPORTUNITY IDENTIFICATION, ANALYSIS AND MANAGEMENT








Considering the potential long-term impacts of climate change on our downstream customers, key stakeholders, facilities and business development and the public utility business nature of our water resources and energy segments, we conducted in-depth identification and analysis of climate change-related risks and opportunities for the two key segments in 2020 and streamlined and improved relevant internal management policies accordingly. During the Year, we conducted the same exercise for the property investment and development and department store operation segments to strengthen the climate change management of related business segment.

We conducted background research, peer benchmarking and case studies for three segments to gain an understanding of the impacts of extreme, acute and chronic climate phenomena caused by climate change on the operation of the segments. In addition, we delved into the updates and implementation of relevant policies, initiatives and regulations. To obtain quantitative and objective results, we invited the departments overseeing operation, facilities management, emergency response, finance and risk management under the segments to rate and discuss the identified physical and transition risks and opportunities in two key dimensions of risk likelihood and risk severity against the assessment criteria of the segments' enterprise risk management systems, so as to reach the final results.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Water Resources:

Below are the key physical and transition risks arising from climate change identified for our water resources segment together with the relevant climate change-related opportunities.

Risk Category	Risk Characteristics	Risks	Description of Risk
Physical risk	Acute	 Typhoons	Increased probability of high-intensity typhoons may lead to unceasing strong winds and torrential rains and hence river flooding, which when coupled with storm surges, waves and tides caused by winds and air pressure, may cause rising water surface and intrusion of seawater into river mouths, affecting the water quality. Coastal areas might also be inundated and cause damage to facilities.
		 Thunderstorms	With the increase of carbon dioxide and the warming of the land surface, high-intensity updraft accompanied by rainstorms is more likely to produce thunder and lightning, posing serious safety hazards to facilities and people.
		 Extreme precipitation	Extreme precipitation, such as increased number of days of heavy rainfall in a year, 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, threatening the safety of facilities and people in low-lying areas along rivers, lakes and coasts. Massive acid rain will also cause water pollution.
		 Floods	The increase in temperatures leads to expansion of rivers, lakes, seas and other water bodies, posing the risk of abnormally high water levels. Global warming accelerates the evaporation of water bodies such as rivers and lakes, resulting in uneven rainfall distribution, increase in drainage of individual water bodies and floods.
		 Droughts	A persisting lack of precipitation or high temperature with insufficient rainfall leads to a lack of moisture in air and soil. The associated earth cracks, water stress and change in water quality may induce higher costs of water supply and difficulty in meeting the demand for water supply.
		 Extreme cold	Dramatic cooling and cold wave weather in winter may lead to extreme conditions such as snowfall and icing, resulting in damage to or malfunction of water pipes, meters and other facilities.
		 Landslides and mudslides	Extreme rainfalls wash against the hillside and loosen the soil, resulting in mudslides and landslips that cause water pollution and damage to facilities.

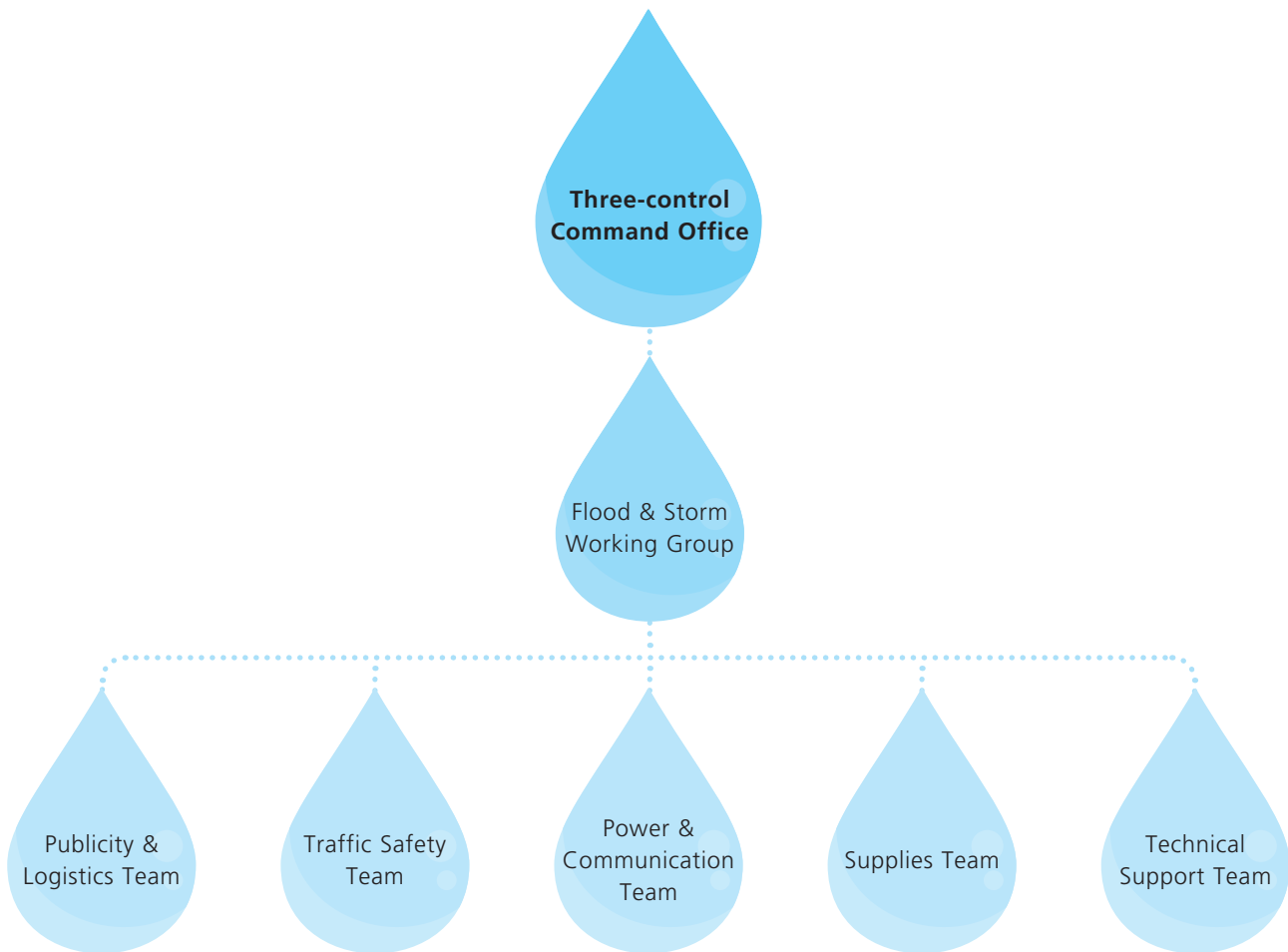
Risk Category	Risk Characteristics	Risks	Description of Risk
Physical risk	Chronic	Global warming	Global warming will result in rising average temperature throughout a year (including summer and winter), increasing the frequency of heat waves, droughts, wildfires and other acute risks.
		Rising sea levels	Global warming will accelerate the melting of polar ice sheets and the expansion of seawater, resulting in rising sea levels in the long run and hence the early obsolescence of existing assets in coastal areas. Therefore, the site selection, planning and design of a new project should factor in the impact of sea-level rise.
Transition risk	Policy and Compliance	Water quality management	China has introduced a number of policies to control water pollution and corporates need to enhance the water quality and ecology management that have been worsened due to climate change to ensure strict compliance with water quality standards.
		Water supply management	To cope with drought and water shortage, the Chinese government will pursue a strict water resources management system, aiming to cap water usage at 700 billion m ³ for the national economy by 2030, and require corporates to comply with the policy to seek continuous improvement on water use efficiency.
	Technology	Water treatment efficiency	To align with China's long-range goals of peaking carbon emissions by 2030 and achieving carbon neutrality by 2060, 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.
	Markets	Customer preference	Driven by the Chinese government's promotion and advocacy, carbon neutrality commitment, water resources planning and other efforts, residents and industrial customers have become more environmentally conscious. They would factor in environmental considerations in selecting services and tend to prefer low carbon services, which will change the existing balance between market demand and supply.
	Reputation	Stakeholders' concerns	China's action plan on climate change involves a wide 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.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Opportunity Category	Opportunity Characteristics	Opportunity	Description of Opportunity
Opportunity	Markets	New market demand	As set out in the Chinese government's 14 th 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. The Group may deploy dispersed and small-sized wastewater treatment facilities in various rural areas step by step to enter the new market and expand its business coverage.
		Green finance	The Chinese 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 enterprises to develop new water projects.
	Products and Services	Technological innovation	The Group may build on its existing smart water services 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 to cope with climate change, it can engage in new lines of business with technology and attract new customers with changing preferences.
		Unconventional water sources	The National Action Plan for Water Conservation released by the Chinese government seeks to vigorously increase the public awareness of water conservation to ensure national water security. It also calls for enterprises to increase the use of unconventional water such as reclaimed water, seawater, rainwater, mine water and brackish water to seize the opportunity to expand their business and reduce reliance on individual water sources and the costs resulting from unstable operation.

Acute physical risks emanating from climate change, such as typhoons, floods, heat waves and droughts, have potential impacts on the operational stability, personnel safety and asset costs of our water resources segment. Therefore, our water resources segment has formulated a series of policies and mechanisms, proactively responded to the impact of relevant risks, boosted capability to withstand extreme weather to ensure the security of water sources and water quality, thereby minimizing the adverse impacts of physical risks on our water supply business.

In order to strengthen the management of climate change, our water resources segment has established a flood, drought and storm control ("Three-control") command office composed of various operational departments under the leadership of management. The office is responsible for formulating and implementing the Three-control plan and specific emergency response plans and directing the Three-control working groups to carry out Three-control, salvage and disaster relief in their operating areas. Besides, five dedicated working teams have been set up to assist with the coordination of the Three-control efforts in relevant areas.



Our water resources segment has developed emergency plans to cope with various extreme weather events and water pollution incidents, such as the Contingency Plans for Water Pollution Emergencies, and revised and issued the Contingency Plans for Flood and Storm Prevention of Dongshen Water Supply Project. These documents clearly set out the key risks that may arise from various emergencies, internal governance structure and respective responsibilities, communication of early warning mechanism, as well as the planning of specific responsive actions, emergency supplies reserve, necessary equipment and regular training, to ensure that our personnel are well equipped with expertise and skills to handle emergencies. During the year, we further issued the Contingency Plans for Production Safety Accidents of Guangdong Yue Gang Water Supply Company Ltd. to standardize and strengthen the management of contingency plans for production safety accidents, further establishing a sound and perfect contingency plan system to respond to various production safety accidents, including extreme weather hazards.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Our water resources segment also organise regular emergency drills to enhance employees' safety and crisis awareness and improve their skills and capability in handling emergencies so as to ensure the security of corporate property as well as their personal safety. During the year, we continued to conduct various emergency drills, including the flood leakage drills in Shenzhen Reservoir, table-top drills of project flood and storm prevention plans, etc., to level up our employees' capability in emergency practice and flood prevention so as to ensure the security of all projects.

We have established a robust communication mechanism with water companies to reinforce the collaboration among companies to cope with physical risks. We also work with government authorities responsible for water supply and treatment to provide timely feedback on emergencies and ensure that adequate resources are available for different emergencies at any time.








In response to the possible drought weather caused by climate change, our water resources segment strictly implements the principle of precise water resource allocation, accurately adjusts water volume to meet water demand, and ensure water supply through drought resistance. As at the end of the year, the three major reservoirs in the Dongjiang River Basin have a total water storage capacity of approximately 5.3 billion cubic meters, with an adjustable water volume of approximately 580 million cubic meters, representing a year-on-year decrease of approximately 80%. In view of this, we have strengthened the coordination with Dongjiang Bureau, the local water bureau and the water intake units along the project, refined the dispatch operation plan, conducted close monitoring, and ensured the normal water intake of all units.

The risks arising from climate change may affect the quality and security of water supply. Therefore, our water resources segment conducts water pollution investigations regularly and utilises smart platforms to closely monitor water quality standards. Water companies with relatively higher risks are required to equip themselves with emergency backup water sources and make use of dual sources to ensure stable water supply and water quality safety.

In addition, our water resources segment may be exposed to transition risks, such as regulatory, market and reputational risks, which may have potential financial implications on the Company. The Group has formulated the Climate Change Policy of Guangdong Investment Limited to enhance risk management and response to climate change. To better align with the policy trends and national development strategies, our water resources segment regularly collects industry policy information, standards and expert opinions, and guides our subsidiaries to timely disseminate such information to improve business practices. Furthermore, we have strict internal control standards in place, such as the Evaluation Indicators System for Standardised Operation and Management, which closely follow the policies and industry developments of the areas in which we operate. This allows us to maintain highly standardised operation and mitigate the transition risks exposed to the business.

Energy Projects:

Below are the key physical and transition risks arising from climate change identified for our energy projects together with the relevant climate change-related opportunities.

Risk Category	Risk Characteristics	Risks	Description of Risk
Physical risk	Acute	 Typhoons	Increased probability of high-intensity typhoons may lead to sustained strong winds and torrential rains, which may cause damage to power generators and energy transmission facilities, resulting in unstable power supply and safety hazards to people.
		 Extreme precipitation	Extreme precipitation, such as increased number of days of heavy rainfall in a year, 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, and cause safety hazards to people.
		 Floods	The increase in temperatures leads to the expansion of rivers, lakes, seas and other water bodies, posing the risk of abnormally high water levels. Global warming accelerates the evaporation of water bodies such as rivers and lakes, resulting in uneven rainfall distribution, increase in drainage of individual water bodies and floods.
		 Extreme heat	More days of high temperature in a year, increased probability of occurrence of heat waves, and higher warm spell duration index may increase the safety risk of outdoor workers. To cope with surging demand for electricity, power generators or energy transmission facilities may have to operate in an overload condition, which may result in exceeding their operating temperature range.
		 Extreme cold	Dramatic cooling and cold wave weather in winter may lead to extreme conditions such as snowfall and icing, resulting in damage to or malfunction of power generators or energy transmission facilities.
	Chronic	 Global warming	Global warming will result in rising average temperature throughout a year (including summer and winter), increasing the frequency of heat waves, droughts, wildfires and other acute risks.
		 Rising sea levels	Global warming will accelerate the melting of polar ice sheets and the expansion of seawater, resulting in rising sea levels in the long run and hence the early obsolescence of existing assets in coastal areas. Therefore, the site selection, planning and design of a new project should factor in the impact of sea-level rise.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Risk Category	Risk Characteristics	Risks	Description of Risk
Transition risk	Policy and Compliance	Energy mix	To meet its long-range goals of peaking carbon emissions by 2030 and achieving carbon neutrality by 2060, the Chinese government will phase out fossil energy and shift to non-fossil energy 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.
		Carbon trading	The Chinese government has launched carbon emission trading markets, setting carbon emission quotas for enterprises. Those enterprises whose emissions exceed their quotas need to purchase more quotas from the emission trading market, which means they have to bear environmental and social external costs caused by the emissions. Instead, enterprises whose emissions are less than their quotas can sell the remaining quotas. The power generation industry is one of the industries covered by the national carbon emission trading system.
	Technology	Energy technology and efficiency	To align themselves with China's long-range goals to peak carbon emissions by 2030 and achieve carbon neutrality by 2060, enterprises 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 their operations.
	Markets	Customer preference	Driven by the Chinese government's promotion and advocacy, carbon neutrality commitment, energy sources planning and other efforts, residents and industrial customers have become more environmentally conscious. They would factor in environmental considerations in selecting services and tend to prefer low carbon services, which will change the existing balance between market demand and supply.
	Reputation	Stakeholders' concerns	China's action plan on climate change involves a wide range of social participation. The general public has paid increasing attention to and gained better understanding of climate change, carbon emissions and environmental issues. The international community and capital markets also expect enterprises 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.

Category of Opportunity	Characteristics of Opportunity	Specific Opportunity	Description of Opportunity
Opportunity	Product	Renewable energy services	To be in line with the national green policy or development direction, power companies may 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.

Zhongshan GDH Energy has developed multiple emergency response plans against risks of extreme weather to enhance its ability to respond to emergencies, including the Emergency Plans for Typhoons, Floods and Strong Convection of Zhongshan GDH Energy Co., Ltd., the Power Failure Response Plan of Zhongshan GDH Energy Co., Ltd. and the Emergency Plan for Inundation of Power Station (Pumphouse) of Zhongshan GDH Energy Co., Ltd.. We keep a watchful eye on weather changes and assess the impact and severity of any extreme weather event so that it may timely activate corresponding level of emergency procedures to ensure safe, stable and continuous operation of power generating units and mitigate the impact of extreme weather on its power supply business. During the year, we carried out safety production work during the seasonal climate periods, organized work such as typhoon and flood prevention, and safety management and control of major hazard sources, improved our ability to respond to extreme weather, rectified potential safety hazards in a timely manner, and ensured the normal operation of safety facilities at all locations. In addition, we organized emergency drills for employees on a regular basis to ensure that they are well-equipped to deal with emergencies and improve their handling capabilities.

Zhongshan GDH Energy understands the transition risks that climate change may cause to its own business. Therefore, we pay close attention to the development of carbon trading market and participate in carbon trading scheme in accordance with the Measures for the Administration of Carbon Emission Trading (Trial) (《碳排放權交易管理辦法(試行)》), the Administrative Rules for the Registration of Carbon Emission Rights (Trial) (《碳排放權登記管理規則(試行)》), the Administrative Rules for the Trading of Carbon Emission Rights (Trial) (《碳排放權交易管理規則(試行)》), the Administrative Rules for the Settlement of Carbon Emission Rights (Trial) (《碳排放權結算管理規則(試行)》) the Guidelines on Enterprise Greenhouse Gas Emissions Accounting and Reporting – Power Generation Facilities (《企業溫室氣體排放核算方法與報告指南發電設施》) and the 2019-2020 National Carbon Emission Trading Cap Setting and Allowance Allocation Implementation Plan (Power Generation Industry) (《2019-2020年全國碳排放權交易配額總量設定與分配實施方案(發電行業)》) to take responsibility for the carbon emissions and environmental impact caused by our business activities. Whenever Zhongshan GDH Energy's carbon emissions exceed the quota arranged by the Guangdong DRC, we will take the initiative to purchase quota from other enterprises.

In response to China's increasingly stringent control over carbon emissions, we pay close attention to the latest policy changes and keep abreast of the updated technological developments in the energy industry, so as to fully support and align with the developing trend of China. During the year, we conducted in-depth research on the dual-carbon policy of China and carried out forward-looking research, and prepared research reports to analyse and study the impact of the dual-carbon policy on the operation of coal-fired power enterprises. We prepared the Analysis Report on New Energy Consumption Policy, the Proposal on the Solar and Thermal Storage Project and the Transition and Development Report to understand the Company's risks and opportunities on energy. At the same time, we actively carried out work on "energy saving and consumption reduction for coal-fired power units", "new energy application" and "special research" to better prepare internally and respond to the new trend of low-carbon transition.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Case Study: New Energy Application Pilot Project



Under the unfavorable business environment faced by coal-fired power enterprises, Zhongshan GDH Energy actively carried out research on the application of new energy and explored the feasibility of emission reduction transition. During the year, we completed the preliminary design for the multi-energy complementary project integrating solar and thermal storage and are preparing for the tender. The project is a pilot project of Zhongshan GDH Energy to explore the path of transition, which is of great significance to our business transition.

Case Study: Energy-saving Research



During the year, Zhongshan GDH Energy actively carried out special research on Coal-fired Coupled Sludge Power Generation Project and formed the Analysis Report on Coal-fired Coupled Sludge Power Generation Project. As the project needs to be carried out simultaneously with the sludge drying project, we will continue to closely communicate with the Zhongshan Water Authority and the sludge drying company in the future, and strive for the support of relevant local government departments to successfully facilitate the project implementation and respond to the transition risks of climate change.

We will continue to carry out research on new energy projects, explore opportunities to expand new energy projects and promote the transition of emission reduction to mitigate the transition risks we are facing and seize future opportunities.

Property Investment, Development and Department Store Operation:

Below are the key physical and transition risks arising from climate change identified for our property investment, development and department store operations projects together with the relevant climate change-related opportunities.

Risk Category	Risk Characteristics	Risks	Description of Risk
Physical risk	Acute	 Typhoons	Increased probability of high-intensity typhoons may lead to sustained strong winds and torrential rains, resulting in property loss and damage to machinery and equipment, creating safety risks for customers, employees and the public, and increasing the cost of repairing or replacing damaged or destroyed assets. Property, shopping mall and other businesses 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.
		 Extreme precipitation	Extreme precipitation, such as increased number of days of heavy rainfall in a year, 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 and increase the risk of inundation of infrastructure in low-lying areas along rivers, lakes and coasts, resulting in water leakage in buildings, property loss and damage to machinery and equipment, increasing the repair and maintenance costs of building facilities, and causing safety hazards to people.
		 Floods	The increase in temperatures leads to the expansion of rivers, lakes, seas and other water bodies, posing the risk of abnormally high water levels. Global warming accelerates the evaporation of water bodies such as rivers and lakes, resulting in uneven rainfall distribution, increase in drainage of individual water bodies and floods. Property, shopping malls and other businesses are exposed to higher risks of flooding, and business may be shut down due to floods.
		 Extreme heat	More days of high temperature in a year, increased probability of occurrence of heat waves, and higher warm spell duration index may increase the safety risk of outdoor workers. The hot weather increased the demand for ventilation, cooling and air-conditioning in properties and shopping malls, resulting in an increase in electricity consumption and operating costs.
	Chronic	 Global warming	Global warming will result in rising average temperature throughout a year (including summer and winter), increasing the frequency of heat waves, droughts, wildfires and other acute risks.
		 Rising sea levels	Global warming will accelerate the melting of polar ice sheets and the expansion of seawater, resulting in rising sea levels in the long run and hence the early obsolescence of existing assets in coastal areas. Therefore, the site selection, planning and design of a new project should factor in the impact of sea-level rise.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Risk Category	Risk Characteristics	Risks	Description of Risk
Transition risk	Policy and Compliance	Energy mix	To meet its long-range goals of peaking carbon emissions by 2030 and achieving carbon neutrality by 2060, the real estate industry will need to strengthen the energy efficiency requirements for new and existing properties, formulate and implement energy-saving measures for projects under construction and in operation. Property, shopping malls and other businesses may also need to pay additional costs to implement carbon reduction projects, such as energy-saving transformation and the use of more renewable energy, so as to comply with national policies.
		Carbon trading	The Chinese government has successively launched carbon emission trading markets, setting carbon emission quotas for enterprises. Those enterprises whose emissions exceed their quotas need to purchase more quotas from the emission trading market, which means they have to bear environmental and social external costs caused by the emissions. Whereas, enterprises whose emissions are less than their quotas can sell the remaining quotas. At present, the Chinese government has not imposed carbon tax or set a cap on carbon emission quotas for the real estate industry, but it is expected that the Chinese government will expand the national carbon market coverage to other key energy consumption industries during the “14 th Five-Year Plan” period, including the building materials industry which is closely related to the upstream supply chain of the real estate industry, which may increase the construction and operation costs of the real estate industry.
		Green building goals and standards	To meet the goal of achieving carbon neutrality by 2060 and response to the 14 th Five-Year Plan for Building Energy Efficiency and Green Building Development, it is expected that the Chinese government will put forward more aggressive targets for green buildings and energy consumption of building. 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, etc..

Category of Opportunity	Characteristics of Opportunity	Opportunity	Description of Opportunity
Opportunity	Market	New market demand	The Chinese government's 14th Five-Year Plan for Building Energy Efficiency and Green Building Development has proposed a number of green indicators for urban buildings. It is expected that the government's green requirements for buildings will increase gradually, and the market will pay more attention to products with green building certification. By increasing green building design and carrying out energy-saving renovation, the real estate/property management can attract more market attention and meet market needs.
		Green finance	The Chinese government and the banking sector have been actively promoting green finance. The real estate/property management business can diversify financing channels by issuing green financial products, providing more funds for enterprises to develop green buildings and improve environmental performance.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

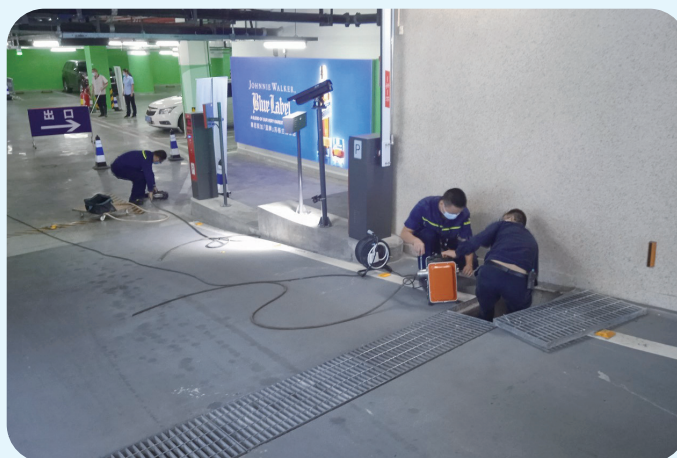
Property investment, development and department store operations are deeply affected by acute physical risks such as typhoons and floods caused by climate change. In order to ensure the safety of all stakeholders, we require all stores to make arrangements for flood prevention and prepare materials in advance according to the corresponding typhoon warning signal level, stop outdoor collective activities and hazardous work outdoors such as operations on high altitude, timely rectify the safety hazards identified, and take preventive measures in advance.



The security team personnel cleans the office area in advance, and conduct special inspections before typhoons and heavy rains to ensure the safety of the office area.



Equipment inspection during typhoon flood season



In addition, the Company's property investment, development and department store operations ("Teem Group") have formulated effective and feasible plans for typhoon and flood prevention drills according to the actual conditions of each business premise, and organized corresponding special drills for typhoon and flood prevention to improve the response capabilities of all personnel.

CLIMATE CHANGE RELATED TARGETS

In order to strengthen the Group's climate change management and climate resilience, we have set climate change-related targets for the major segments during the year. Through departmental interviews, external background research and peer benchmarking analysis, we have set the following targets for each of our water resources business, energy projects and property investment, development and department store operations:

Water Resources:

- To 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
- Strive to reduce the leakage rate of the Water Holdings' pipeline network to 13% by 2030

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
- To 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
- To strive for a 11% reduction in water withdrawal for power generation (ton/MWh) of the energy project by 2030, against the FY2020 baseline
- To 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

Property Investment, Development and Department Store Operation:

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

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

5.2

ACCELERATING LOW-CARBON DEVELOPMENT

In recent years, China has placed continuous efforts in formulating and implementing a number of policies in relation to carbon emissions and energy use, including the commitments set out in the 14th Five-Year Plan to further reduce its economic energy intensity and carbon intensity, and the commitments made in 2020 to peak carbon emissions by 2030 and achieve carbon neutrality by 2060, seeking to promote the green development of the country.

In line with the national vision and the international low-carbon and environmental protection development strategy, the Group actively fulfills its own responsibilities as an enterprise. In response to climate risks, the Group attaches great importance to energy consumption and carbon emission management, and strives to integrate the concept of low-carbon development into business operations as far as possible on the basis of compliance, and accelerate the implementation of energy conservation and emission reduction measures in each business segment to better respond to the challenges brought by climate change.

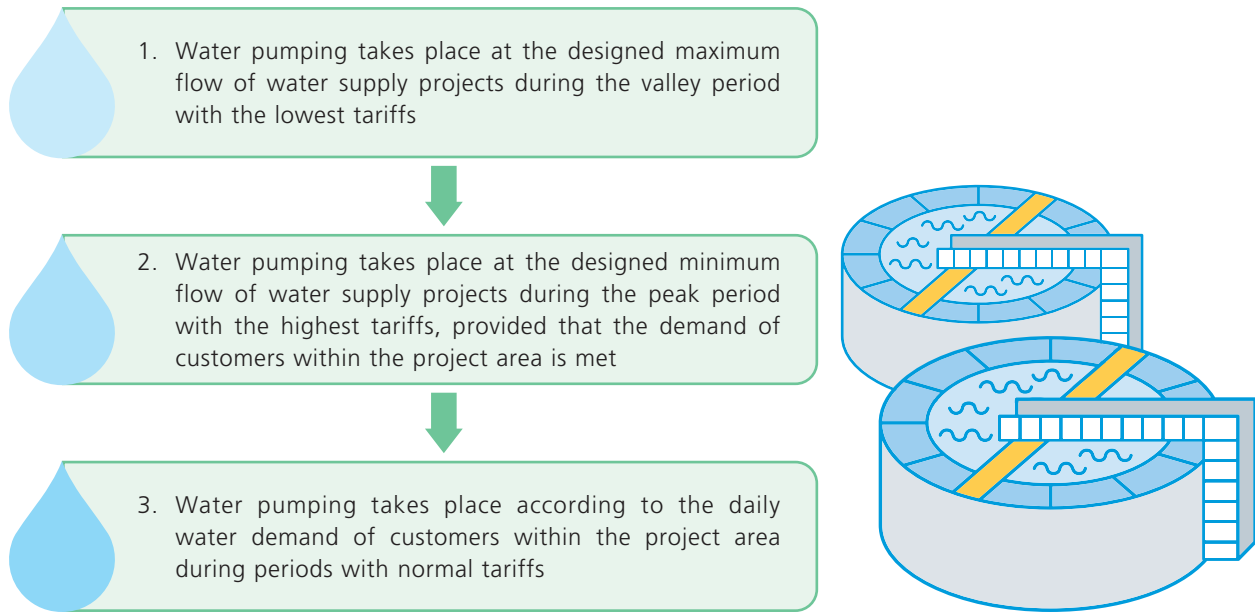
WATER RESOURCES

Our water resources business mainly operates in Southern China and Eastern China, and have extended into the water resources market in Northern China during the year, providing quality and reliable water services for over ten million populations. As a responsible public utility enterprise, we actively promote energy conservation and emission reduction in various businesses, continuously improve water supply efficiency and promote green development. We actively plan and continuously optimize the energy consumption performance of our daily operations. Although the Shenzhen Municipal Bureau of Industry and Information Technology cancelled the key energy consumption assessment on our operations during the 12th Five-Year Plan and 13th Five-Year Plan, we continue to strive to improve energy efficiency, optimize cost control, and fulfill corporate responsibilities to align with national policies and development trends.

We are committed to strengthening the energy consumption management of our water resources business to continuously improve energy consumption performance. Designated personnels are assigned to closely monitor and inspect the monitoring indicators of energy consumption per unit of our daily production and operation, and perform monthly analysis on production electricity, electricity consumption balance of power supply system and energy consumption performance, and calculate indicators such as water consumption and efficiency of each system and pump station, which provide a basis for operation and management personnel to maintain appropriate energy consumption indicators. During the year, we formulated energy consumption operation standards, including comprehensive unit consumption indicators for electricity consumption of pump stations of water operation, and prepared energy conservation assessment guidelines for pump stations that can be completed by each water company to closely monitor energy conservation indicators.

During the year, we strived to promote the construction of a standardised operation and management system. Through in-depth on-site inspection, we conducted a comprehensive comparison and analysis of all dimensions of operation and management and internal control indicators. We sorted out and improved the operation and management system of Water Holdings in all aspects, and formulated a number of systems in line with the actual situation of the Company, such as the Technical Regulations for Operation and Management of Urban Sewage Treatment Plants, Technical Regulations for the Operation and Management of Urban Water Supply Plants and Management Measures for the Star Evaluation of Water Plants, to further standardise the production and operation, environmental protection compliance and water supply services of subsidiaries, and implemented hierarchical management and control according to the operating conditions of each company, laying a solid foundation for each company to improve quality and efficiency.

We developed different control plans for peak/valley periods pursuant to the Comprehensive Budget Management Measures and other policies such as cooperating with the tariff mechanism for peak/trough periods for major power consumption industries in Dongguan so as to optimise the control and operation of the water supply systems. As the drought in the Dongjiang River Basin continues, we strictly implement the water supply capacity allocation of Dongjiang River Basin to maintain a balanced operation of the systems. At the same time, we take into account factors such as equipment status, maintenance arrangements and the Three-control requirements of pump stations at different levels, and strive to optimise the water pumping flow at different time slots every day to ensure the stable water supply of the system, cooperating with Dongjiang's downstream salinity control and fresh water make-up work.



Our Control Centre optimises the water pumping flow at different time slots every day in accordance with the above strategy, taking into account factors such as equipment status, maintenance arrangements and the Three-control requirements of pump stations at different levels. In order to improve the overall efficiency of each pump station and reduce system-wide energy consumption, we have been keeping track of the electricity consumption of our pump stations, ranking the generating units by efficiency through analysis and calculation of their real-time operating data. As such, we can prioritise the operation of generating units of high efficiency. We also organised regular preventive maintenance and overhaul for our generating units to avoid unnecessary energy wastage due to malfunction. Within the design capacity, we also raised the operating water level of pump sumps, thereby reducing the operating pumping head of the generating units and their energy consumption. Furthermore, we properly matched the operation of synchronous generators and the asynchronous generators at a pump station. In addition, we engaged a third-party energy-efficiency rating agency to regularly assess the energy consumption of equipment at each pump station and repair equipment with declining efficiency. Where appropriate, we also eliminate outdated equipment and carry out upgrading work, thereby continuously improving the energy efficiency. During the year, we carried out a number of energy-saving technical renovation and maintenance work, including energy efficiency improvement of transformers, energy efficiency improvement projects of water pump equipment motors, and renovation and maintenance of water transmission structures, etc., to improve energy efficiency and reduce unnecessary power consumption.

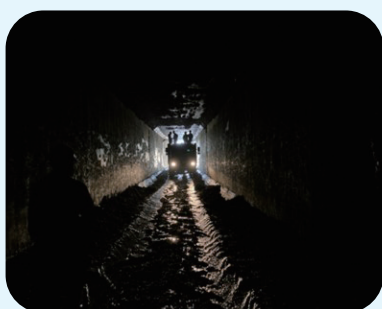
The energy consumption per unit of the system in 2021 was 3.7 kWh/kTm, which is lower than the Company's target of 4.0 kWh/kTm and the industry standard of 4.53 kWh/kTm.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Case Study: Erosion Prevention and Control of Limnoperna Fortunei



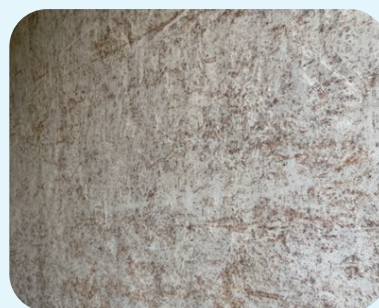
Water Projects are usually suffered from the breeding problem of limnoperna fortunei. Although the operation management unit manually removes the limnoperna fortunei in the inner wall of the pipe every year, the limnoperna fortunei continues to grow periodically after dredging the waterway. The reduction of the flow capacity of the culvert leads to an increase in the energy consumption of the water supply, which brings potential danger to the safe operation of the relevant water projects. In view of this, we carried out the erosion prevention and control of limnoperna fortunei, and coated BIOX composite materials on the lest culvert of the inverted siphon culvert, in order to inhibit the growth of limnoperna fortunei, reduce the internal surface roughness rate, and protect the safety of the structure, which effectively reduced the water level and unit energy consumption of outlet sumps, solving the flow bottleneck of the inverted siphon culvert, and providing a greater space for optimised control with remarkable results. In the next two years, we plan to spend RMB4.2 million per year on limnoperna fortunei prevention and control, which will greatly reduce energy consumption after completion of the project, and is expected to save about 6 million kWh of electricity per year.



limnoperna fortunei flourished before construction



Construction effect



Protective effect of anti-shell coating after one year of water circulation

Case Study: Renewal and Renovation Work of Mechanical Devices



In 2021, we carried out the first phase of renewal and renovation work for Tai Yuan units. During the whole 14th Five-Year period, we replaced the original six old pump main units at the Tai Yuan pump station with high-efficiency energy-saving pump main units. After the replacement, it is expected to reduce energy consumption by 3% compared with the original main units systems, and to save energy by 3,153,600 kWh per year after the completion.



The first phase of renewal and renovation work for Tai Yuan units

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Case Study: Smart Water Plants Construction, Intelligent Drug Dispensing and Operation



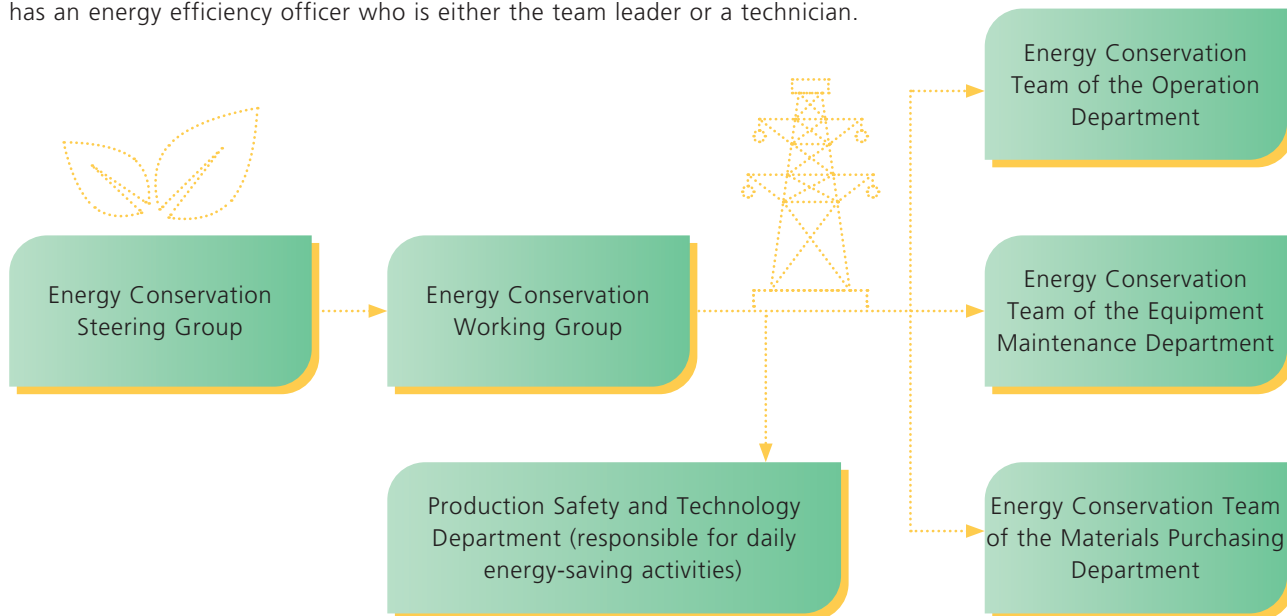
We actively promote the construction of smart water plants, conduct intelligent drug dispensing and trial of intelligent inspection at Nansha demonstration site. Smart customer service also aims to move towards the goal of "Run Zero Errands". During the year, Chaonan demonstration site completed the deployment of 10 sets of core products, which accurately aerate and reduce energy consumption by approximately 14%, reducing energy consumption with smart technology.

ENERGY PROJECTS

The energy industry is crucial to the global trend of low-carbon transition and emission reduction. Therefore, the Group pays close attention to the discussion and development of low-carbon transition and emission reduction, and constantly reviews the possible impact of its energy projects on climate change. Due to the rapid development of the Group's other lower-carbon core businesses, the contribution of the energy projects to the total revenue of the Group has decreased year by year, declining from 9.82% in 2018 to 5.4% in 2021.

Our energy business operation meets national standards and strictly implements the Norm of Energy Consumption Per Unit Product of Combined Heat and Power Generation. Taking into account its own business development, we have also formulated the Standards on Supervision and Administration of Energy Conservation of Zhongshan GDH Energy Co., Ltd. and the Standards on Supervision and Administration of Environmental Protection Technology of Zhongshan GDH Energy Co., Ltd. in accordance with a series of national and provincial policies, so as to further strengthen the management of energy consumption and carbon emissions. The relevant documents clarify the supervision and management functions, scope and content in the production process, and have also established an examination mechanism so that the internal supervision of Zhongshan GDH Energy can be more systematic, scientific and legal.

According to the requirements of the Standards on Supervision and Administration of Energy Conservation of Zhongshan GDH Energy Co., Ltd., Zhongshan GDH Energy has established a three-tier energy management system consisting of the company, departments and teams. The general manager of the company acts as the head of the energy conservation working group and the production safety and technology department is responsible for organising, overseeing, inspecting and coordinating daily energy management of the company. Each of the operation department, the equipment maintenance department and the materials management department has a part-time energy efficiency supervisor who is responsible for the energy saving work of the department. Each production team has an energy efficiency officer who is either the team leader or a technician.



Corporate Energy Conservation Management Structure

In terms of daily work, we issue production indicators monthly to guide daily production operations. During the year, we continued to carry out performance indicators competitions among different operating departments based on production indicators in accordance with the Competition Management Measures on Performance Indicators of Zhongshan GDH Energy Co., Ltd., and included the results of the competitions in the monthly examination of individuals. 30% of the departmental assessment is allocated to the competition appraisal to motivate the operation team to reduce energy consumption in the course of production and operation. Indicators for the competition encompassing key operational indicators, such as electricity consumption rate of production factories, average electricity supply, steam temperature and equipment efficiency, will be collected by the SIS monitoring system of the power plant. The Operation Department will include the results of the competition in the monthly review of individuals to strictly control our energy performance.

During the year, we continued to carry out a number of energy efficiency works, including the completion of the renovation of four circulating water pumps, cooling towers, condensation pumps and other facilities. Technological transformation of circulating water pumps can effectively improve the corrosion resistance of circulating water pumps and effectively improve the operating efficiency of water pumps; the optimization and transformation of the cooling tower flow field can solve the problem of inappropriate matching of the distribution of lymph filling material and the filling air power field, enhance the heat conversion efficiency of the cooling tower, and reduce the coal consumption of power supply; the energy efficiency improvement of condensation pump can effectively solve the problem of poor corrosion resistance, low efficiency and high energy consumption of condensation pump, improving operational efficiency and reducing coal consumption for power supply.

In 2021, Zhongshan GDH Energy continued to promote innovation management related work, including micro-innovation projects such as new energy application, special technological transformation, equipment efficiency improvement, and safety education. It also conducted special surveys on sludge combustion, air compressor energy conservation, liquid ammonia to urea, and other related innovation projects to promote green development.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Case: Promoting micro-innovation projects to save energy and reduce emissions



In terms of new energy application, we completed the survey, design and project filing for the multi-energy complementary project integrating solar and thermal storage in 2021, and prepared to commence project bidding. Upon completion, the project can effectively reduce the roof temperature in the front area of the plant, save electricity for air conditioning, reduce carbon dioxide emissions, and increase the proportion of renewable energy consumption. This project is the first step for the energy business to explore the new energy transition, which is of great significance and helps us accumulate experience to cope with new challenges in the future.

Case: Special research on coal-fired coupling sludge power generation project



In response to the national development direction of actively encouraging "Coal-fired coupling Sludge Power Generation Project", and considering that coal-fired coupling sludge power generation has considerable environmental and investment benefits, along with higher feasibility of technical solution, we carried out special research and completed the preparation of the Analysis Report on Coal-fired Coupling Sludge Power Generation Project during the year, detailing the background, implementation needs, engineering ideas of "Coal-fired Coupling Sludge Power Generation Project", and evaluated the impact of mixed sludge on the units. We have also conducted on-site research with the Mindong Compounds Treatment Company (民東有機物處理公司), and conducted technical exchanges with experts from Hunan Electric Power Design Institute and Xi'an Thermal Power Research Institute, striving to explore feasible solutions suitable for the Company's low-carbon development.

In addition, we have prepared the Application Report of Guangdong Provincial Energy Conservation and Consumption Reduction Special Fund Project (《廣東省省級節能降耗專項資金項目申請報告》) and applied for the 2022 energy conservation special fund from the Energy Administration of Guangdong Province to continue to improve energy conservation and reduce energy use and operating costs in the future.

In 2021, our annual coal consumption for power supply was 306.4 g/kwh, successfully achieving the 2021 target of 307.8 g/kwh. In addition, our two generating units have met the national ultra-low emission standards, with emissions compliance rates of 99.67% and 99.50%, respectively.

OTHER BUSINESS SEGMENTS

Property Investment, Development and Department Store Operation:

In order to reduce unnecessary carbon emissions, Teem Group conducts routine inspection to identify room for improvement in the energy consumption of property management.

Case: Lighting replacement works for corridors and toilets of Teem Tower



In 2021, we conducted lighting replacement works for the corridors and toilets of Teem Tower and completed the energy efficiency renovation of 965 sets of downlights in 12 floors corridors and the replacement of 1,001 sets of lamps in all toilets in the 5th to 45th floors. Through this renovation, we have improved the visual comfort of the public area in the building and achieved environmental protection and energy conservation. It is estimated that 4,700 kWh of electricity can be saved per month after the replacement.



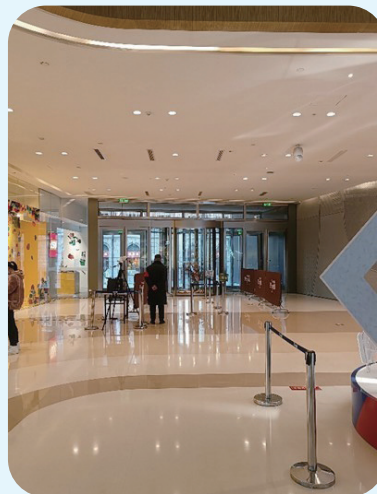
Lighting in the public area of the tower after replacement of lighting

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Case: Energy efficiency improvement at Tianjin Teem Shopping Mall



Due to the severe negative pressure of Tianjin Teem Shopping Mall, a large amount of outdoor cold air enters the shopping mall from the main gate on Heping Road in winter, leads to a very low temperature at the gate; in summer, a large amount of hot air enters the shopping mall from the same gate, causing a lot of energy waste. In 2021, we renovated the main gate and replaced it with an electric revolving door, which greatly improved the temperature at the gate area and surrounding merchants, greatly reduced the energy loss of the shopping mall and saved a large amount of energy.



Main gate of Tianjin Teem Shopping Mall after renovation

Hotel Ownership, Operation and Management:

In order to improve energy consumption management, the hotel headquarters compile energy budgets, set targets and conduct reviews for hotels under its management every year. Besides, it performs annual, quarterly and monthly equipment maintenance for hotels under its management to closely monitor the energy efficiency of all equipment.

In addition, the Hotel Management Company has implemented various energy efficiency measures to improve energy consumption, including reducing the frequency of running water heaters and suspending the use of hot water storage tanks based on occupancy rate. We selected appropriate operating mode for transformers based on actual loading to reduce the electricity consumption of no-load operation and adjust the operation of air-conditioning units as per peak, flat and valley load periods of power usage so as to increase electricity consumption during valley load period, thereby achieving energy conservation and consumption reduction in all aspects.

Greenhouse gas (GHG) emissions	Unit	2021	2020	2019	2018
Water Resources ¹					
GHG emissions – Scope 1	tons of CO ₂ e	1,523.35	1,813.23	466.24	496.36
GHG emissions – Scope 2	tons of CO ₂ e	409,990.94	383,049.20	334,527.77	304,685.78
GHG emission intensity	tons/HK\$10,000 of revenue	0.23	0.30	0.35	0.37
Teem Group ¹					
GHG emissions – Scope 1	tons of CO ₂ e	1,895.74	2,173.34	34,303.05	40,038.96
GHG emissions – Scope 2	tons of CO ₂ e	47,753.92	38,038.53		
GHG emissions per unit area	tons CO ₂ /m ² of operating area	0.064	0.052	0.066	0.078
Hotel Management Company ¹					
GHG emissions – Scope 1	tons of CO ₂ e	366.81	335.17	7,128.37	7,093.72
GHG emissions – Scope 2	tons of CO ₂ e	7,602.04	7,870.29		
GHG emission intensity	tons/HK\$10,000 of revenue	0.20	0.27	1.15	1.02
Zhongshan GDH Energy ²					
GHG – Scope 1	0'000 tons of CO ₂ e	303.17	312.24	269.04	278.24
GHG – Scope 2	tons of CO ₂ e	112.48	158.17	75.59	383.83
GHG emission intensity	tons/HK\$10,000 of revenue	18.89	25.91	21.97	21.20
GDH Highway ¹					
GHG emissions – Scope 1	tons of CO ₂ e	169.25	184.64	835.76	734.78
GHG emissions – Scope 2	tons of CO ₂ e	869.99	776.26		
GHG emission intensity	tons/HK\$10,000 of revenue	0.0074	0.0090	0.011	0.0098
Hong Kong Headquarters ¹					
GHG emissions – Scope 1	tons of CO ₂ e	13.15	10.13	77.09	84.21
GHG emissions – Scope 2	tons of CO ₂ e	90.82	73.44		
The Group ¹					
GHG emission intensity	tons/HK\$10,000 of revenue	1.18	1.53	1.84	2.35

Notes:

1. GHG emissions are calculated based on the gross electricity consumption with reference to the emission factor of the regional power grid in China and the gross consumption of diesel and petrol. GHG emissions of the Hong Kong headquarters are estimated based on the Reporting Guidance of the Stock Exchange.
2. GHG emissions are estimated in accordance with the Guidelines on Accounting and Reporting of Greenhouse Gas Emissions from China's Electricity Generation Enterprises issued by the National Development and Reform Commission.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

5.3

STRENGTHENING WATER MANAGEMENT

Water stress has always been one of the challenges faced by China and many regions of the world. With social development and population growth, more than one-third of the regions across China are still facing water stress. The state and governments at all levels strengthen the management of water resources through different policies and measures, and have made significant progress and achievements in water resources conservation, protection and management. They also explicitly imposed stricter management on water resources in three aspects, namely strengthening the control on the development and utilisation of water resources, improving the control on water efficiency and raising the sewage discharge standards in water functional areas. In order to meet the national goal of limiting the water consumption for economic purpose to 700 billion cubic meters by 2030, our water resources business and other operating businesses actively strengthen water resources management to cope with water shortage.

SYSTEMATIC MANAGEMENT

Since stable water supply is the cornerstone of our water resources business operation, we address the risks arising from water stress during the course of our operations in a prudent manner. In order to reduce the challenges caused by water stress, the Company has formulated the Policy on Water Supply Management of Guangdong Investment Limited, which encourages all business segments to actively control the total water consumption from the source to improve comprehensive utilisation of water resources, while improving the efficiency of water supply, effectively reducing the pipeline leakage, and strengthening water efficiency control. We also actively explore alternative water sources and improve the recycling rate of sewage, and are committed to providing training on water source protection and water conservation for downstream and end users to eliminate any form of waste. Our water resources business has also formulated a series of internal management policies and guidelines, such as the Regulation on Reservoir Operation and the Plan for Reservoir Operation in Flood Season, to provide strategic direction and practical guidance for water resources management and control at the operational level.

Before the commencement of any new project, we conduct preliminary works such as water resource reliability analysis, water supply continuity assessment, water quality assessment and downstream water consumption forecast to ensure that the project will not be affected by water stress in the future. Meanwhile, we proactively respond to and work with the local government by participating in the preliminary research, planning and analysis of waterworks construction projects such as water diversion. Through the integrated management of upstream, midstream and downstream processes, we strive to minimise the risks arising from water stress.

At the same time, we closely monitor the risk of water stress to ensure the stability of our water supply. By following the annual allocation plan, the Water Resources Department of Guangdong Province and the Dongjiang River Basin Administration Bureau make every effort to coordinate the water supply to Hong Kong and ensure our water resources segment can access sufficient water sources in accordance with its specified water supply quota. The water resources segment also works closely with the water authority of Shenzhen and Dongguan to formulate water supply plans for Shenzhen and Dongguan areas along the project, and strictly controls the water supply to meet the water resources allocation requirements of the Water Resources Department and Dongjiang Bureau as planned.

To improve the companies' overall operational efficiency, the water resources segment has launched the Personal Business Objective Commitment (PBC) Scheme, on which the management has set a good example to ensure safe and stable supply of water resources. Pursuant to the PBC scheme, the internal operational performance indicators of the water resources segment is pegged with the individual performance of persons in charge of respective water companies so as to increase the responsibility of the management of each water company and ensure the consistency of water resources management objectives between the water resources business and its subordinate water companies. In addition, we have established multi-tier incentive and assessment mechanisms at corporate and departmental levels for key water companies, and enhanced the assessment on control of pipeline leakage by including indicators of untreated water, tap water and sewage operations, such as pipeline leakage rate, production units' energy consumption and key project management, into individual integrated assessment. The assessment results are closely pegged to the remuneration of the person in charge of the subordinate water companies in a bid to encourage employees to pay attention to water stress.

During the year, Water Holdings reduced water leakage by 17 million tons in total by adopting a number of measures to optimise water supply pipeline networks by the Group, including analysing the pipeline network status of each water supply company, setting up goals and work plans and improving the efficiency of pipeline leakage control through pipe network zoning, pressure management and pipeline leakage detection.

TECHNOLOGICAL APPLICATION GUARANTEE

The water resources segment leveraged its technological advantages to promote pipeline leakage control and boost the operating efficiency of our upstream water supply chain. We have formulated a series of management measures and technical procedures, including the Regulations for Maintenance, Repair and Management of Hydraulic Structures, the Management Measures for Hydraulic Facilities Rating, the Rules for Monitoring and Management of Hydraulic Engineering Safety, the Management Procedures for Aqueduct Technologies, the Management Procedures for Box Culvert Technologies and the Management Procedures for Hydro Tunnel Technologies to provide guidelines and regulations for the maintenance and repair of the hydraulic structures of the Dongshen Water Supply Project. We have also put in place the Selection Guide for Materials Used in Municipal Water Supply Pipeline Networks, the Management Procedures for Urban Water Supply Pipeline Networks of Guangdong Water Holdings Limited and other management systems, providing standards for the selection and management of pipeline materials, metering and pipeline network maintenance. During the Year, we prepared the Guidelines on the Establishment of Pipeline Network Emergency Repair Center in Guangdong Water Area to give full play to the management synergy effect of water companies and enhance the ability of each company to repair pipes bursting. As of December 2021, the overall leakage rate of the water pipeline network of Water Holdings decreased by 1.85% as compared with the previous year, and the key water leakage control companies decreased by 3.22% as compared with the previous year. The waste of water resources and economic losses caused by pipeline network leakage was reduced effectively.

To further improve the management and control of pipeline leakage, we adopted the industry standards, namely Leakage Control and Evaluation Standards for Urban Water Supply Pipeline Networks, and the Water Balance Analysis Method of the International Water Association to evaluate the extent of leakage and boost our capability in pipeline leakage control and detection. Yunfu New District, Zhaogao, Wuzhou, Pingyuan, Gaoyou, Danzhou, Gaozhou, Suixi, Yizheng and other water companies have reached the first-level assessment criteria set out in the Leakage Control and Evaluation Standards for Urban Water Supply Pipeline Networks, and thus maintaining the overall pipeline leakage control rate within 10%.

The water resources segment continued to cooperate with academic institutions in research and development of leakage detection technology for technical pipe network leakage control. During the Year, we established preliminary scientific assessment method of DMA leakage and damage, the assessment model of water supply pipeline network damage, the estimation method of DMA real leakage, the optimisation method of the strategy of DMA leakage control and the new warning method of DMA leakage jointly developed with the Research Center for Eco-Environmental Sciences, Chinese Academy of Sciences. We will further evaluate and optimise the above technologies in the future.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

In addition, we have independently developed information platforms such as intelligent network zoning and water supply pipeline network management system, combined with a series of measures such as pipeline network gap modelling, pipeline network leakage detection, pipeline network renovation, zoning measurement and construction, and replacement of old water meters, to implement refined control and management of water supply pipeline network leakage, and improve the effectiveness of water company's leakage control. Take Xuyi Guangdong Water Co., Ltd. as an example, through the three-level regional technology system of water supply pipeline network, it has reduced the leakage rate of the pipeline network by 16.54% in two years, with huge environmental benefits generated.

The Dongshen Water Supply Project further utilised new technology to develop a multi-tier raw water transmission and distribution mathematical model and an automatic control system, achieving prediction of water demand and analysis of energy efficiency of the pump set, meeting water demand and optimising the operation of the pump set. It can save more than RMB10 million compared with the balanced operation.

We also strengthened the inspection and maintenance of the facilities of our water projects. In 2021, all facilities of Dongshen Water Supply Project remained intact, and 99.89% of pump stations were in good condition.

CONSCIOUS WATER CONSUMPTION

The Group makes full use of its operational advantages on water environment management in the water resources segment and proactively carries out internal control to ensure the stable supply of water resources. We are also committed to improving water utilisation efficiency in other business segments to reduce the wastage of water resources.

Energy Project

Zhongshan GDH Energy strictly complies with the Water Law of the People's Republic of China and makes recommendations on the annual water consumption plan according to the Management Measures on Planned Water Consumption Level, sets the planned water withdrawal and the distribution of water consumption plan within the year, and then submits the Form of Annual Planned Water Consumption Level to Xijiang River Basin Administration Bureau of Guangdong Province for approval. During the year, the total volume of water withdrawal of Zhongshan GDH Energy was 7,820,000 m³, better than the annual target of 8,580,000 m³.

Zhongshan GDH Energy has adopted a number of water-saving measures and management systems to reduce water consumption. We apply innovative technologies to improve the efficiency of wastewater collection and reclamation. The outlet pipes of pore control filter (PCF) were upgraded to allow coal-containing wastewater to flow to the drainage tank of the gravity filter where flocculant is added to separate solids by sedimentation to produce reclaimed water. This enables us to cut 28,800 tons of water withdrawal from rivers each year, thereby optimising water consumption. We also conduct regular checks to identify and replace leaking valves in a timely manner, and tighten the valves of generating units that are not in operation to reduce industrial water consumption. At the same time, we strictly monitor monthly small indicators of water withdrawal quota for operation, and incorporate the indicators into employees' personal performance test, so as to effectively control water withdrawal. In addition, Zhongshan GDH Energy has formulated the Water Conservation Management Standards to strengthen the operation management of equipment, improve the operation efficiency of equipment, reduce the water replenishment rate, and strengthen the heat supply management, with an aim to reduce pipeline losses. Thanks to the above efforts, our water consumption per unit power generated in 2021 stood at 1.90 m³/MWh.

RAISING WATER-SAVING AWARENESS

GDI is committed to leveraging the business characteristics of each business segment, cooperating with various water-saving publicity, and advocating citizens and employees to raise the awareness of water-saving and water resources protection. The water resources segment also utilises relevant professional knowledge to disseminate knowledge on water conservation, protection and management among customers and citizens in the form of publicity and popular science education, so as to enhance the citizens' awareness of water conservation.

Case Study: Water Plant Open Day



In order for more people to understand the whole process of sewage treatment and tap water production, Meizhou Guangdong Water, Wuzhou Guangdong Water and Liupanshui Guangdong Huanbao collaborated with local government authorities and media to invite experts, local residents and students to participate in the “Water Plant Open Day” activity during the “World Water Day”.

Through site visits to the whole process of tap water production and sewage treatment, people understood the difficulty of water supply and the precious value of water resources. They also learned more about water safety and water environmental protection through water safety display boards, interactive games and expert explanations.



Case Study: Promoting Water Safety to the Community



In order to actively promote the concept of water cherishing, saving and protection, and popularise knowledge related to water safety, Meizhou Guangdong Water, Nansha GDH Water, Danzhou Guangdong Water, Shantou Guangdong Water and Wuzhou GDH Environmental Protection, together with the local government authorities and media, carried out publicity activities such as “Water Safety into the Community” in communities, plazas, rural areas and campuses according to local conditions. 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 the public and popularised water safety knowledge.



5. CORE SUSTAINABILITY ISSUES (CONTINUED)

5.4

ADVANCING TECHNOLOGY AND PRODUCT QUALITY

Providing customers with high-quality products and the best services is the aim of the operation of all business segments of GDI. We have always adhered to strict quality standards, uphold the principles of environmental health and safety, and provide clear guidance on the production, inspection and sales of products and services across various business segments pursuant to the Policy on Quality, Environmental Health and Safety Management of Guangdong Investment Limited. Furthermore, we promote business innovation and harness technologies such as intelligent system to improve products and services quality, thereby offering better experience to customers.

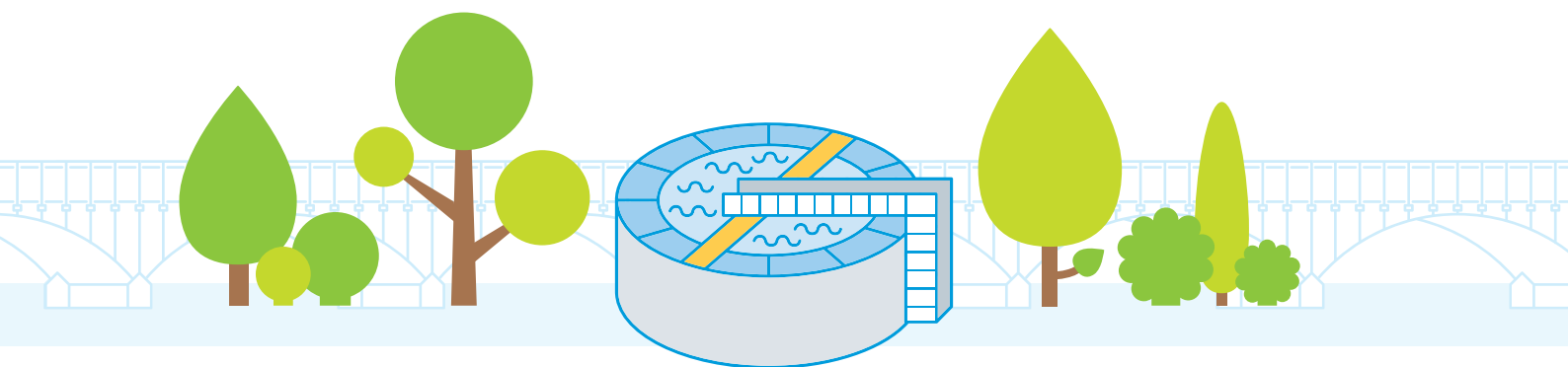
We also conduct daily communication and interaction with our customers through various channels to understand their expectations and needs, which can further improve the quality of the Group's products and overall services, help us actively respond to the needs of consumers and establish a positive brand image.

WATER RESOURCES

As one of the Group's core businesses, the water resources segment is committed to providing customers with safe and clean water supply. Therefore, we have implemented the Policy on Water Quality Management of Guangdong Investment Limited to supervise the quality and safety of water supply construction projects and ensure a safe, high-quality and stable water supply. During the year, the water resources segment revised five policies, namely 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, the Regulations on the Management of Water Quality Monitoring and the Regulations on the Management of Water Quality Sampling, to further strengthen the water quality management of water supply projects and comprehensively promote the standardisation of water quality management. At the same time, we continue to promote business innovation, use intelligent systems to facilitate the development of smart water services and improve the business operations of water resources, so as to ease water stress, address water environment issues and ensure water safety.

Water companies that are engaged in untreated water supply, tap water supply and sewage treatment, as well as newly acquired water companies are also required to implement the above-mentioned water quality management measures. In addition, internal documents and policies, including the Urban Water Supply Quality Monitoring and Management Guidelines, the Evaluation Indicators System for Standardised Operation and Management, and the Management Procedures for Urban Water Supply Pipeline Networks clearly set out the operation guidelines that water resources segment must strictly abide by, so as to continuously improve the operation and management level of our subsidiaries. In 2021, we revised the Technical Regulations for Operation and Management of the Urban Sewage Treatment Plants of Guangdong Water Holdings Limited and the Technical Regulations for Operation and Management of the Urban Water Supply Plants of Guangdong Water Holdings Limited to further standardise the operation and management of the urban sewage treatment plants and water supply plants. Through our efforts, four of our subsidiaries, including Gaoyou Gangyou Engineering (Engineering Company), Wuhua Yuehai Huanbao, Zhejiang Bohua Huanjing Technology Engineering and Hebei Guangdong Water Group Co., Ltd., have reached international quality management standards and obtained the ISO 9001 quality management system certification.

In order to ensure the quality, safety and stability of water supply, we continued to implement the Personal Business Objective Commitment (PBC) Scheme during the year to monitor the status and progress of various indicators. In 2021, the overall performance of the PBC indicators was satisfactory. Except for Feilaixia, which failed to complete the financial assessment indicators due to the drought this year, other indicators were successfully completed, reflecting the improvement of the Company's overall operating efficiency.



Intelligent Quality Control through Smart Water System

By applying innovative information technologies including the Internet of Things, mobile internet, big data, cloud computing in production management, water supply services and operational control, smart water services strengthen the monitoring of the quality and safety of water supply. We have also adopted multiple systems, such as dynamic modelling system for pipeline networks, intelligent system for pressure control, laboratory management system and intelligent platform for centralised metering, to comprehensively monitor and analyse the quality of water supply to ensure customers' water safety.

In 2021, the water resources segment promoted the application of Laboratory Information Management System (LIMS) in 73 laboratories under its cooperation projects, forming a monitoring network which synchronises with the development pace of the water resources business. This system helps us to monitor the water quality in all areas on a macro level and improves the ability of our project companies' capability to quickly respond to water quality emergencies.

Untreated Water Processing and Safety Assurance

Untreated water is the starting point in the tap water production process, the safety of untreated water is therefore the key to the quality of tap water. To this end, we continued to strengthen the monitoring and remediation of water pollution sources. Through a management mechanism that classifies pollution sources along the Dongjiang River and around the Shenzhen Reservoir according to category, region and level, we track and monitor potential sources of risk, grasp the dynamic changes of pollution sources, and reduce untreated water safety risks.

In terms of untreated water safety monitoring, our Water Environment Monitoring Centre, which is accredited by China National Accreditation Service for Conformity Assessment ("CNAS"), possesses close to 600 types of water quality testing capabilities, covering the four major national standards for water quality, including surface water, drinking water, underground water and urban sewage testing. It has also established a water quality monitoring network for project companies across the country. In 2021, we carried out special water quality monitoring, and strengthened the monitoring of indicators such as 2-MIB, chlorophyll a, algae richness, electrical conductivity, fluorides, and permanganate index. The Water Environment Monitoring Centre also publishes Water Quality Monitoring Programme for the Dongshen Water Supply Project on an annual basis, which helps us obtain real-time knowledge of important water quality indicators during water intake and supply so as to ensure the quality and safety of water intake and supply. During the year, the overall water quality passing rate of 25 tap water companies was above 99%; the passing rate of the national standard of treated water disinfectants was 100%; the passing rate of the internal control on the turbidity of treated water (0.5NTU) was higher than 95%.

The monitoring and early warning platform for untreated water quality built by the Group can accurately predict and forecast the water quality of water resources, and conduct water quality monitoring, early warning and forecast of water quality, risk source management, water quality management, statistical analysis, etc. to further improve the efficiency of water quality management and the level of water quality early warning management to prevent incidents.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

During the year, we renovated the online water quality monitoring floating platform of the Shenzhen Reservoir by replacing the river buoy with marine buoy. Marine buoy with higher wind resistance capacity reduces the risk of being overturned under typhoon weather, ensuring a close monitoring of water quality during adverse weather conditions. We have also upgraded the profile monitoring devices to further enhance the reliability of online water quality monitoring at the Shenzhen Reservoir.



The Group introduced globally advanced automatic monitoring technology for untreated water quality in the Dongshen Water Supply Project to manage and monitor the untreated water supply in an all-round way. At the same time, together with dam safety monitoring systems, automatic monitoring and reporting system of water conditions, water supply metering and remote transmission system, satellite nephogram and video monitoring system, the entire transportation of untreated water can be safely and effectively guaranteed. The project is also the world's largest nitrification treatment project, which plays a major role in ensuring safe and high-quality water supply services.

Case Study: Renewal and Renovation Work of Processing Facilities for Biological Nitrification Project



The biological nitrification project at the tail of the Shenzhen Reservoir was built in 1998. Since it has been in service for more than two decades, the processing facilities were suffering from different degrees of aging and deterioration. In 2021, we renewed the processing facilities of No.1 channel, mainly optimised the layout of the nitrification tank filler and the distribution of aeration pipes, and improved the uneven aeration, sedimentation, and siltation in the channel. The renewal work was successfully completed; the channel now operates steadily, the water quality testing data is normal, and the problems of aeration uniformity and sludge accumulation have been effectively improved. The Renewal and Renovation Work of Processing Facilities for Biological Nitrification Project is a solution to the potential safety risks of the Shenzhen Reservoir, and we expect to continue the renewal of the processing facilities for the remaining channels in the coming three years to ensure a high quality and safety of water source services and bring extensive benefits to the society.



The construction site of No.1 channel processing facilities renewal

Monitoring Water Quality with Innovative Technologies

The water resources segment is committed to using innovative technologies to optimise water quality monitoring technologies. We launched a smart inspection system based on image analysis and AI recognition technology. With the help of unmanned inspection robots, we explored the closed operation mode of water production sites. Through the intelligent and refined inspection, we optimised the operation mode, solved the human resources problem, and improved the operation technology level of the pump stations.

Water Holdings comprehensively develops smart water plants to improve water supply quality. During the year, we completed the development of software and hardware products of the secondary water supply smart control system and put them into pilot application. The system integrated edge computing gateways, and achieved stable and reliable operation of local smart control of secondary water supply pressure adjustment. In addition, we completed the upgrade of the water big data platform, and the research and development of five core models, including untreated water dissolved oxygen prediction, smart drug dispensing for water plants and precise aeration for sewage plants, which were applied in Meizhou, Chaonan, Nansha and Shenzhen reservoirs. Taking the Chaonan demonstration site as an example, smart drug dispensing reduced drug consumption by approximately 15% and precise aeration reduced energy consumption by approximately 14%.

Cases Study: Building an Unmanned Management Platform



In 2021, Yantian Reservoir completed the construction of drone management platform and carried out inspection pilot. The unmanned monitoring vessels of Shenzhen Reservoir completed equipment upgrading and were put into use.



Drones in Yantian Reservoir



Unmanned Surface Vessel for Sampling and Monitoring in Shenzhen Reservoir

In 2021, Guangdong Water proactively participated in a number of scientific research projects and received a number of awards while various technologies were applied and promoted, demonstrating our scientific research achievements. This included the application for the 2021 Guangdong Province Science and Technology Award for the Smart Area Control Technology for Water Supply Network Leakage and Complete Set of Digital Simulation System. The technological achievements of the Three-level Regional Technology System for Water Supply Pipeline Network were also recognised by industry-renowned experts such as Yongzhen Peng, a fellow of the Chinese Academy of Engineering, and accredited as International Advanced and National Leading.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Development of Sewage Treatment Technology

As a leader in the industry, Water Holdings has been actively developing sewage treatment technologies to achieve national and international advanced standards. During the year, we continued to benchmark against leading enterprises in the industry, actively discussed the precise aeration and smart drug dispensing transformation plan, and put it into actual operation, so as to stabilise the treated water quality. We also installed precise filters at the back end of the secondary sedimentation tank of the town-level sewage treatment plant to ensure the treated water suspended solids (SS) meet the discharge standards. At the same time, we changed and replaced the equipment, including the filter cloth and filter pool, denitrification filter pool and aeration system transformation, to enhance the pollutant treatment capacity of the plants. In addition, we monitor the environmental compliance issues of each water company through regular special inspection on operational issues, carry out rectification and reform, and strive to strengthen the sewage treatment capacity.

Case Study: Rural Sewage Treatment – Low-carbon and High-efficiency Rural Water Environmental Management Technology Development and Application Project



The low-carbon and high-efficiency rural water environment management technology development and application project provides distributed sewage treatment and integrated sewage treatment solutions for rural areas through the development of rural sewage treatment centralised control system to further improve the sewage treatment technology. The project has developed six sets of integrated sewage treatment equipment, a set of mobile sludge treatment equipment, a set of small intelligent sludge aerobic fermentation equipment, a remote sewage production monitoring platform and intelligent operation management and control systems such as equipment, operation, inspection, maintenance and repair. The project outcome has been widely used in Shenzhen, Meizhou, Shaoguan, Jiangmen and other places. The quality of treated water has reached the Class I Standard A, and the sludge quality of the end product meets the requirements of the Disposal of Sludge from Municipal Wastewater Treatment Plant – The Quality of Sludge Used in Gardens or Parks (GBT 23486-2009). Among them, the mobile sludge treatment equipment appeared at the Guangdong Provincial Urban Sewage Promotion Conference and was well received by relevant leaders of the provincial Department of Housing and Urban-Rural Development in the field of environmental protection at city and county levels.



Customer-Centric Services

The Group adheres to the customer service concept of “attentive, sincere and considerate”. In order to improve customer experience, we launched the master data platform system during the year, and promoted smart customer service in a number of water companies to strengthen the information management and control over customer service.

Furthermore, customers can contact our water companies through customer service hotlines, customer service work order system, and a unified WeChat official account. We also carried out training programmes on customer service management and work skills for our staff, providing the procedures and guidelines for handling customer requests and complaints, so as to enhance the professional skills of the customer service staff and ensure that customers can obtain the best experience. Along the Dongshen Project area, our water supply management departments regularly contact customers to understand their water demand, and respond to customers’ feedback in a timely manner, as well as coordinate and handle problems of users.

We have established a unified intelligent platform for centralised metering using the information platform to simplify the process of connecting water meters or concentrators, as well as automatic communication transmission and data access process. Through this platform, we can monitor the data of each water meter in real time, and analyse it with big data, so as to simplify the process of manual metering, address issues such as untimely payment by users, and provide end users with more proactive and personalised services.

Each year, the Company conducts user satisfaction surveys to extensively collect opinions and suggestions on water supply management from clients along the project area to understand their expectations and improve the quality of services based on the result. It covers six dimensions including corporate brand image, water quality management, water supply management, customer service, service demands of major clients as well as customer opinions and suggestions, covering 18 items regarding customer services of water supply. In 2021, our business continued to gain widespread recognition from clients, with an overall customer satisfaction rate of 98.5%, the same as the previous year.

OTHER BUSINESS SEGMENTS

Property Investment and Development and Department Store Operation

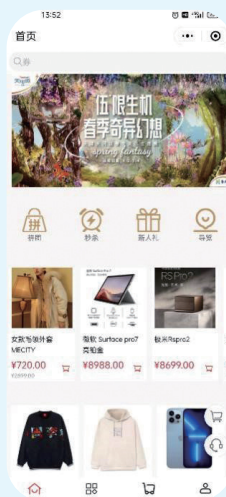
With customer value as the core of its operation, Teem Group provides premium commercial properties to tenants, actively maintains and improves the quality of goods and services, and is committed to providing tenants with a smooth and comfortable operating environment. We conduct opinion survey on a regular basis and collect tenants' opinions through a comprehensive tenant, communication and feedback mechanism. We conducted tenant surveys through online questionnaires, inviting tenants to rate 11 items including public areas, public health, engineering equipment and facilities management, and collected their opinions and suggestions on the Group's property management work. The relevant departments will actively deal with the tenants' feedback, and our customer service representatives will visit and communicate with tenants who provided suggestions to help them solve problems.

In addition, we have also actively adopted various intelligent sales and management methods to solve the challenges encountered in the operation of customers and create a convenient and high-quality operating environment for them.

Case Study: Launching Online Shopping Mall Project



In order to cooperate with the Group's digitalisation work and enhance the driving force of transformation, we launched the online shopping mall project by building an online platform and completing the development and testing of major functions. We launched the online platform on 19 June, and completed the first attempt of the activity with the 4th anniversary of Tianjin Teem as the starting point to increase customer sales, with a sales amount of RMB607,000, bringing a good start for the online platform. After the successful establishment of the platform, the Group continued to launch regular activities based on the basic strategy of continuously improving the shopping mall platform to ensure the popularity of the platform, and accelerated the move-in of merchants. From the extensive network-based negotiation mode to the one-on-one targeting mode, the Group expanded the scope of tenant resources, and took the opportunity of the Double 11 event to match the merchants' move-in activities. During the event, the sales amount reached RMB890,000. The online shopping mall has promoted the operation and development practice through the aspects of innovative operation, featured activities and platform construction. The total number of visits reached over 40,000 times during the year, and the total sales reached RMB4,790,000, completing the Company's annual performance contract index requirements.



5. CORE SUSTAINABILITY ISSUES (CONTINUED)



Case Study: Optimising Membership Management

With the increasing number of members, Teem achieved an increase in the contribution of member consumption by improving member operation management and promoting intelligent operation. During the year, we actively explored and adopted more intelligent technologies to realise the interconnection between membership business and welfare benefits and constantly added value to members' rights, interests and service experience. We implemented measures such as member interaction, points exchange and rights and interests sharing in stores to improve member retention and promote the digital and intelligent operation of enterprises.

In order to standardise the management of Teem brand, we have formulated the Guidelines for Brand Specifications of Teem Shopping Mall and the Administrative Measures for Publicity and Promotion Activities to provide clear guidelines for the promotion and planning of projects. On the other hand, in order to protect the rights and interests of consumers, we have formulated the Sales Management System Manual of Teemall Department Store, which requires business departments to provide correct and complete relevant product and service information for external publicity in Chapter 6 External Advertising Management. Advertisement must be appropriate, positive and complies with national regulations. We strictly regulate the review process of external publicity content, and abide by the requirements of the relevant laws and regulations, such as the Law of the People's Republic of China on the Protection of Consumer Rights and Interests, the Food Safety Law of the People's Republic of China and the Product Quality Law of the People's Republic of China, and have obtained ISO 9001:2015 quality management system certification to monitor product quality.

In order to maintain the product and service quality of Teemall Department Store, we have implemented various measures to control quality of goods at the pre-sale stage and during sale. In the pre-sale process, we ensure that the quality of products is up to standard through the Supplier Management System by means of issuing certificates and invoices. At the sale stage, we check the products that are about to be launched and have been put on shelves to ensure quality and safety. In addition, the on-site management personnel conducts weekly spot checks on the commodities on sale to ensure that the quality of the commodities meets the standards and prevent problematic commodities from entering the market, resulting in safety issues.

Teemall Department Store also attaches great importance to the thoughts and satisfaction of customers. We conduct customer satisfaction surveys on a regular basis and distribute electronic customer satisfaction questionnaire by means of on-site scanning of QR codes to collect scores and opinions from customers. It covers 13 items such as ancillary facilities, shopping environment and service quality. In addition to the customer satisfaction questionnaire, customers can also express their opinions through other channels. The Sales Management System Manual of Teemall Department Store sets out the handling procedures and guidelines for customer complaints for relevant departments, which explicitly states the process of customer complaints handling and requirements on employee's services. A customer complaint report is required to submit for review, so as to avoid the recurrence of similar incidents.

In 2021, Teem Group received 211 consumer complaints, with an overall customer satisfaction rate of 95.85%. We have followed up on relevant complaints and taken timely corrective actions on valid complaints, achieving a resolution rate of 100%.

Hotel Ownership, Operation and Management

The Hotel Management Company has been in strict compliance with national laws and regulations and industry regulations such as the Industry Code of Tourist Hotels in China and Star Rating Standard. It has also issued and strictly implemented several internal policies such as the Internal Guidelines for Hotel Pricing Management System and the Service Quality Management Regulations. All hotels under the Hotel Management Company have obtained the Work Safety Standardization Certification, except for the two hotels in Hong Kong which have not passed the Work Safety Standardization Certification due to the non-application of Mainland regulations. Among them, Guangdong Hotel (Shanghai) has obtained the Level 2 Standardization Certification, and the remaining hotels have obtained Level 3 Standardization Certification. In addition, all hotels have obtained the ISO 18001 quality management system certification to ensure the occupational health and safety of employees. In 2021, Guangdong Hotel (Shanghai) and Shenzhen Guangdong Hotel (Shenzhen) carried out the application process for ISO 9001 quality management system certification.

Our hotel units conduct regular hotel inspections every day. The leaders of the headquarters of the Hotel Management Company lead the team and the Safety Production (Emergency) Management Department conducts irregular inspections. At the same time, hotel units carry out safety management such as cross-inspections across hotels to eliminate potential hazards and provide our guests with a safe and ideal living environment.

During the year, Hotel Management Company added internal policies such as the Management Measures for Standardization of Operation Process of the Integrated System of Guangdong (International) Hotel Management Holdings Limited, and deepened and optimised the existing system. In 2021, after preliminary system research by the Marketing Department and multiple communications with owners, we continued to promote the switching of the Property Management Systems (PMS). During the year, we completed the construction of the PMS system of one hotel. In response to the requirements of Guangdong Hotel (Hong Kong), we also completed the investigation and research on the PMS system of the Shiji Group, which further opened up the idea of developing and optimisation of the existing integrated system.

We attach great importance to the information security of customers. We prevent our internal staff from leaking consumer information by applying account passwords on our information systems and through various access controls. We store our customers' data in the intranet, strengthen the system security management through constant technological upgrade and protect consumer information through measures such as cloud-based PMS and white list. When customers register for membership through our official website or at the hotel reception, their personal information will be directly transmitted to Central Reservations System (CRS) via PMS and undergone unified encryption. In addition, we strictly comply with the principle of customer data confidentiality and ensure that staff has obtained approval from the information department of the Hotel Management Company before requesting the CRS technical service company to extract data, with a view to effectively preventing membership information leakage through managing the information access rights of employees. In 2021, there were no information security incidents relating to the Hotel Management Company. We will continue to closely monitor and regularly check the operation of our network and website, strengthen management and prevention of information security incidents so as to safeguard consumers' information security in an all-round manner.

During the Year, we continue to utilise WeChat applications to develop new customer functions based on marketing requirements, improve the functions of applications and enhance the user experience. By continuously optimising member rights and interests, including payment of gifts, birthday gifts, membership days, etc., and carrying out all-staff marketing and distribution of incentives, we provide customers with all-round services. We also make more efforts on promoting marketing activities and WeChat official account to promote various brands and products for members.



Guests' opinions and suggestions are important references for us to continuously improve our service level. We conduct comprehensive satisfaction survey and provide timely feedback through big data provided by Jointwisdom and maintain tracking of customer satisfaction. By collecting online reviews from guests, we investigate their accommodation experiences at our hotels and ensure that the results are genuine, valid and timely. The information collected is consolidated with the Guest Satisfaction Survey (GSS) data for statistical analysis in our system to optimise existing measures and improve service quality. During the year, Jointwisdom's score of the Hotel Management Company is 92.59, 0.26 point higher than that of the previous year.

In addition to the comprehensive satisfaction survey, guests can express their opinions and suggestions through the customer complaint mechanism. Upon receiving customer complaints, our staff on duty will timely address customer demands within their capacity, report to their superior, follow up and handle the complaint according to the instructions. For complaints lodged by customers on our online platform, the sales department will forward them to corresponding departments based on the contents to conduct a thorough investigation and take corresponding remedial and corrective measures.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

Road and Bridge Operations

GDH Highway is committed to maintaining road traffic safety and smooth traffic flow for the purposes of safeguarding lives and properties of road users. We strictly comply with the Highway Law of the People's Republic of China to strengthen the construction and management and promote the development of highways. We have also formulated internal rules such as the Administrative Measures for the Supervision and Inspection of Special Vehicles and the Rules for the Supervision of Obstacle Removal Operations to regulate the daily management of obstacle removal work and ensure intact highways, and safe and smooth transportation.

In order to improve the efficiency of emergency response, we have established a joint coordination mechanism of "Traffic Police, Highway and Corporate", by which, the efficiency of emergency response has been improved by 50%, ensuring the safety of public travel to the greatest extent. In addition, according to the Service Areas Management System and the Emergency Response Plan for Toll Stations, GDH Highway conducts emergency drills, joint safety inspections and accident handling training regularly to ensure that employees can provide safe and high-quality services for the public and road users, and implement the safety production policy of "safety first, prevention prioritised with comprehensive governance".

In addition to complying with laws, regulations and industry requirements, GDH Highway has set the benchmark against local operational management inspection standards, formulated the Implementation Plan for Creating Maintenance Management Demonstration Roads and continued to improve the standard of maintenance management and promoted refined management. During the Year, we carried out the carbon fiber plate bridge reinforcement and maintenance project. We used carbon fiber plate to reinforce the bridges to enhance the load bearing capacity, while shortening the road renovation period, saving a large amount of investment and reducing the traffic flow pressure during road renovation.



Case Study: Asphalt Pavement Hot-in-Place Recycling Technology



Since the reconstruction and operation of Xingye-Liujing Expressway on 18 March 2021, two traffic accidents that burnt large-scale of road surface, had occurred. In order to shorten the time for resumption of operation, GDH Highway adopted new process Hot-in-Place recycling technology and equipment to achieve rapid maintenance of asphalt roads, which, compared with traditional manual repair technology, can reduce the manpower by 50% and shorten the repair time from more than 3 days to half a day.

Not only can the use of Hot-in-Place recycling technology and equipment improve the speed of emergency repair and construction effectively, but can also realise the 100% reuse of the used asphalt. Such environmental-friendly and low-carbon construction technology has fully achieved the “reuse of stone materials and recycling of asphalt”, saving a large amount of road raw material resources.



In 2021, we continued to implement the maintenance plan for the “three major systems” of toll collection to ensure that the systems are in good technical condition and lay a solid foundation for the normal implementation of network charging. Maintenance work includes formulating mechanical and electrical maintenance plans, implementing mechanical and electrical projects, and stepping up thorough inspection of all mechanical and electrical equipment on the eve of major holidays to ensure that all major systems are operating stably and reliably and achieve zero major liability incidents affecting toll collection.

We have formulated the Complaint Reporting and Handling Management System, which provides clear guidelines for handling complaints, so that we can identify the responsible person immediately upon receiving a complaint, follow up and communicate with the complainant to ensure that the complaint is resolved in a timely manner. Meanwhile, we fully tap into the functions of the public communication service platform hotline, “96333”, to effectively enhance the bulletin service of highways and the emergency handling capabilities.

During the year, we received a total of 41 service suggestions, handled 497 business consultations and 987 instant messages, deployed 970 rescue operations with a handling rate of 100%. There were no valid complaints throughout the year.

5. CORE SUSTAINABILITY ISSUES (CONTINUED)

5.5

CONSERVING BIODIVERSITY AND ECOSYSTEM

Protecting biodiversity is the foundation for the harmony between human and nature. The Chinese government has attached great importance to the protection of the ecological environment and ecosystem safety and has been establishing a number of biodiversity protection plans, including the “China Biodiversity Conservation Strategy and Action Plan” since signing and acceding to the international Convention on Biological Diversity in 1992, to further improve the administration of ecological civilisation. In this regard, the Group is committed to reducing the impact of its operations on the ecological environment, enhancing the Group’s overall awareness of environmental protection, continuously enhancing its ability to respond to biodiversity protection, and making its best efforts to implement international and national biodiversity planning and protection.

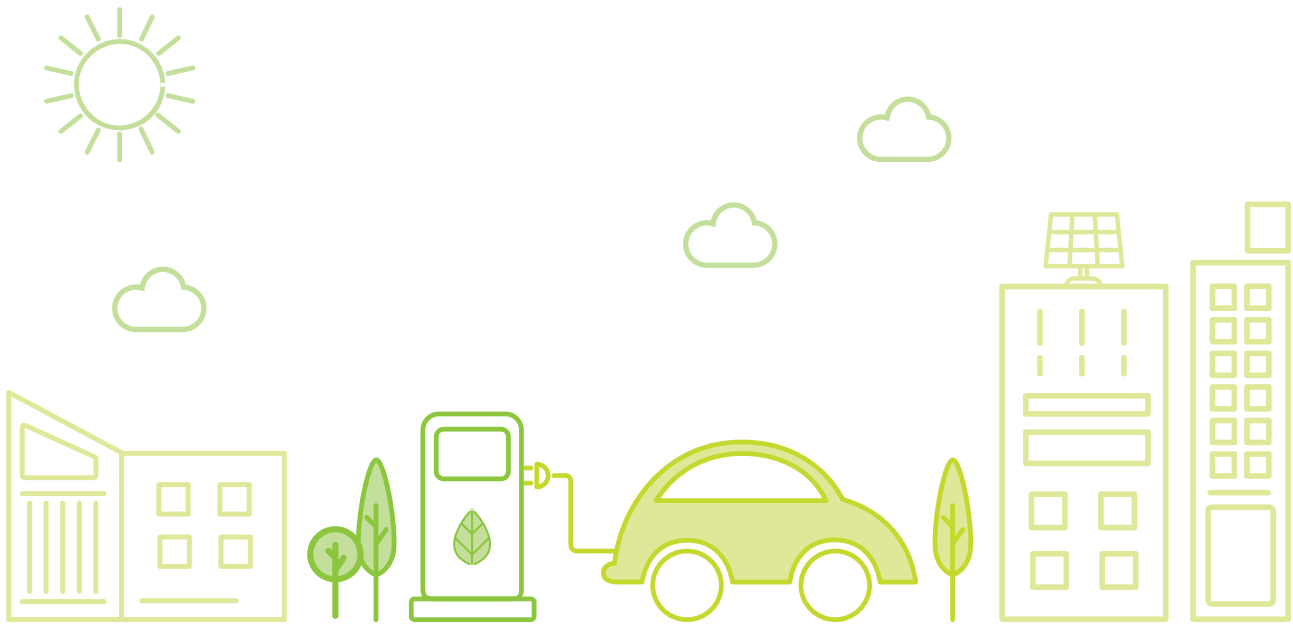
ECOLOGICAL CONSERVATION PRINCIPLES

The Group recognises the vital importance of biodiversity conservation to the sustainable development of the Group’s business. To this end, we have revised the Biodiversity Protection Policy of Guangdong Investment Limited, and committed to adopting various means to maintain the ecological balance and biodiversity and striving for a “net positive impact” on biodiversity in future construction plans. In addition, the Group will further enhance management’s engagement in biodiversity management with constant investment in resources in various aspects to promote environmental protection and restoration.

Biodiversity conservation has been integrated into the construction and operation stages of projects involved in each business segment. We encourage each business segment to carry out biodiversity assessments for relevant projects to prevent adverse impacts brought by construction and operation activities on biodiversity, endangered species and habitats. At the same time, our publicity campaigns and training activities targeting biodiversity conservation have raised the awareness of employees, contractors and other stakeholders towards the importance of biodiversity conservation.

RESPONSIBLE COOPERATIONS WITH GOVERNMENT

The Chinese government continues to improve the ecological civilisation system and enhance the supervision of ecological environment. As a socially responsible enterprise with certain influence, we fully support and comply with those government policies which aim to protect the ecological environment and actively implement the Measures for Special Supervision of Ecological and Environmental Protection issued by the Ministry of Ecology and Environment. To strengthen the protection of ecological environment and resources of reservoirs, Yue Gang Water Supply jointly issued the Several Opinions on the Establishment of Joint Coordination Mechanism for the Protection of Ecological Environment and Resources of Shenzhen Reservoirs (Trial) with 10 units, including Luohu District Procuratorate, Shenzhen Drinking Water Protection Management Office, Luohu District Ecological Environment Bureau, and Luohu District Water Bureau, which effectively exerted its influence and appeal to ensure that each unit performs its supervisory duty in protecting the ecological environment of the reservoir in the water source protection work of Shenzhen reservoirs. In May 2021, Yue Gang Water Supply and the local government departments jointly carried out special clean-up and rectification actions on the illegal construction, illegal planting, breeding and stockpiling in water source reserves of Shenzhen Reservoir to effectively ensure the safety of drinking water sources. At the same time, the Group actively participated in industry forums and the publication of two local standards in Guangdong Province, namely the “Technical Regulations on Environmental Protection and Sludge Treatment and Disposal of Urban Rivers and Lakes” and the “Design Regulations on Ecological Restoration of Urban Rivers and Lakes”, to promote ecological protection and ecological integration within the city.



At the same time, the Group's water business cooperates with the government to protect water sources and strengthen the inspection and supervision of drinking water sources. We have installed physical and biological isolation and barriers outside the water sources of reservoir areas to safeguard the safety of drinking water. In addition, we hold meetings quarterly to study the work on water source protection and communicate the conditions of the water source in a timely manner through irregular on-site inspections and establishing real-time communication groups to ensure water quality.

ECOLOGICAL ASSESSMENT AND REMEDIATION

We make every effort to minimise environmental impacts of our business operations and are committed to managing and restoring the ecological environment. Prior to the commencement of a new large-scale project, we conduct the environmental and ecological impact assessment, allowing us to analyse possible negative impacts of such a project on the local and surrounding ecosystem and the livelihood of indigenous residents, while establishing specific mitigation plans based on the results to protect the ecology and natural habitats at source as much as possible. To this end, we have engaged external experts for long-term cooperation to carry out a series of plans for water quality risks of the Shenzhen Reservoir, such as ecological fish breeding, so that the reservoir can maintain low water ecological risks during the drought. For the established projects, we continue to upgrade the water quality monitoring to improve the monitoring capability.

The Group adopts a science-based approach to assess ecosystem diversity and biodiversity. We have been working with the Research Center of Hydrobiology of Jinan University for many years to evaluate and improve the water ecology of the Dongshen Water Supply Project, Yue Gang Water Supply carried out monitoring and remediation of pollution sources along Dongjiang River and Shenzhen Reservoir, improved water quality management, carried out water quality protection research, and strengthened special water quality monitoring during the year. We also actively carry out comprehensive treatment for water environment through scientific research and technical means to restore the ecological environment of water bodies and organically combine scientific research results with business scenarios, which greatly improved the operation of the water resources segment and ensured the safety of water quality.

JOINT RESEARCH AND DEVELOPMENT

We continue to work with domestic universities to carry out science research projects in a bid to improve the ecological environment and water quality with innovative technologies. In 2021, the Group cooperated with the Jinan University and adopted the research results to water quality dispatch of Shenzhen Reservoir. Both parties cooperate to carry out water ecological monitoring. Based on the actual ecological monitoring situation, we have conducted dynamic evaluation of the water ecology with corresponding improvement measures taken, such as ecological fish farming and water quality dispatch. The water ecology of the two reservoirs of Dongshen Water Supply Project has been maintained at a low risk level for a long time, and the management effect is obvious.



6.1

UPHOLDING STRINGENT BUSINESS ETHICS AND INTEGRITY STANDARDS

The Group operates with great probity by upholding the highest standards of business ethics and integrity. With reference to the Basic Standards for Internal Control of Enterprises formulated by Guangdong Holdings, with a focus on “three flows and three points” (namely flows of goods (logistics), fund flows, and information flows; key points, risk points and control points), we have optimised our corporate policies and procedures. At the same time, the Group practices stringent over our internal control, comprehensive budgeting, production safety, and the “three systems” management (i.e. quality, health and environmental management systems) in order to improve its comprehensive risk management. We regularly conduct analyses on the effectiveness and rationality of our existing risk management strategies and take into account the actual situation for revisions and improvement. All such work aims to ensure that we enhance our execution capability and overall management standard on a continuous basis. During the year, the Group was not aware of any incidents of human rights, labour rights, environment and anti-corruption related performance.

OPERATING WITH INTEGRITY AND COMBATING CORRUPTION

The Group upholds the governance philosophy of high standards and transparency and has put in place an anti-corruption policy based on the principles of integrity and accountability. We ensure strict compliance with national laws and regulations in every process of our operations, including the Anti-Corruption and Bribery Law of the People's Republic of China, the Supervision Law of the People's Republic of China, the Civil Code 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 and the Anti-unfair Competition Law of the People's Republic of China. We also review our internal control and risk management systems according to the latest regulatory requirements.

The Group has formulated, updated and revised the Anti-corruption Policy of Guangdong Investment Limited, strictly implemented the List of Objectives and Assignments for Discipline Inspection and Supervision and Employee Code of Conduct on Honesty and the Integrity of Guangdong Holdings Limited to clarify the code of ethics for employees and implement anti-corruption work. In order to ensure the integrity and ethics of employees, the Group has revised the working guidelines for integrity talks and policies for concerns about employees' misconduct. The Group has also formulated the Code of Business Ethics for Employees which details the definition of acts that constitute corruption or unethical practice and clearly sets out the procedures for handling conflicts of interests and strictly regulates the conduct of employees such as anti-competition, insider trading, and accepting or offering gifts, favours or hospitality. The Group actively explored the discipline inspection of state-owned enterprises in Hong Kong, formulated the Code of Conduct of Guangdong Investment Limited and other systems, and signed the Integrity Responsibility Statement with 53 employees of the Hong Kong headquarters for the first time during the year, making a commitment to integrity.

The Group also strives to enhance its overall performance on integrity building and cultivates a culture that goes against corruption, advocates and encourages honest practices and speak-up culture. The Group evaluates its past performance on a regular basis, provides positive guidance and facilitates the discussions and communication on corporate discipline inspection and supervision, so that all stakeholders can realise the importance and necessity of combating corruption and upholding integrity for the Group's reputation. To this end, we have provided employees with training on anti-corruption in stages for a long time to enhance the Group's overall awareness of anti-corruption and integrity, thereby ensuring that their will not engage in any act that harms the interests of the Group and relevant stakeholders. To further beef up anti-corruption education and enhance employees' awareness on integrity and self-discipline, GDI organised its directors and employees at headquarters to attend anti-corruption training delivered by the Independent Commission Against Corruption (ICAC). Through the lectures on anti-corruption, corporate and business ethical standards and case studies, the participants were refreshed with knowledge on laws and regulations and relevant information about code of conduct. We hold ongoing dialogues with key leaders and newly appointed senior management of the Group to clarify their duties and matters for attention in combating corruption. We also give admonitory talks to urge and require employees to perform regular reviews and take corrective actions for minor breaches.



Water Resources

As the Group's core business segment, the water resources segment strictly supervises itself and its subsidiaries, and actively establishes and improves the discipline inspection and management system. The water resources segment strictly implements the Work Guidelines on Supervision and Discipline Execution and the Rules for Whistleblowing via Petition Letters for Discipline Inspection formulated by Guangdong Yue Gang Water Supply Company Ltd. and Guangdong Yue Hai Water Holdings Limited, and carries out supervision and discipline execution in accordance with regulations, disciplines and laws. During the year, it formulated and issued the Work Guidelines for the Integrity Supervision of the Construction of Major Projects and the Interim Provisions on the Registration Report of Tender Call of Guangdong Yue Gang Water Supply Company Ltd. and Guangdong Yue Hai Water Holdings Limited, and revised the Interim Measures for the Supervision and Administration of the Duties and Consumption Behaviors of the Persons-in-charge of Enterprises of Guangdong Yue Gang Water Supply Company Ltd. and Guangdong Yue Hai Water Holdings Limited to further strengthen the restriction and supervision of the power operation throughout the construction.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

The water resources segment continued to track the annual internal control rectification plan. While carrying out audit projects, it conducted spot checks on the implementation of internal control, formulated rectification measures for control deficiencies identified, and regularly followed up the implementation of rectification results. Moreover, the water resources segment also arranged annual self-assessment on internal control for the year to identify deficiencies in a timely manner and put forward proposals for improvement with a view to underpinning the operation and management of the internal control system.

During the year, the water resources segment organised nearly 270 employees at all levels to participate in the Group's risk control management training. At the same time, in combination with the segment's compliance management training, third-party risk control experts were invited to give risk control training for the backbone of subsidiaries to further improve employees' risk awareness and business capabilities.



Property Investment and Development and Department Store Operation

Teem Group has revised its Work Regulations for Discipline Inspection and Supervision, Work Guidelines for Supervision and Discipline Execution, and Implementation Rules for Reminder, Enquiry Letter, Admonition, Encouragement and Integrity Interviews and has piloted the Accountability Measures for Irregularities in Corporate Operations and Investments. Such revision and measures aimed to further specify the duties and main tasks regarding discipline inspection and internal audit, detail the implementation of conversational inquiries, set out the requirements for discipline execution and accountability and upgrade the regulation and standard of discipline inspection and internal audit so as to make fully uses of the supervisory resources of internal discipline inspection, finance, audit and risk control, thereby enhancing the efficiency of supervision on an ongoing basis.

Teem Group conducts routine audit on its subsidiaries and monitors and urges the rectification of issues identified to eliminate any management loopholes. In addition, we organise internal and external training activities and audit training regularly to improve the professional skills of our audit staff and, in particular, deepen their understanding of our business so that they can provide better audit services for our operations.



Hotel Ownership, Operation and Management

During the year, the Hotel Management Company has revised the Implementation Rules for Supervision on Tendering and Purchasing, formulated the guidance for the supervision of construction projects and bidding and procurement of Hotel Management Company, and sorted out the list of negative issues that are prone to occur in the process of bidding and procurement. In addition, the Company has also formulated the Interim Measures for the Supervision and Administration of the Duties and Consumption Behaviors of the Persons-in-charge of Enterprises to regulate the duty consumption behavior of the person-in-charge of enterprises, and improved the Internal Audit Management Measures. In addition, we require senior management members such as the chairman, general manager, department heads and staff holding key positions to sign the Integrity Responsibility Statement to reduce the integrity risk in business operations.

In order to further strengthen the awareness of risk control and integrity, the Hotel Management Company completed a total of 13 internal audit projects according to key projects during the year, and put forward 107 audit issues, 7 precautions and 53 suggestions on various management issues such as human resources management, property management, project management, bidding management, contract management, financial management, safe production, pandemic prevention and control, and audit rectification. In addition, the Hotel Management Company also regularly launches a series of discipline education activities for leaders and employees, which include studies on guidelines and principles on building integrity and fighting corruption to enable them to understand and implement the requirement of corruption-free operations at group level.

Case Study: Discipline Education and Training Activities of the Hotel Management Company

The discipline inspection department of the Hotel Management Company, together with the project management department, organized training and examinations on the interpretation of systems such as the management measures for project tendering, the management requirements for goods and services procurement, and the implementation rules for supervision on tendering and purchasing. Approximately 130 management members of the Hotel Management Company and its subsidiaries participated in the training. In addition, on 15 September 2021, the Discipline Inspection Committee of Hotel Management Company invited a lecturer from the Independent Commission against Corruption of Hong Kong to conduct a seminar on integrity and honesty. The lecturer explained the common areas of corruption and fraud in the hotel industry, relevant laws and regulations, typical cases, and anti-corruption tips. More than 20 management members from two overseas hotels participated in the training.



Energy Projects

Zhongshan GDH Energy strictly complies with policies such as the Work Guidelines for Supervision and Discipline Execution of Zhongshan GDH Energy Co., Ltd., the Work Guidelines for Integrity Systems Development and Integrity Dialogues, Cautionary Talks and Admonitory Talks of Zhongshan GDH Energy Co., Ltd., the Administrative Measures on Reception of Zhongshan GDH Energy Co., Ltd. and the Management Standards for Reimbursement of Personal Expenses for Business Purposes of Zhongshan GDH Energy Co., Ltd. and raises employees' awareness of integrity in discharging their duties through discipline inspection and training sessions so as to prevent violations. During the year, Zhongshan GDH Energy organized 4 integrity training sessions for relevant staff of discipline inspection, with a total of 330 staff at key positions participating. During the year, Zhongshan GDH Energy conducted an integrity review on 11 cooperative units and suppliers to understand whether our staff had any dishonest behavior. The results of the review showed that no corruption behavior was found.



Roads and Bridges

GDH Highway has strictly implemented the Work Guidelines for Supervision and Discipline Execution, the Audit Management Measures and other policies and internal control manuals, and has formulated the Interim Measures for the Supervision and Administration of the Duties and Consumption Behaviors of the Persons-in-charge of Enterprises. It is responsible for routine disciplinary inspection and supervision, with the aim of monitoring corruption risks and providing holistic process control for key activities and sensitive positions. Focusing on key areas, links and positions of project construction, GDH Highway identified integrity risk points and formulated the Integrity Risk Prevention and Control Manual. The manual sets out the key points of supervision, targets of supervision and methods of supervision at different stages, and implements precise supervision by means of list-based and institutionalized supervision and prior supervision. In order to implement the integrity construction, GDH Highway organizes the signing of the Integrity Responsibility Statement, the Convention on Integrity and the Integrity Responsibility Statement, and regularly conducts integrity warning talks within the Company.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

WHISTLE-BLOWING MECHANISM AND PROTECTION

GDI has put in place group-wide whistle-blowing policies and procedures, including the Employee Business Ethics Manual of Guangdong Investment Limited, the Policy for the Employees to Raise Concerns about Possible Improprieties and the Rules for Whistle-blowing via Petition Letters for Discipline Supervision of Guangdong Investment Limited. The Group encourages and urges its staff to report any suspicion of dishonest, unethical or illegal acts. Any such report will be handled in a confidential manner to protect whistleblowers in accordance with the laws and regulations of the region where the entity operates, and the identities of whistleblowers will not be disclosed without his/her consent. Upon receipt of the report, the case will be referred to the Internal Audit Department of the Group to carry out fair and independent investigations and evidence collection. The case will then be submitted to the Chairman of the Board or the Audit Committee in order to keep confidential of the identities of the whistleblowers. During the year, there were no disciplinary violations or cases filed for the Group's business segments.



Water Resources

With “standardised, institutionalised and refined practices” as its goal, the water resources segment unblock the reporting and complaint channels, actively processes the reporting and accusation from the public, conduct timely investigation and handling in accordance with the Rules for Whistleblowing via Petition Letters. In addition, Guangdong Water has also made public on its official website for disciplinary inspection, petition and reporting channels. The Company has set up measures to protect its whistleblowers by ensuring the confidentiality of their particulars and strictly forbidding retaliation against them.

In 2021, the Company received a total of 39 reports through complaint and report letters, online reports, clues handed over by superiors and supervision and inspection. For cases reported, the Discipline Inspection Office of the Company shall, in accordance with Measures of Whistle-blowing via Petition Letters and the Guidance on Supervision and Discipline Inspection, conduct verification and treatment on the clues of the problems in accordance with the procedures of acceptance registration, research and proposing suggestions, reporting and approval, etc.. In 2021, there were no corruption lawsuits within the Company.



Property Investment and Development and Department Store Operation

Teem Group has put in place the Rules for Whistle-blowing via Petition Letters for Discipline Supervision, the Work Guidelines for Supervision and Discipline Execution and other policies to standardise the process for handling whistle-blowing and complaints, and clarify the provisions for protecting whistleblowers, including the requirements that the personal information of the whistleblowers and the contents of whistle-blowing shall be kept confidential and the particulars of the whistleblowers should not be disclosed without the whistleblowers' consent. In addition, we collect whistle-blowing information via various 24-hour channels, including Teem WeChat official account and official website. Dedicated personnel are responsible for making suggestions on how to handle the matters in strict compliance with relevant policies, coupled with level-by-level review and timely processing to achieve "zero backlog" of reported cases.



Hotel Ownership, Operation and Management

To standardise the procedures for whistle-blowing via petition letters for discipline inspection, the Hotel Management Company has formulated and issued the Rules for Whistle-blowing via Petition Letters of Guangdong International Hotel Management (China) Limited based on the Rules for Whistle-blowing via Petition Letters for Discipline and Supervision of Guangdong Holdings Limited and the circumstances of the Company. To establish public channels and platform, the Hotel Management Company published hotlined and email address on its official website. Cases reported are subject to strict and timely verification, processing and submission according to relevant requirements with verification results provided to persons concerned in a responsible manner.



Energy Projects

To facilitate employees to report any breach of disciplines or laws and other related issues, Zhongshan GDH Energy has set up various reporting channels, including publishing its whistle-blowing hotline, email address and postal address on its bulletin board and internal magazines to ensure various complaint channels are readily accessible.



Roads and Bridges

In order to further strengthen and standardise the supervision and reporting work of discipline inspection, GDH Highway has formulated the Working Rules for Whistle-blowing via Petition Letters of Guangxi GDH Highway Co., Ltd. to better play the role of communication, information feedback, supervision guarantee, coordination and guidance, and safeguard the legitimate rights and interests of the whistleblowers. Moreover, GDH Highway has formulated the Guidelines on Handling Complaints and Whistle-blowing to strictly regulate the management of information from whistle-blowing hotline and email and fully utilised the function of the customer service platform hotline "96333" to enable public scrutiny.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

6.2

EMBRACING AND PRESERVING THE ENVIRONMENT

Mankind's daily and economic activities are inextricably linked to the natural environment and are interdependent on each other. GDI always regards green operation as the foundation of development. With the Sustainable Development Policy of Guangdong Investment Limited in place, GDI further promotes its sustainability efforts to minimize its operational impacts on the environment and natural resources. During the course of operation, we shoulder the responsibility as a leading green operation enterprise in the industry, strictly abide by relevant laws and regulations and environmental standards, following the national environmental protection development trend, to formulate environmental protection plans tailored to its characteristics in each business segment, so as to reduce the discharge of sewage, waste and air pollutants, and achieve the goal of clean production and efficient use of resources.

ENVIRONMENTAL MANAGEMENT SYSTEM

As an integral part of the Group's business operations, we maintain outstanding environmental performance in respect of products and services with a keen eye on the environmental impact of our operations. The Group strictly complies with major environmental protection laws such as the Environmental Protection Law of the People's Republic of China, the Energy Conservation Law of the People's Republic of China, 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, the Law of the People's Republic of China on Prevention and Control of Environmental Pollution by Solid Waste, the National Inventory of Hazardous Wastes (2021 Edition), and the Measures for the Administration of Environmental Surveillance. Meanwhile, under the Group's overall environmental protection policy, specific policies and measures are put in place according to the actual operational situation of each business segment to continuously improve the management approach for eco-friendly production and operation, and the Group continuously promotes awareness of green production internally so as to perform its responsibilities for monitoring and managing projects.



Water Resources

The water resources segment attaches continuous attention to core issues such as climate change, energy and emissions and water stress, and is committed to improving the sustainable operations to ensure stable business development in the long run. We practice strict control over the policies, procedures and responsibilities based on the implementation of our integrated management system (the “three systems”) that combines environment, quality and safety. Based on the guidance of the environmental management system under the “three systems”, we carry out tasks in compliance with the ISO14001 standard of the International Organization for Standardization. Following the requirements of certification agencies, we conduct regular review and devise improvement plans for Water Holdings and Yue Gang Water Supply as well as the subordinate water companies to maintain our water businesses at the international standard.

In order to ensure sustainable operations, water resource risk management is introduced in subordinate water companies to proactively detect the local environmental risks and associated hazards as early as possible so as to avoid substantial damage to the surroundings and our own operations. We identify environmental risks from time to time through a thorough investigation of five risk aspects, namely “corporate environmental risks”, “environmental hazards in the course of production and operation”, “organisational structure of the Company for environmental protection”, “environmental accidents” and “corporate environmental protection focuses”. During the Year, the water resources segment carried out a total of 205 special examinations and engineering inspections, and continued to identify problems and implement rectifications. Meanwhile, the Group analyses the performance of environmental risk sources such as energy consumption, water consumption, sludge discharge, solid waste disposal and use of disinfectants to ensure compliant production and seek further improvement in terms of pollutant reduction.

For projects under construction, we implement civilized construction to minimise the impacts on surrounding communities and environment during construction and operation, which include dust, noise, light pollution and waste. We also promote information systems and application of smart construction sites to improve the overall efficiency and management level of construction projects, and reduce the impact on the environment, which has achieved initial results in pilot projects such as Xinghua Yangtze River Water Diversion Project and Puning North Central Water Plant Project.



Property Investment and Development and Department Store Operation

Teem Group has put in place an environmental monitoring and management system with well-defined responsibilities and standardised procedures and obtained the ISO14001 environmental management system certification. In the future, we will further implement reasonable and efficient plans and operational procedures to achieve environmental excellence. During the establishment of the system and the launch of operational process, we have enhanced the overall environmental management standards in a short period of time, and heightened staff’s awareness and capability on environmental management, which to a certain extent facilitated our coordinated sustainable development both in economic and environmental aspects. We also promote green procurement and sign environmental protection agreements with third parties, requiring third parties (merchants) to ensure that they have met environmental protection requirements related to pollutants, packaging materials and products.

Besides, Teem Group considers environmental impacts in the building lifecycle, including building design and construction, while buildings characterized by meeting the requirements of green buildings. In our property management business, we actively enhance the performance and conditions of facilities to reduce energy consumption and emissions. In the indoor environment of our properties, we have engaged a professional independent party to clean and sterilise each special exhaust system in the building, conduct relevant indoor air quality inspection covering bacteria, particulate matter and dust accumulation pursuant to the Hygiene Specification of Central Air Conditioning Ventilation System in Public Buildings.



Hotel Ownership, Operation and Management

The Hotel Management Company endeavours to improve its environmental performance and maximise the value for customers in the provision of quality services at its hotels. In accordance with environmental management standards, we have gradually established our environmental management system, with multiple measures including eco-friendly consumption, waste classification and treatment, energy conservation and emissions reduction put in place in our hotel operation. Such efforts are devoted to raise employees’ environmental awareness and encourage them to set examples for others and communities to jointly build a better environment.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Energy Projects

Zhongshan GDH Energy focuses its environmental management on three major areas, namely water conservation, energy conservation and waste management. To achieve high standard of routine environmental operation and management, we have formulated a number of environmental management rules and regulations, mainly the Supervision and Management Standards for Chemical Technology, the Supervision and Management Standards for Environmental Protection Technology, the Management Standards for Reporting Information on Exceeding Environmental Limits, the Solid Waste Management Standards, the Operation Rules for Centralised Control, the Operation Rules for Environmental Protection, and the Operation Rules for Chemical Use to create positive and long-lasting environmental benefits. We have also built a comprehensive system for treating sewage, exhaust and waste residues as well as a fully enclosed coal transportation system and enclosed coal yards in order to achieve centralised sewage treatment, integrated and efficient utilisation of solid waste and ultra-low emissions according to standards.



Roads and Bridges

GDH Highway makes every effort to minimise the impacts of its operations on the natural environment to deliver eco-friendly highways. Driven by such vision, we pay close attention to the surrounding environment of our roads, continuously improve the driving environment and set up a stable and long-term mechanism for greening and cleaning along our highway. In respect of soil and water conservation and soil restoration of any construction project, we formulated detailed policies and measures to ensure compliance with the requirements of applicable laws and regulations.

Meanwhile, we continuously explore new approaches to reduce highway noise so as to avoid disturbing neighbouring communities and ecosystem. We keep monitoring the noise produced from road maintenance and renovation and engage independent third-party consultants from time to time to evaluate our noise reduction performance along the route. We would then adjust our management strategy based on evaluation results to mitigate the noise impact.

EMISSION CONTROL AND REDUCTION

GDI actively leverages the competitive edge of various segments to help improve the ecological environment and reduce various emissions, including atmospheric pollutants, sewage and hazardous and non-hazardous waste through use of clean energy, improvement of production technologies and application of new technologies. Thanks to the efforts and strict control of each segment, GDI and its business segments had no major pollution incidents or violations of relevant laws and regulations in the year; nor were they subject to complaints, fines or sanctions for major environmental pollution or violation of environmental regulations.



Water Resources

Our water resources segment is responsible for the supply of clean water through its daily water supply operation, the process of which does not involve material environmental pollution or emissions. While our sewage business is responsible for treating sewage contaminated due to human activities. During the treatment process, the concentration of pollutants in water will be reduced to reach the national standard suitable for discharge. Moreover, we take effective measures to treat and control such indicators as chemical oxygen demand (COD) and ammonia nitrogen (NH_3) concentration in water, coupled with real-time monitoring via online monitoring devices and other approaches to strictly treat and control such indicators as chemical oxygen demand (COD) and ammonia nitrogen (NH_3) concentration in water, so as to ensure the discharge complies with requirements and avoid the pollution of water sources and harm to public health. During the year, we have been engaged in 26 sewage treatment projects in 9 provinces in China, reducing COD and NH_3 by an aggregate of 48,251.37 tons and 4,971.60 tons respectively.

Case Study: Eastern Shanwei Water Purification Plant



The Eastern Shanwei Water Purification Plant and Supporting Pipeline Network Project newly built an underground eastern water purification plant with the aim of enhancing the sewage treatment capacity of downtown in Shanwei city and Honghaiwan area, and utilising the facilities of pipeline network to reduce the contamination of combined discharge. It can also enhance the capacity of pollutant removal, tremendously decreasing the discharge into the sea. This purification plant is the fixed process of sewage transmission system in Shanwei and enable the system to maximise the effectiveness.



Case Study: Carbon Source Optimisation and Utilisation, Phosphorus Removal and Resource-recycling Project



The low-carbon and resource-recycling upgrading technology and application demonstration projects of urban sewage were carried out in Meizhou Erwu and Zhouxi River Sewage Plants together with domestic colleges and universities to carry out research and develop technologies such as carbon source optimization and utilization, phosphorus removal and resource-recycling on the basis of the typical process of urban sewage treatment. Through strengthening and optimising the original process of biochemical pools, combined with the biological aeration filter (BAF) of double bed layer and anaerobic biological filter technology, the removal rate of nitrogen, phosphorus and organic compounds was further improved. The key indicators of effluent met the special emission limit requirements in the Urban Wastewater Treatment Plant Discharge Standards (2015 Consultation Draft).



6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Property Investment and Development and Department Store Operation

The major emissions of Teem Group are solid waste and sewage generated by property construction works, catering tenants and daily operations of its properties. In terms of solid waste discharge, and in line with the regulations such as the Management Regulations for Construction Waste of Guangzhou, the Management Regulations for Classification of Domestic Waste and the Management Measures for Food Waste and Waste Grease, we formulated the Waste Classification and Treatment Procedures of Teem, the Implementation Plan for Domestic Waste Classification of Teem, the Waste Classification Management Policy, the Operation Code of Domestic Waste Classification and other policies to control waste generation. In addition, we have engaged professional third parties to collect and treat wastes to ensure proper disposal and avoid environmental damage. On the other hand, we have strengthened the management of household garbage collection and transportation, guided merchants to do a good job in sorting, releasing and collecting household garbage, and promoted the reduction of household garbage sorting sources. At present, the garbage classification work has stepped into the normal track and achieved remarkable results. Garbage classification has been included in the daily on-site inspection items, and all kinds of domestic garbage removal quantity are reported monthly on regular basis.

In terms of controlling energy and water conservation, we are committed to comprehensively improving the efficiency of energy utilization. In particular, Panyu Teemall has formulated energy conservation and environmental protection plans, advocated active participation of tenants in energy conservation and consumption reduction, and helped the Group further establish an energy conservation and environmental protection management system. Relying on environmental protection technologies, Panyu Teemall has carried out energy conservation and consumption reduction in terms of lighting, air conditioning, heat insulation, water control, etc., and built a green and environmentally shopping mall. During the year, the Teem Tower completed the upgrade of energy-saving lighting systems in corridors and washrooms, saving 80% of the original electricity consumption by energy-saving lamps.



Hotel Ownership, Operation and Management

The major emissions of Hotel Management Company are solid waste and sewage generated by property construction works, catering tenants and daily operations of its properties. In terms of solid waste discharge and in line with the regulations such as the Management Regulations for Construction Waste of Guangzhou, the Management Regulations for Classification of Domestic Waste and the Management Measures for Food Waste and Waste Grease, we formulated the Waste Classification and Treatment Procedures of Teem, the Implementation Plan for Domestic Waste Classification of Teem, the Waste Classification Management Policy, the Operation Code of Domestic Waste Classification and other policies to control waste generation. At the same time, Hotel Management Company has implemented the responsibility management system and established a hotel waste sorting working group to clarify the responsibilities of each unit. We have also carried out waste sorting by setting up waste sorting bins in hotel lobbies, guest rooms, office buildings and other places, and engaged professional third parties to collect and treat wastes to ensure proper disposal and avoid environmental damage.



Energy Projects

On top of meeting the standard of factory construction, Zhongshan GDH Energy has been working to control the density of air pollutant emissions from its coal-fired generation units in strict compliance with the Emission Standard of Air Pollutants for Thermal Power Plants and the Notice on Issues concerning the Implementation of Tariff Support Policies for Coal-fired Power Plants with Ultra-Low Emissions. As a result, Zhongshan GDH Energy has consistently met the emissions limit for coal-fired power generation units, with its emission density of smoke and dust, sulphur dioxide and nitrogen oxides below 5 mg/Nm³, 35 mg/Nm³ and 50 mg/Nm³ respectively when the oxygen content meets the standard of 6%. In order to meet the emission standards of equipment, we adopt the dual-cycle flue gas desulfurization process of limestone-gypsum method, and in the denitrification process, we adopt the advanced SCR system. The efficiency of these two systems in terms of reduction of sulphur and nitrate content in flue gas reached 99.08%/99.08% and 79.65%/83.96% respectively. In addition, for the dust content of flue gas, we have installed four electric bag dust removal devices and a dust removal system to reduce air pollution. To ensure the accuracy of our emission data, we regularly engage third-party testing agencies to conduct self-monitoring of mercury content, blackness, noise at boundary, fugitive emissions, and circulating cooling water and domestic sewage in exhaust gas on a quarterly basis. The main pollutants of flue gas, such as smoke and dust, SO₂ and nitrogen oxides, are monitored through an online monitoring system. Zhongshan GDH Energy's environmental targets for 2021 are to achieve ultra-low emission compliance rate, and the ultra-low emission compliance rate of both units can reach 99% every quarter, meeting expectations. In 2021, Zhongshan GDH Energy was not subject to any administrative penalties for environmental pollution accidents.

In response to the call of the state, Zhongshan GDH Energy is committed to promoting the innovative low-carbon green transformation. During the year, we continued to optimize the energy efficiency of generating units and carried out the bidding of the multi-functional and complementary system integrating light and fire storage, hoping to reduce coal consumption in the future to achieve green transformation, reduce carbon emissions and impact on the environment. At the same time, we also carried out technical transformation of circulating water pumps to effectively improve the operating efficiency of water pumps. In addition, we also revised the Solid Waste Management Standards of Zhongshan GDH Energy Co., Ltd. during the year, and clearly divided the division of labor to handle hazardous waste properly.



Roads and Bridges

The waste generated by GDH Highway mainly includes waste materials from the replacement of broken road slabs, waste guardrails, columns, household garbage and wastewater. We have developed an environmental management system in strict compliance with the national laws and regulations for various emissions and wastes. At the same time, we have issued the Guidelines for Environmental Protection Compliance of Guangxi GDH Highway Co., Ltd., which regulates the requirements including water pollution prevention and air pollution prevention, to regulate the management of emissions.

As for waste management, we insist on recycling and reusing items with value to minimise waste. We reuse crushing board generated during road improvement work, and use it in non-bearing structural parts such as central separation belt, construction of roadbed bridges to check the bench of the ladder and road shoulder hardening, which can not only save energy, but also solve the environmental problems caused by the crushing board to handle the stacking.

Case Study: New Energy Transformation



In response to the national call for vigorous development of new energy, GDH Highway actively promotes photovoltaic power generation projects, new energy vehicles purchase and charging pile installation, and installs photovoltaic panels on the rooftop of Guigang management to generate electricity by solar energy, so as to reduce the electricity expenses of Guigang management area. The installation of the project will be completed in November 2022.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

Emission data display

Emissions	Unit	2021	2020	2019	2018
Water resources					
COD emissions	tons	4,622.72	4,270.75	2,921.00	2,150.07
COD reductions	tons	48,251.37	36,644.23	25,888.00	14,701.83
NH ₃ emissions	tons	264.48	229.93	161.00	144.14
NH ₃ reductions	tons	4,971.60	4,247.48	3,110.00	2,073.24
Total phosphorus emissions	tons	81.10	63.57	50.62	54.03
Total phosphorus reductions	tons	671.42	514.95	406.00	232.97
Sludge treatment	tons	121,757.46	111,985.80	77,358.24	34,621.25
Teem Group					
Hazardous waste generated	kg	2,652.46	1,939.68	5,316.24	2,494.09
Hazardous waste recycled	kg	1,364.78	1,656.68	3,146.00	900.20
Recycling rate of hazardous waste	%	51.5	85	59	36.1
Non-hazardous waste generated	kg	2,817,392.14	106,668.00	617,090.00	277,584.00
Non-hazardous waste recycled	kg	1,862,702.14	106,333.00	617,090.00	264,255.00
Recycling rate of non-hazardous waste	%	77	99	100	95.2
Hotel Management Company					
Total sewage discharged	tons	339,782.90	110,802.50	175,412.70	180,225
Food waste generated	kg	53,125.97	67,329.96	71,174.00	77,187.00
Zhongshan GDH Energy					
Nitrogen oxides (NOx) emissions	tons	471.14	490.52	454.03	449.20
Sulphur oxides (SOx) emissions	tons	233.31	168.29	129.94	148.66
Smoke and dust emissions	tons	34.25	36.25	29.43	27.77
Gypsum generated	tons	97,817.01	66,524.78	67,653.97	68,380.37
Recycling rate of gypsum	%	100	100	100	100
Ashes generated	tons	336,491.20	302,148.34	305,106.84	285,208.85
Recycling rate of ashes	%	100	100	100	100
Residues generated	tons	27,155.14	18,805.44	18,560.00	19,281.96
Recycling rate of residues	%	100	100	100	100
GDH Highway					
Hazardous waste generated	kg	32.71	763.86	2,184.95	/
Hazardous waste recycled	kg	32.71	734.20	2,120.45	/
Recycling rate of hazardous waste	%	100	96	97	/
Non-hazardous waste generated	kg	3,465,357.00	3,463,940.00	97,769.00	/
Non-hazardous waste recycled	kg	3,465,357.00	3,438,000.00	97,769.00	/
Recycling rate of non-hazardous waste	%	100	99	100	/
Total sewage discharged	tons	42,770.00	64,969.00	824	712

SUSTAINABLE CONSUMPTION OF RESOURCES

GDI proactively promotes paperless management and office, and strictly implement “eight offs” principle, requiring employees to turn off the idle electronic equipment before leaving offices, and adopting centralised management of company vehicles so as to achieve energy conservation, and environmental protection continuously. In accordance with the Management Measures for the Deployment and Use of Vehicles, the Rules for Reception Standards and other regulations, we clearly set out the appropriate occasions for vehicle usage and the standards for reception activities to encourage green commuting and standardised reception so as to avoid wastage of resources. We also require all business segments to carry out reasonable procurement of office supplies and all subsidiaries shall purchase supplies when necessary in accordance with their respective regulations such as the Management Measures for Office Supplies of Zhongshan GDH Energy and business needs in order to avoid excessive warehousing of supplies and encourage employees to conserve resources.



Hotel Ownership, Operation and Management

We appropriately adjust the cold water temperature of the air conditioning system of the high energy consumption equipment, reduce the running time of the hot water storage and heating equipment, and close the terminal equipment in the suspended business area in the course of operations.



Energy Projects

According to the Management Measures for Office Supplies of Zhongshan GDH Energy, only purchase office supplies when necessary to reduce unnecessary storage.



Roads and Bridges

We use the hot in-place recycling of the asphalt pavement technology to quickly repair asphalt pavement diseases on the spot in the course of asphalt pavement maintenance, and the application of recycling technology can make the utilization rate of solid waste reach 100%.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

Resource usage data by business segments

Use of Resources	Unit	2021	2020	2019	2018
Headquarters					
Total electricity consumption	10 MWh	12.68	10.19	9.64	10.66
Water resources					
Electricity consumption in business operations	10 MWh	77,782.38	72,671.07	63,465.71	57,804.17
Total gasoline consumption	litres	448,642.45	521,449.49	155,893.33	/
Total diesel consumption	litres	117,318.24	153,323.38	16,853.66	/
Renewable energy consumption	10 MWh	234.33	359.22	155.01	/
Teem					
Total electricity consumption	MWh	83,699.50	65,504.01	61,189.01	70,880.82
Total electricity consumption intensity	MWh/m ² of business area	0.11	0.08	0.12	0.14
Total gasoline consumption	litres	38,991.45	25,022.98	33,031.04	30,274.49
Total diesel consumption	litres	2,330.33	1,855.87	950.00	972.00
Total natural gas consumption	m ³	825,113.00	971,570.00	905,741.00	1,197,511.00
Total water consumption	tons	874,759.00	779,292.68	928,822.00	903,731.04
Total water consumption intensity	tones/m ² of business area	1.13	1.00	1.80	1.75
Hotel					
Total electricity consumption	10 MWh	1,161.96	1,256.79	1,233.15	1,228.32
Total gasoline consumption	litres	32,914.44	34,569.39	51,045.00	55,393.00
Total diesel consumption	litres	57,472.66	53,092.13	129,706.00	119,863.00
Total natural gas consumption	m ³	58,870.00	47,465.00	69,744.00	71,960.00
Total water consumption	tons	148,451.00	118,551.00	194,903.00	200,250.00
Total water consumption intensity	tons/HK\$10,000 of revenue	3.73	3.85	3.15	2.89

Use of Resources	Unit	2021	2020	2019	2018
Zhongshan GDH Energy					
Total coal consumption	tons of standard coal	1,139,809.93	1,109,379.86	1,011,361.16	1,045,805.43
Total gasoline consumption	litres	17,775.56	16,647.76	17,701.84	19,212.09
Total diesel consumption	litres	60,374.66	79,862.72	40,862.50	186,453.00
Total water consumption	tons	7,823,926.00	7,701,220.00	6,869,629.00	8,405,747.00
Total water consumption intensity	tons/HK\$10,000 of revenue	48.74	63.91	56.09	64.04
Water consumption in production	tons	7,682,716.00	7,572,910.00	6,735,484.00	8,248,500.00
Industrial water recycling rate	%	97	98	97	/
Domestic water consumption in office	tons	141,210	128,310.00	134,145.00	157,247.00
GDH Highway					
Total electricity consumption	10 MWh	165.05	147.27	121.65	108.34
Total diesel consumption	litres	8,850.38	10,684.13	12,615.72	8,179.86
Total gasoline consumption	litres	44,476.29	48,051.94	50,896.62	52,455.47
Total water consumption	tons	42,770.00	64,969.00	23,650.00	24,850.00
Total water consumption intensity	tons/HK\$10,000 of revenue	0.31	0.61	0.31	0.33
Group Total					
Comprehensive energy consumption	tons of standard coal	1,217,086.83	1,210,835.22	/	/
Comprehensive energy consumption intensity	tons of standard coal/HK\$10,000 of revenue	0.41	0.52	/	/

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

6.3

PRIORITISING HEALTH AND SAFETY

GDI always adheres to the safety management concept of “life and safety first” and is committed to ensuring the safety and health of employees and visitors through constantly enforcing and enhancing the safety management system in different business segments, further amplifying the execution of safety supervision and improving the safety awareness of employees and relevant parties. We endeavour to prevent major safety incidents in our business operations.

The Group strictly complies with national and regional laws and regulations, including the Labour Law of the People’s Republic of China, the Production Safety Law of the People’s Republic of China, the Fire Prevention Law of the People’s Republic of China, the Law of the People’s Republic of China on the Prevention and Treatment of Occupational Diseases and the Occupational Safety and Health Ordinance of the Hong Kong Special Administrative Region. Meanwhile, the Group purchased social insurance and employer liability insurance for all employees to guarantee their safety, in an effort to provide a healthy, reassuring and safe working environment.

The Group also formulated rules and regulations including the Regulations on Production Safety Management of Guangdong Investment Limited, the Provisional Measures for Screening, Identification and Control of Production Safety Hazards of Guangdong Investment Limited, the Provisional Management Measures for Hazard Management of Guangdong Investment Limited, the Measures for Appraisal of Production Safety Management of Guangdong Investment Limited and the Provisional Regulations on Production Safety Responsibility System of Guangdong Investment Limited to specify the responsibilities of departments and employees in safety management.

To enhance production safety management of the Group and its business segments, the Group set up respective production safety committees for various business segments and the Managing Director is responsible for leading, supervising and managing the production safety issues within the management scope of the Group. The Production Safety Committee of each business segment is chaired by their respective chairmen who is responsible for supervising and managing the production safety work within their respective business scope.

Main Responsibilities of the Production Safety Committee:

- Consistently implement the production safety laws and regulations, policies, procedures and industry standards as well as the decision-making and deployment in relation to production safety
- Organise and formulate the targets for production safety and supervise the implementation
- Conduct debrief on production safety, analyse the situation of production safety and establish appropriate counter measures
- Supervise the formulation and improvement of production safety management system by subsidiaries
- Ensure the effective implementation of production safety work

In the past three years, we had zero work-related fatalities or serious injuries. In 2021, we recorded a total of 11 work-related injuries and a loss of 349 working days in total, representing a decrease of 26% as compared to 2020.

SAFETY MANAGEMENT SYSTEM



Water Resources

During the year, we revised and improved the safety management system, and issued five major systems, including the Guidelines for the Safety Production Management System, the Guidelines for the Evaluation of the Safety Production Management System, the Administrative Measures for the Incentive Examination of the First Responsible Person for Safety Production (Trial), the Guidelines for the Safety Standardization Management System of Construction in Progress, and the Rules for the Management of Meetings on Safety Production. With an innovative management model, the Company has established an appraisal mechanism for the first person responsible for safe production, and standardized the safety management process of projects under construction to reduce the risk of safe production of projects. At the same time, the Company has established a safety risk management system and assessment standards with the characteristics of Guangdong Water by benchmarking with first-class management enterprises.

We strictly supervised the implementation of various safety management regulations of our subsidiaries, and adopted a vertical management system for personnel specialised in safety management for subsidiaries reaching certain business scale (having two or more sewage treatment plants, excluding village-and-town level sewage treatment plants) in the water resources segment, in a bid to enhance the monitoring of safety network development of each water company and promote safety management efficiency. Each water company formed production safety (emergency) management departments to exert dedicated management and control and take corresponding responsibilities for the development of production safety system as well as the daily management and operation concerning production safety. In addition, the subsidiaries were required to revise and update the safety management system in a timely manner according to the system requirements from the higher level and the actual situation. Each company continuously strengthens the training and publicity of the safety management system, and requires the senior management to earnestly implement safety management system and serve as a role model to the employees in this regard, so as to make employees attach more importance to the safety management system.

In addition, for the new subsidiaries, we have formulated the Guidelines for the Takeover of New Projects of Guangdong Water Holdings Limited to guide the subsidiaries or the newly established project companies to achieve the three-level production safety standardisation in a progressive manner, and obtain relevant certifications within three years. At the same time, the newly established project companies are required to operate in accordance with the PDCA model of the safety management system of Water Holdings.

In order to provide operational guidance for safety management, we also formulated the management measures relating to occupational hazards and risks, including the Manual on Quality, Environment, Occupational Health and Safety Management Systems, the Control Procedures for Hazard Identification and Risk Appraisal, the Control Procedures for Occupational Health and Safety Operation, the Emergency Response and Accident Handling Procedures and other documents. We have formulated the Provisional Operational Risk Classification and Grading Control Plan the Administrative Measures for Classification and Control of Safety Risks as well as Screening and Management of Safety Hazards to identify the corresponding key risks and risk levels in production, hazardous chemical management, vehicle usage, construction, fire safety, etc. and to clearly state the risk management measures and the requirements for operators, thereby reducing the exposure of employees to occupational health and safety risks and preventing work-related injuries comprehensively.

In addition to our own business operations, we also incorporate the business risks of the relevant parties into our risk management boundary, implement risk management and control, conduct regular inspection and appraisal, consider rewards and punishment seriously and conduct appraisal of relevant management department of the relevant parties so as to achieve safety management throughout the whole process. We included safety management requirements in our tender documents and contracts with suppliers, contractors and service contractors to clearly set out the safety responsibilities of the relevant parties and signed safety management agreement simultaneously when signing the contract, requiring relevant parties to undertake safety management throughout the entire process in terms of safety responsibilities, target management, supervision and assessment.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

Production safety performance

During the year, a total of 37 subordinate water companies of Water Holdings have obtained ISO 45001 Occupational Health and Safety Management System certification. In addition, we have integrated the standardisation of production safety into the daily production safety management. A total of 2, 18 and 7 subsidiaries have obtained Grade 1, Grade 2 and Grade 3 Qualifications for production safety standardisation respectively. Moreover, a subsidiary was awarded "National Safety Culture Construction Model Enterprise" and 3 subsidiaries were awarded "Provincial Safety Culture Construction Model Enterprise", respectively, which helped the water resources segment to promote the construction of production safety standardisation as a whole.

Furthermore, water resources segment has established the safety performance appraisal system and production safety responsibility statement appraisal indicators in accordance with the safety management systems. With the efforts and rigorous supervision by each company, the water resources segment has achieved all safety targets for the year.

Production Safety Responsibility Statement Appraisal Indicators of Water Resources Business in 2021	Target Value
Veto indicators (including serious injury, fire, equipment damage above RMB100,000, death or serious injuries of directly related parties, major social events based on personal injury, etc.)	0 5-10 demerit points for each non-compliance
Management indicators (employee safety training rate, minor injuries, etc.)	<2 2-3 demerit points for each non-compliance
Tasks	1-2 demerit points for each non-compliance
Bonus points: Recognition from relevant government authorities	1 point at county level; 2 points at municipal level; 3 points at provincial level; 5 points at national level

Production Safety Target of the Water Resources Segment in 2021	Target Value
Production safety liability accident with deaths or above	0
Serious injury and minor injury rates of employees	Not more than 0.001
Non-personnel injury and production safety liability accident with direct economic loss of more than RMB1 million	0
Occupational disease rate of employees	Not more than 0.001
Annual production safety management appraisal	Pass or above



Property Investment and Development and Department Store Operation

Teem Group organises all employees to sign production safety responsibility statements based on their levels and positions every year, so that all employees can clearly define their own safety responsibilities and fully implement the production safety responsibility system for all employees. We strictly implement the “Five Measures in Place” regarding safety responsibility, management, implementation, training and emergency rescue to strengthen employees’ capability in production safety management. In addition, we conduct a comprehensive inspection and review on production safety management and compliance on a regular basis, and implement corresponding risk prevention measures to minimise safety responsibility risks. During the year, in order to further strengthen the production safety management capability and improve the management level, and ensure the effectiveness and practicality of the production safety rules and regulations, Teem Group established the Work Guidelines for Production Safety Compliance, aiming to ensure production safety in compliance with laws and regulations.

Production safety performance

Teem Group established a safety performance appraisal system in accordance with the safety management system, and sets reasonable annual KPIs every year. So far, the production safety of Teem Group is generally stable, with all seven annual production safety indicators meeting the requirements.

Production Safety Target of Teem Group in 2021		Target value
1.	Production safety liability accident with serious injury or above	0
2.	Minor injury rate of employees	Not more than 0.001
3.	Non-personnel injury and production safety liability accident with direct economic loss of more than RMB100,000	0
4.	Occupational disease of employees	0
5.	Liability accident in relation to environmental pollution	0
6.	Material disputes, group events, extreme events	0
7.	Semi-annual and annual production safety management appraisal	Pass or above

Teem Group also actively commenced production safety standardisation, organised professional technical personnel to conduct self-appraisal work and engaged third-party professional safety institutions to carry out external reviews. Currently, a total of six companies or branches have obtained the Grade 2 qualification for national production safety standardisation with three years validation.



Hotel Ownership, Operation and Management

The Hotel Management Company is committed to improving various production safety management systems. During the year, the Hotel Management Company further improved the safety hazards screening and safety prevention and control system, formulated or revised a total of 7 production safety-related systems and internal policy documents, including the Appraisal Measures for Production Safety Management of the Hotel Management Company in 2021, the Key Points of Production Safety and Fire Prevention Work of the Hotel Management Company in 2021, the Work Guidelines for Production Safety Compliance of the Hotel Management Company, the Work Guidelines for Environmental Protection Compliance of the Hotel Management Company, the Contingency Plans for Emergencies of COVID-19 Infection in the Headquarters of the Hotel Management Company, the Emergency Plan for Earthquake Disaster Prevention in the Headquarters of the Hotel Management Company, and the Notice on Further Strengthening Emergency On-duty on Holidays, which provide a guidance for the production safety of the Hotel Management Company. Through such measures, it strengthened the production safety responsibilities of all entities, timely eliminated risks and hazards and ensured production safety.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

In addition, in order to ensure safe constructions of our major projects and safe operations of newly joined management units, the Group implemented key control and strengthened inspection on the Jida Project and Yueqiao Company (including the hostels) and due to a weak foundation of their production safety, many issues were identified during the production safety inspection. Therefore, we spent one year improving their management system of safety production through safety inspections and on-site instruction provided by experts. We have set up production safety management institutions and equipped production safety management personnel, clarified the responsibilities between them and the lessees, and repaired damaged safety equipment. We have completed the rectification of problems in August this year, which has greatly improved the production safety support level of Yueqiao Company and the hostels.

Production safety performance

During the reporting period, the Hotel Management Company had no safety liability accidents and accomplished the following production safety targets:

Production Safety Appraisal Indicators for Hotel Ownership, Operation and Management in 2021	Target Value
Accident with serious injury or above	0
Accident with minor injury	Not more than 0.001
Non-personal injury accident of more than RMB1 million	0
Occupational disease rate of employees	Not more than 0.001
Rectification rate of safety hazards	100%
Certificate rate of key responsible persons and safety management personnel	100%

The Hotel Management Company continued to encourage all hotels to obtain the production safety standardisation certification. All hotels have passed the production safety standardisation certification, except that two hotels in Hong Kong have not obtained the production safety standardisation certification due to non-application of the Mainland regulations. One of the hotels has been awarded the Grade 2 enterprise certification of production safety standardisation, and the remaining hotels have been awarded the Grade 3 enterprise certification of production safety standardisation.



Energy Projects

During the year, the energy projects segment formulated internal policy documents such as the Management Standards for Production Safety Rewards and Punishments and the Management and Control of Safety Risks, and revised 7 safety management standards, including the Management Standards for Safety Risk Control at Different Levels of Zhongshan GDH Energy Co., Ltd., the Safety Management Standards for operation in restricted space of Zhongshan GDH Energy Co., Ltd., the Management Standards for Work Tickets of Zhongshan GDH Energy Co., Ltd., the Management Standards for Production Safety Rewards and Punishments of Zhongshan GDH Energy Co., Ltd., the Management Standards for Screening, Identification and Control of Production Safety Hazards of Zhongshan GDH Energy Co., Ltd. and the Management Standards for Civilized Production of Zhongshan GDH Energy Co., Ltd.. We formulated and implemented a total of 34 special production safety management standards, thereby further improving the company's production safety management system and comprehensively implemented safety governance.

In addition, in the Safety Management Standards for Relevant Parties (External Parties Involved) of Zhongshan GDH Energy Co., Ltd., we clearly set out the responsibilities of the project management department in safety management, covering the whole process of safety, security management, construction process control, safety supervision and management, acceptance and evaluation and strengthening the production safety management of third parties, suppliers, contractors and other relevant parties. We require the project management department to sign the production safety agreement with the relevant parties to review their safety qualifications and specify the safety management responsibilities of both parties. In order to ensure that the safety performance of the relevant parties is in line with expectation, we provide basic safety and technology training in the Company's safety training system for the personnel of relevant parties. We also revise and review the proposal for operation with high safety risk and strengthen the control of on-site operation process.

Production safety performance

Zhongshan GDH Energy sets comprehensive targets on production safety every year, covering personnel, equipment, environment and management perspectives. We allocate the safety tasks to respective departments, teams and individuals to implement safety target management. Assessment and appraisal for departments are carried out on the progress of targets achievement to make continuous improvements. To implement the production safety responsibility system and improve the three-level safety system, signing of the production safety responsibility statements is required level by level. During the year, we continued to conduct special examinations on the annual production safety targets of various departments, with “six zeros” achieved for all annual production safety targets.

Production Safety Target of Zhongshan GDH Energy in 2021	Target Value
Personnel injury liability accident	0
Equipment liability accident at the lowest level or above	0
Fire liability accident at the lowest level or above	0
Environmental incident at the lowest level or above	0
Traffic accident which incurs liabilities at serious level or above	0
Occupational disease	0

During the year, Zhongshan GDH Energy engaged a third-party company to conduct an evaluation on the current status of occupational disease and issued an evaluation report. In accordance with applicable national laws, regulations, rules and relevant standards, the third-party company carried out inspection, testing and evaluation on the three major areas of Zhongshan GDH Energy, namely production area, auxiliary production area and non-production area. The result shows that the company's occupational health management is in compliance with the national requirements.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

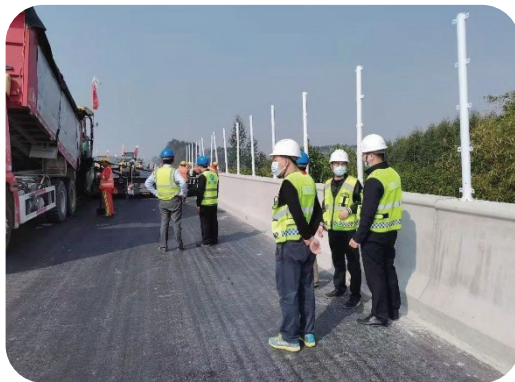


Roads and Bridges

During the Year, GDH Highway continued to comprehensively rectify and improve the safety management system. With reference to the contents of the Production Safety Law of 2021, we sorted out and investigated the weak links and non-compliance items in safety management, and revised and improved 8 systems such as the Company's production safety accident emergency plan and production safety responsibility system, which were issued and implemented in September this year. In addition, based on the division of departmental responsibilities and work needs, GDH Highway has formulated internal work guidelines such as the Work Guidelines for Production Safety Compliance and the Work Guidelines for Environmental Protection Compliance on the basis of the original production safety management system.

We continuously strengthen the management and control of production safety risks, and regularly carry out the identification and assessment of production safety risks. We will continue to implement risk sources control measures to ensure that those areas with safety risks are safe and managed. During the year, GDH Highway identified a total of 214 safety risks, of which no significant risks were identified.

During the year, we entrusted a third-party safety evaluation provider to provide consulting services on the implementation of construction safety technology for the road renovation project, and provide strong professional technical services for the supervision and inspection of the safety process of construction projects, so as to improve the professional technical capabilities of project construction safety management and achieve the goal of zero production safety liability accidents for projects.



Production safety inspection for the road renovation project
by the entrusted third-party safety evaluation provider

GDH Highway formulated the Safety Management Requirement for Relevant Parties, which provides guidance for safety management works of suppliers, contractors and service contractors. Meanwhile, we carry out safety qualification audit for outsourced projects and safety training for outsourcing unit from time to time. During the year, 54 safety audits were conducted on relevant parties targeting areas for improvement in safety management and potential safety hazards on construction.

Production safety performance

In 2021, GDH Highway continued to consider and organise production safety work and emergency response, formulated the safety management targets, assigned them to each staff and required the staff to sign the production safety responsibility statements. No production safety liability accident occurred during the year and the 2021 safety targets were achieved.

Production Safety Target of GDH Highway in 2021	Target Value
1. Liability accident with degree of injury above minor injury	0
2. Fire liability accident	0
3. Occupational disease rate of employees	0
4. Traffic accident with major liability	0
5. Incident of stability maintenance via petition letters and visits	0
6. Liability accident with direct economic loss of more than RMB100,000	0
7. Three-level safety education and training rate of employees	100%
8. Rectification rate of safety hazards	100%
9. Annual inspection rate of vehicles and whole-vehicle weighbridges	100%
10. Daily inspection and maintenance rate of toll collection systems and generator units	100%
11. Rate of prompt hindrance clearance and rescue	100%

In October, we passed the Grade 1 certification of production safety standardisation for highway operators and obtained the Grade 1 certification.

PRODUCTION SAFETY ENHANCEMENT



Water Resources

We formulated the Appraisal Measures for Production Safety Management to strictly implement responsibilities on production safety, regulate the appraisal and incentive mechanisms for production safety management and strengthen production safety management. The management measures require us to conduct quarterly and annual appraisal on the safety responsibility statements and review the performance of all entities on achievement of production safety targets based on the appraisal requirements of the Group and the actual situation of all entities on production safety every year.

Meanwhile, we carry out routine inspection and appraisal and various special safety inspections and appraisals, including comprehensive inspections by the headquarters and all departments, regional cross-checks appraisal, inspections, appraisal by third parties, remote video surveillance inspection and appraisal, so as to monitor performance on production safety in all dimensions and require timely rectification when potential danger is discovered. The finalised appraisal results on production safety are released on the intranet and included in annual performance appraisal of all regions and subsidiaries. Those failing to meet the standards will be punished.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

We adopt modern and digitalised means to monitor production and office areas and to enhance safety monitoring and management on the water resources segment. New construction projects under the water resources segment were required to install video surveillance systems. Companies with video surveillance systems and projects under the existing renovation programmes are required to synchronise their current video surveillance systems with the headquarters. Meanwhile, we also conducted remote supervision of production safety in production and construction areas, establishing video surveillance systems and implementing 24-hour online monitoring.

During the year, we invited external experts to provide special trainings on operation in restricted space and safety management as well as trainings on safety management methods to all participants, so as to further enhance the employees' awareness on production safety and improve the business capabilities of full-time and part-time safety managers. Meanwhile, we also carried out special trainings and safety inspection trainings for construction project managers and safety managers respectively to improve their safety management skills.

In addition, we continued to improve the production management system, standardise operation management and strengthen operational risk control. To improve safety management, we enhance cooperation and communications with professional safety companies with reference to the safety management experience of local power supply bureaus, in order to improve the understanding and management of digitalised and intelligent safety applications, the establishment of safety culture and safety innovation.



Property Investment and Development and Department Store Operation

In order to further implement safety risk prevention and control and strengthen the concept of safety development, Teem Group adopts an innovative safety management model to manage and control the risk source, and implement a dual prevention work mechanism for safety production. Teem Group quantitatively analyses each business premise using a risk matrix analysis method, to identify high, medium and low risk sources, creates a register for production safety risk control at different levels and formulates preventive measures to fundamentally eliminate safety hazards.

In terms of safety hazards screening and management, we strictly performed the work mechanism of "to uphold the red line and conduct inspection, priority and elimination", further deepened the safety hazards screening and management system, guided and urged all companies to develop a register to ensure prompt elimination of sources of danger, classified and sorted according to the category of safety hazards, thereby achieving closed-loop management. Based on the three-year action plan for special rectification of production safety and the work mechanism of "to uphold the red line and conduct inspection, priority and elimination", the Company launched a full-coverage and network-oriented safety hazards screening and management, and established a rectification register for rectification of hidden dangers and problems found in the investigation. As of December 2021, Teem Group headquarters carried out 79 production safety inspections and identified 310 potential safety hazards, with a rectification rate of 100%.



Hotel Ownership, Operation and Management

Based on the requirements of the Group and the actual situation of the Hotel Management Company, we conducted more than 50 inspections to continuously improve its production safety management, including flight inspection, pre-holiday safety inspection, special inspection, and cross-inspection of production safety. A total of 677 safety hazards were identified during the year. We carry out comprehensive inspection and scientific ranking of potential hazards, and arrange designated employees to follow up the progress and to complete the remediation, thereby eliminating potential risks and hazards and ensuring safety in production and operation. We also carry out multiple inspections on construction projects, mainly supervising the safety management of fire safety, material stacking, temporary electricity use, edge protection, hot chemicals, high-level operation, warning signs and posts on the construction site, to continuously eliminate potential hazards. In addition, we analysed the existing safety issues and required all construction units to put forward preliminary ideas and measures for the rectification of above-mentioned safety issues, which were submitted in writing to the headquarters for supervision and implementation.

In order to prevent fires caused by non-compliance smoking, excessive on-site sundries and irregular temporary power consumption, we have implemented various special rectification work for smoking, on-site cleaning and temporary power consumption. Construction units are required to set up smoking areas in their respective responsible areas, post signs of smoking areas, set up a whistle-blowing system, arrange special personnel to clean the areas every day, and the supervision units are required to arrange electrical engineers to comprehensively inspect the temporary power consumption on site and standardize the on-site power consumption, so as to ensure safe and civilized construction and avoid safety accidents during the construction phase.



Energy Projects

During the year, Zhongshan GDH Energy has established a safety training experience hall to strengthen the training and education of safety production and enhance the awareness of employees. Through experience, teaching, practice, VR experience equipment, safety knowledge multimedia and operation simulation platform, it helped employees improve their safety skills and awareness. In order to enable employees to be familiar with and master the professional knowledge and operational skills required for safe production in their respective positions, we carry out special trainings on fire-fighting skills, scaffolding management, limited space, working at height, hazardous chemicals management, hazardous waste management and other aspects in response to common and prominent problems found in daily inspections to ensure the safety management level of high-risk operations. During the year, we organized more than 30 training sessions to enhance employees' safety skills and operational level and awareness on production safety, with over 1,000 participants.

In order to screen and eliminate potential hazards, we have promoted the working mechanism of "uphold the red line and conduct inspection, priority and elimination". We identified existing outstanding risks and potential hazards from the five dimensions, including plan approval, technical disclosure, operation specifications, on-site monitoring, completion and acceptance of the investigation process, before, during and after the operation. Implementation of hierarchical and classified control to solve problems item by item to achieve safe operation. We also attach great importance to production safety during major holidays, major political activities and seasonal climate. We have organized special safety inspections on typhoon and flood prevention, gas and major hazard sources, and timely rectified potential safety hazards to ensure the normal operation of safety facilities at all places. We have organized 66 safety inspections of various types and rectified 279 potential safety hazards.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Road and Bridge

During the Year, GDH Highway continuously improved and revised its production safety system, and carried out a comprehensive review on safety management system. Among them, we have formulated the production safety education and training plans for 2021 for new employees, and implemented three-level safety education. A total of 34 people participated in the plan, including the production of 20 versions of the 4th safety publicity board, 14 accident warning video education sessions were held. The Company organized 8 safety education and training sessions, and conducted 4 examinations on safety knowledge for all employees. All employees attended the three-level safety education and passed the examination on safety with full marks. All operators for special operation held the corresponding work permits.



Training on production safety management knowledge conducted by senior lecturers from Safety Consulting Service Institution



Carrying out the "Traffic Police, Highway and Corporate" national safety production publicity and consultation day

We established the Traffic Police, Highway and Corporate Joint Coordination and Command Centre on Road Renovation Project to clarify the responsibilities and cooperation contents of each person. We also equipped the center with various manpower and equipment, including traffic wardens, co-channel interphones, traffic dispersion equipment and patrol vehicles. We have achieved resource sharing, information exchange, team coordination and high efficiency and quality of our works through different parties effective and rapid working mechanism so as to promote collaborative maintenance and support of traffic order.

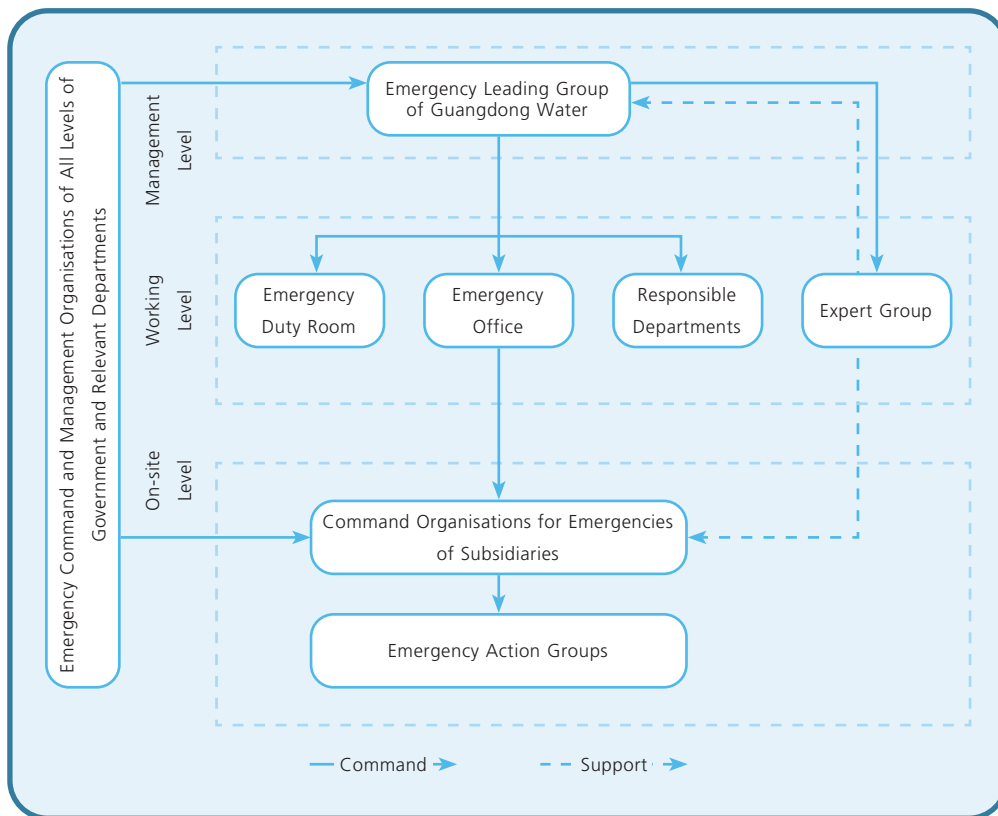
During the year, we continued to invest RMB754,300 in safety training, safety rectification, safety materials, etc. In addition, the Group also improved the safety protection level of road traffic through renovation of road surface projects to improve the safety level of GDH Highway. In 2021, GDH Highway formulated the annual safety production supervision and inspection plan, and conducted safety hazard investigation and rectification on the basis of self-inspection and self-correction of safety production of various departments. GDH Highway has set up inspection ledger and hidden danger ledger, and classified them according to the degree of harm and the difficulty of rectification. As of December 2021, we have carried out 66 safety inspections to timely follow up, rectify and feedback the hidden safety problems found by the superior inspection. 360 problems have been found and 360 rectification has been completed, reaching 100% improvement rate and no major hidden safety problems have been found.

EMERGENCY RESPONSE MECHANISMS

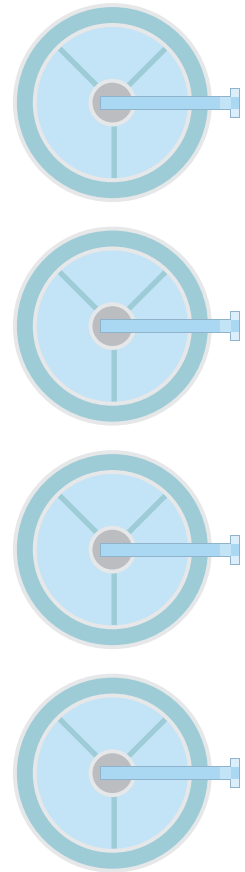


Water Resources

In order to prevent and reduce emergencies and the damage caused by them to the maximum extent, and to ensure the personal safety of employees, production safety and property safety, we have formulated the Consolidated Contingency Plans for Emergencies of Guangdong Water Holdings Limited, which provides subsidiaries with guidance on emergencies and responses. It classified emergencies into four categories and sort emergencies into four levels of risks according to their severity, controllability, scale of influence and other factors. The emergency leading teams, emergency response office and five working groups for emergencies were set up to facilitate comprehensive and timely emergency response. In addition, in order to enhance the emergency response capability of production safety accidents, we revised the "Emergency Plan for Production Safety Accidents of Guangdong Yue Gang Water Supply Company Ltd." to identify potential safety risks or emergencies, prevent and reduce potential diseases and injuries, and conduct training and drills for employees to effectively prevent various production safety accidents. After the occurrence of major accidents, we can carry out emergency rescue in accordance with the pre-determined plan in a timely manner and control emergencies in a timely manner.



Organizational structure of emergency management of Guangdong Water



6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

All entities of the water resources segment study and analyse possible emergencies with severe consequence in the production process in an in-depth manner, such as meteorological disasters, outbreak of epidemics, personal injuries, terrorist attack, leakage of hazardous chemicals and fire disasters and have formulated careful and meticulous drill plans for such emergencies. During the year, we conducted 707 emergency drills, including pandemic prevention emergency drills, safety production and emergency rescue drills, fire-fighting and evacuation drills, electric shock emergency drills, flood prevention and typhoon prevention emergency drills, etc. at the headquarters of the water resources segment. In addition, we cooperated with the members of the Command Office on Prevention of Floods, Typhoons and Droughts of Luohu District to carry out double-blind drills to promote practical skills. After each drill, the emergency management personnel of all entities of the water resources segment will review, repeatedly summarise and evaluate the whole process of the drill. Based on the results of the drill, relevant emergency plans and rectification measures have been improved, and emergency response capabilities have been strengthened in multiple dimensions. At the same time, all entities actively cooperated with external professional emergency rescue teams and local emergency response departments, and invited expert members published in the expert database of Guangdong and Shenzhen governments or professionals that meet relevant qualifications and professional requirements as emergency experts to timely request the Shenzhen government and Dongguan government to assign corresponding emergency experts to provide technical support in case of emergency.



Fire-fighting and evacuation drill



Flood and typhoon prevention emergency drill

Case Study: Yue Gang Water Supply Conducted Double-blind Emergency Drills with Members of the Command Office on Prevention of Floods, Typhoons and Droughts of Luohu District



In 2021, Yue Gang Water Supply and the Command Office on Prevention of Floods, Typhoons and Droughts of Luohu District carried out the annual double-blind emergency drills on the prevention of floods, typhoons and droughts at the reservoir in Shenzhen. It simulated piping, landslides, water rescue and other emergency scenarios on the dam of the reservoir and carried out series of emergency rescue to test our practical skills and emergency handling capabilities on flood prevention and rescue.



The drills introduced “Shenzhen emergency one touch access” information transmission, water rescue by using unmanned aerial vehicles and other new emergency equipment and fully enhanced the capabilities on floods prevention and disaster rescue with multi-functional floating rescue stretchers, floating lights and other advanced rescue equipment.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



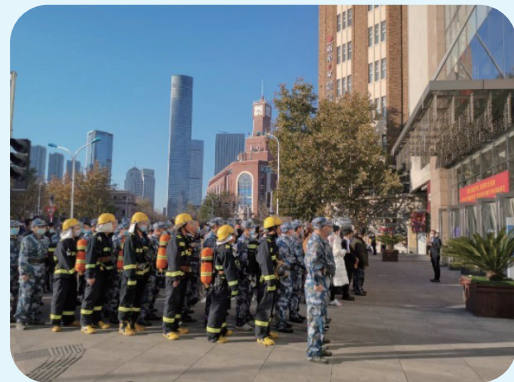
Property Investment and Development and Department Store Operation

To ascertain and effectively improve the emergency response and rescue capabilities, Teem Group organised a total of 208 emergency drills in 2021, including double-blind drills without warning for initial fires, un-alarmed emergency exercises for falling objects from height, and epidemic response for sudden suspected cases, with a total number of approximately 39,000 participants involved.

Case Study: Double-blind Drills without Warning for Initial Fires



In 2021, in accordance with the guideline of "Safety First, Precaution Crucial", Teem organised a double-blind drill without warning for initial fires, which strengthened the construction of "Four Firefighting Abilities of Enterprise" and "Firefighting Knowledge and Firefighting Abilities of Staff", and effectively improved the fire prevention awareness of all employees through the popularisation of general fire safety knowledge, to gain the ability of fire escape and self-rescue and emergency response to other emergencies.



Fire drills in the second half of 2021

During the year, we organised and carried out special activities including the Month of Production Safety, Month of Fire Protection Publicity, Three-year Action Plan for Special Rectification of Work Safety, Special Rectification of Construction Safety, Special Inspection of Gas Safety, Fire Safety Inspection of Escape Room and Fire Safety Standardization Management of Large Commercial Complex. Through various special activities of work safety, we effectively improved the awareness of the core of work safety and promoted the execution, implementation and refinement of work safety.



Hotel Ownership, Operation and Management

The Hotel Management Company has formulated and improved internal policy documents to provide guidance for handling various types of emergencies. During the year, we revised and improved the Emergency Plan for COVID-19, which optimized the pertinence, feasibility, effectiveness and linkage of the Plan.

In 2021, we also conducted drills under emergency plans. For example, during the “Month of Production Safety” and the “Month of 119 Fire Safety Publicity”, the headquarters and subordinate units of the Hotel Management Company organised more than 40 emergency drills such as fire-fighting and emergency evacuation drills, elevator trapped rescue drills, COVID-19 emergencies, and limited space rescue drills, with a total of more than 2,200 participants, which effectively improved the capabilities of employees to respond to and deal with various emergencies.

In addition, the headquarters and all units of the Hotel Management Company have formulated corresponding guidelines such as the “Emergency Plan for Typhoon and Rainstorms” for extreme weather such as typhoons and rainstorms that may occur in the region, and designated personnel to follow up the extreme weather warnings from the local meteorological stations. Once an extreme weather warning is received, the leader on duty will be immediately notified to activate the emergency plan and deploy disaster prevention work according to the level of extreme weather warning, including setting up a bulletin board at the entrance of the lobby, inspecting the rain and drainage situation in each area of the hotel, inspecting and strengthening the stability of outdoor facilities and power lines, setting sandbags for the entrances that are easy to fill rainwater, purchasing and storing emergency materials in a timely manner, etc., to ensure that all countermeasures are well prepared before the arrival of extreme weather, and specific requirements are formulated for personal protection and other safety measures during emergency.

Case Study: Extreme Rainstorm Emergency Guidance in Zhengzhou



On 17 July 2021, a rare heavy rainstorm occurred in Zhengzhou. In order to assist in the emergency rescue work of Guangdong Hotel (Zhengzhou) under extreme rainstorm, the responsible leaders have required the safety management department to continuously follow up and provide dynamic guidance on the disaster prevention of Guangdong Hotel (Zhengzhou) (hereinafter referred to as “the Hotel”) since 17 July. When the rain in Zhengzhou reached its peak value on 20 July and the Hotel was in a dangerous situation, the safety production leader followed up and guided the Hotel’s flood control work around the clock, and guided the key links of flood control work. Eventually, with the joint efforts of all employees of the Hotel, the flood was effectively under control. The Hotel did not experience any casualties, which minimized the Company’s property loss.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Energy Projects

Zhongshan GDH Energy continuously improved the production safety and integrated emergency plans on production, special emergency plans and on-site handling plans during the year. The emergency plans mainly include accident risk analysis, emergency command organization and its responsibilities, emergency procedures, emergency measures, etc. In addition, based on the three-year plan on emergency drills of the company, we continued to enhance emergency drills by regularly organising trainings and drills on emergency plans. During the year, we organised drills on liquid ammonia leakage, prevention of typhoons and floods, hydrochloric acid leakage, power failure in all plants, fire on coal belts, fire evacuation and emergency rescue, etc.



Roads and Bridges

GDH Highway has implemented the emergency duty system with major leaders of the company leading the shift by rotation and employees sticking to their positions. The "Traffic Police, Highway and Corporate" joint work mechanism has achieved remarkable results, ensuring the orderly traffic of vehicles on highways and toll stations within the managed area. During the year, under the joint mechanism, we organised the service activities of "6.16 National Safety Production Consultation Day", "122 National Road Safety Day" and "Love and Travel". Through publicity boards, banners, and setting up publicity consulting services, etc., the company promoted expressway safety production policies and regulations to the passing drivers and passengers, and explained expressway traffic safety knowledge and emergency response specifications, to enhance the safety awareness of the public. In addition, we jointly carried out the "Operation Exercise Activities for the Central Movable Guardrail on Expressway" to further test the mastery of emergency rescue personnel on the central movable guardrail demolition and assembly, and improved the efficiency of temporary lane change. In order to ensure the safe and smooth passage of the expressway during the construction period, we have established 7 "GDH stations" with emergency rescue facilities and equipment in our areas, aiming to improve the emergency response capability when handling traffic accidents and traffic dispersion. During major festivals or special periods, we formulate safe and smooth traffic plans in advance to ensure safe and smooth highways on that day.

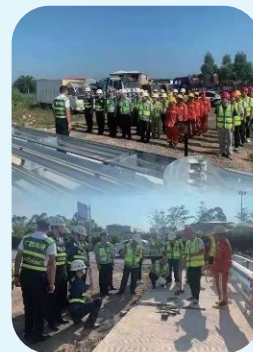
In response to extreme weather, we have formulated the Notice on Flood Control and Drought Prevention and Typhoon Prevention, to clarify safety responsibilities and measures, and improve flood prevention and emergency response mechanisms in 2021. We integrated flood prevention and typhoon prevention into all aspects of work to fully implement the responsibilities of flood and typhoon prevention. The relevant personnel are required to collect and release meteorological warning information, report risk information in a timely manner, strengthen emergency on-duty, and effectively carry out safety prevention work. Before the flood season and bad weather, the relevant personnel are required to carefully organize the safety risk investigation and potential safety hazard investigation and management for flood prevention and typhoon prevention, so as to ensure early detection and early disposal of potential safety hazards.

Case Study: On-site Safety Protection Emergency Response Training for Traffic Accidents of Vehicles Carrying Hazardous Chemicals

On 11 November 2021, GDH Highway organised and carried out on-site safety protection emergency response training for traffic accidents of vehicles carrying hazardous chemicals, and invited experts of emergency response of hazardous chemical accidents in Guigang City to give lectures on-site, explaining the types of goods, chemical characteristics, hazards and precautions for on-site emergency response of common vehicles carrying hazardous chemicals on expressways, as well as on-site emergency response measures for rescue personnel in the event of leakage of hazardous chemicals, equipping employees with an understanding of the emergency response methods for traffic accidents of vehicles carrying hazardous chemicals, and thus improving the emergency response capabilities of all employees of traffic accidents of vehicles carrying hazardous chemicals and the sense of responsibility for preventing emergencies, as well as business skills and knowledge, which plays a positive role in ensuring road safety and smooth traffic in our areas.



On-site safety protection emergency response training for traffic accidents of vehicles carrying hazardous chemicals



Operation exercise activities for the central movable guardrail on expressway

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

6.4

BUILDING COHESIVE WORKFORCE

GDI regards talents as the most important asset, and high-quality talent reserves lay the foundation for the Company's future development. We are committed to creating a diversified corporate culture, providing employees with a high-quality talent development and growth environment, creating a fair, just, safe and healthy working environment, and promoting the common growth of employees and the Group. At the same time, we also provide a competitive remuneration and welfare system, comprehensive on-the-job professional training and diversified employee activities to create a career platform for employees to display their talents and ideas.

The Group strictly complies with all relevant labour laws and regulations such as the Labour Law of the People's Republic of China, the Labour Contract Law of the People's Republic of China, the Minors Protection Law of the People's Republic of China, the Law of the People's Republic of China on the Protection of Women's Rights and Interests, the Sex Discrimination Ordinance, the Employment Ordinance (Chapter 57 of the Laws of Hong Kong), the Employees' Compensation Ordinance (Chapter 282 of the Laws of Hong Kong) and Occupational Safety and Health Ordinance (Chapter 509 of the Laws of Hong Kong). The Group has formulated and implemented a system with sound employment policies, including the Administrative Measures for Recruitment Management, the Management Regulations on the Implementation of MPF Schemes and Administrative Measures on the Avoidance of Relatives. The Group implements equal employment policies and prohibits all forms of discrimination in employment. It prohibits forced labour and child labour and guarantees equal labor rights of female employees. It establishes recruitment, remuneration, training and promotion systems without discrimination over gender, region, race, religion and age and provides disabled employees with a barrier-free working environment to protect the basic rights and interests of all employees.



During the year, we had a total of 9,909 employees, with 801 employee resignations, the details of which are set out in the table below.

	2021	
	Total number of employees	Total number of resigned employees
Total number of employees by gender		
Male	6,243	453
Female	3,666	348
Total number of employees by employee category		
Senior	324	12
Intermediate	916	51
Junior	8,662	737
Temporary and short-term contracts	7	1
Total number of employees by region		
Mainland China	9,726	715
Headquarters and Hong Kong	183	86
Total number of employees by age group		
30 or below	2,423	396
31-40	2,986	242
41-50	3,027	99
Above 50	1,473	64
Total number of employees by employment type		
Formal contract	9,723	792
Outsourced contract	179	8
Temporary and short-term contracts	7	1

FOCUSING ON STAFF DEVELOPMENT

With times and technology rapidly advancing, only through continuous learning and improvement of the employees can a company maintain the motivation for sustainable development. Therefore, nurturing and exploring employees' talents is one of the focuses of the Group's talent management. Following the principles of fairness, justice, openness, reward and punishment, we have formulated and strictly abide by our internal policies such as the Staff Management Regulations, the Human Resources Management Regulations, the Performance Assessment Measures, the Interim Regulations on Management of Staff Training and Further Study and the Trainings Management Measures, and continuously increase input in training resources to provide our staff with diversified training courses and development plans. We formulate and tailor the training programmes according to their demands for professional skills and relevant knowledge for career development, in a bid to assist them reach their full potential and explore career development path. This also helps the Group create a rigid succession plan. The Company encourages the staff to participate in external work-related professional skill training, continuing education courses and seminars according to job requirements. We subsidy the relevant fees for the participating staff. In 2021, employee training mainly comprised lectures delivered by internal professionals and professional training organised by external parties. The training category includes the mandatory qualification training, job-related vocational training, job adaptability training and professional seminars, etc.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

	Unit	2021
Total training hours	Hour	266,998.41
Average training hours per employee	Hour	27.25
Average training hours by gender/percentage of trained employees		
Male	Hour/percentage	25.04/89.27%
Female	Hour/percentage	31.02/89.03%
Average training hours by employee category/percentage of trained employees		
Senior	Hour/percentage	36.10/91.36%
Intermediate	Hour/percentage	29.91/90.07%
Junior	Hour/percentage	26.66/89.08%
Temporary, short-term contracts and outsourced ⁽¹⁾	Hour/percentage	37.71/100%

Note:

1. Due to the slight difference in the statistical caliber of employees in individual segments, the training data of contract and short-term and outsourced employees are disclosed on a combined basis.



Water Resources

We attach importance to the cultivation of talents and the personal development of employees and are devoted to providing all employees with professional trainings on knowledge improvement and promoting strategic synergies. It carries out comprehensive staff trainings by leveraging on GD Water College. During the year, the GD Water College focused on the direction of trainings and carried out training based on its model of “Four Capabilities”, namely leadership, professionalism, transferability and safety. Based on the characteristics of the industry and the actual needs of employees, the Group consistently optimises its training programmes and carries out innovation during the operation of the training programmes:

Programme optimisation:

After nearly four years of project-based operation, the GD Water Academy and Innovation Center has now established a talent training system consisting of branded projects such as "Pilot Programme", "Long Voyage Programme", "Specialty Programme", "On-boarding Programme" and various professional management methods. In 2021, the GD Water Academy and Innovation Center launched a new management talent training programme (the "Pilot Programme" senior leadership training camp short-term class) to empower the Company's expatriates, improve their comprehensive management quality, and help the Company improve its business performance. The new employee training program was iteratively optimized into the "On-boarding Programme", which includes new employees of our subsidiaries to enable new employees to gain understanding of the Company and its corporate culture and to facilitate their adaptation at work from their campus life through the organic integration of centralised trainings, outdoor activities and training for new employees on operation and maintenance.

Form optimisation:

Due to the impact of the COVID-19 pandemic, the video conference system was adopted in the training programme on the professional management of talent pools for remote training, and the recorded course videos were uploaded to the online platform of GD Water College in a timely manner through the conference system. This approach not only solved the problem that some staff from water companies were unable to attend on-site training due to the COVID-19 pandemic, but also enriched training resources by replacing the original simple PPT courses with internal course videos that were uploaded to the online platform of GD Water College.

Content optimisation:

We continued to organised the second Micro-Course Competition of GD Water, and a total of 50 high-quality micro-courses were provided for all employees of GD Water. All micro-course works have been uploaded to the online platform of GD Water College for all employees to watch for learning. We will continue to expand the scale, enhance the influence and introduce more outstanding programmes in the future.

During the year, GD Water and Yue Gang Water Supply have successfully held 18 comprehensive trainings at the company level and over 1,000 training sessions at the department level and subsidiary level, covering all employees.

*Property Investment, Development and Department Store Operation:*

During the year, Teem Group continued to focus on improving the capability and quality of middle management to stimulate innovation vitality. Under the "Swan Programme (鴻鵠計劃)", our systematic training programme for middle management, we carried out 16 training sessions including "Political Improvement for Middle Management", "Establishment of Innovative Environment for Enterprises", "Calculation and Analysis of Commercial Real Estate Investment" and "Commercial Real Estate Asset Management and Operation Management", and organised 3 reading sessions with the theme of "Who is away from my customer" and "Adversity Quotient". Focusing on the needs of the company's transformation and upgrading, the company guided trainees to use scientific tools and methods to analyse and discuss the difficulties and bottlenecks encountered in work, broaden work ideas, and improve their execution by applying what they have learned in the practice through special trainings, reading clubs and brainstorming. During the year, 81% of the special training of the "Swan Programme (鴻鵠計劃)" was completed as planned, with four modules of "Political Education, Position Improvement", "Strategic Outlook, Learning Operation", "Business Analysis, Decision-making Improvement" and "Management Empowerment, Team Building".

At the same time, Teem Group focused on the cultivation of reserve talents, and carried out a review of employees' competence based on their job capabilities to gain a deep understanding of the overall performance of the staff of functional departments and the middle or above management of our subsidiaries, so as to cultivate employees in a targeted manner. After comprehensive, objective and fair evaluation on the job responsibilities, core competence, comprehensive quality and qualifications of our employees by managers at all levels, we analysed the suitability of employees' capabilities and quality each position, explored the potential of internal talents, realised dynamic management of personnel, and built a platform for training talent reserve.

In 2021, to comprehensively strengthen the digital construction and promote its digital transformation, Teem Group recruited 4 digital professional talents through social recruitment to build a professional digital team together with 5 employees who were previously transferred to the digital operation center through internal adjustment of departments. We also organized a 2-day benchmark learning training camp on the theme of "Digital Transformation" — visiting Tencent, the learning content of which includes "Business Model of Digital Development" and "Scenario Marketing in the Digital Era", etc., to help employees understand the importance of digitalization.

In addition, in order to better improve the professional skills of new employees, we have redesigned the new employee induction training system to provide comprehensive training courses in the form of "2 + 2", including 2-day offline courses and 2-month online learning course packages.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Hotel Ownership, Operation and Management

Hotel Management Company has built a multi-dimensional training system with online and offline integration to provide employees with hierarchical, three-dimensional and customised trainings, with an aim to achieving the ideal training results for every employee and improve their working capabilities.

During the year, due to the impact of the COVID-19 pandemic, Hotel Management Company held six internal themed trainings, covering topics such as production safety, intellectual property protection, integrity education, legal risks, and system implementation, for the purpose of improving the comprehensive ability of employees at the headquarters and promoting horizontal coordination and communication among various departments under the premise of cost control. Through the trainings, the training ability of middle management at the headquarters of Hotel Management Company can be fully improved, the skills and knowledge can be conveyed, and the employees' awareness of safety, integrity and compliance can be further improved, so as to promote the standardization, normalisation and refinement of various work.

On the other hand, relying on the online training and education college, the Company continued to vigorously develop the "Internet + Training" model, build a digital learning engine, and efficiently empower the talent team, to establish a high-quality talent team for Hotel Management Company, stimulate the internal learning potential, and further promote the construction of a learning organization. During the year, the online college offered trainings with a total of 22,374.31 hours and an average of 30.92 hours per employee, with a total of 24,088.78 credits and an average of 29.56 credits.

In addition, during the year, we promoted the implementation of the "Talent Cultivation Programme (蹲苗計劃)", and implemented the talent training strategy of Hotel Management Company, to further strengthen the training of young cadres, improve their overall quality and business ability as well learning ability, execution ability and problem-solving ability. We also expanded the layout vision of high-potential talents and improved their systematic thinking ability through various grassroots work, striving to build a high-quality young professional team of loyalty, honesty, responsibility and vitality.



Energy Projects

In 2021, we strictly implemented the work policy of "carrying out targeted special training programmes based on the Company's actual business development, work needs and talent needs", and earnestly conducted demand research and analysis. We planned and implemented two special training programmes in 2021, namely middle-level and junior-level management ability training programme and new employee training programme, focusing on the management of new-generation employees of the Company. In particular, for the middle-level and junior-level management ability training programme, we focused on introducing the external course of "Power Break™-BREAK Empowerment Method for Managing New Generation of Electricity" to explain and empower methods such as "building trust, establishing rules, enjoying work, alleviating emotions, and insisting on empowerment", so that managers can better manage and cultivate new generation employees. For new employee training programme, we adopted a combination of internal and external courses, including 12 internal courses for new employees and external training courses on "Professional Shaping for New Employees". In addition, new methods such as personality test, reading activities and "Baseball Sports" outreach activities are added to cultivate new employees' professional quality and enhance the sense of belonging to the Company's corporate culture.

In addition, in order to optimize the construction of the training system, we continued to organize 26 development members from various departments to carry out the development of the third phase of 10 courses which lasted for 2 months. During the year, the Group optimized and innovated the methods and processes of course development and acceptance, and effectively improved the quality of course development and ensured the actual use of courses through "courseware review, course lectures (real training), review and acceptance". We provided internal trainers or lecturers with practical lectures to improve their teaching ability.

As of the end of December 2021, the completion rate of the trainings under the plan at the company level were 95%, representing a significant increase compared with that of 2020. Meanwhile, Zhongshan GDH Energy carried out 64 training programmes at the company level with a total of 990 participants.



Roads and Bridges

To improve the job skills and working efficiency of employees, promote a positive learning atmosphere, improve the work efficiency of employees and comprehensively improve the overall quality and management, GDH Highway formulated the Implementation Rules for the Management of Employee Skills Enhancement and Rewards during the year, specifying the skill requirements in terms of academic qualifications, degrees, titles, vocational qualifications, amount of incentives and years of service. The rules also set out the detailed reporting, approval and review procedures. After the Implementation Rules were issued, employees highly recognised and responded positively. During the year, 10 people were awarded for skills improvement.

In addition, GDH Highway continued to strengthen internal training, establish an internal trainer team, strengthen civilised service, and comprehensively improve the comprehensive quality of employees. During the year, we organised 27 training sessions on civilised services, legal knowledge, fire safety knowledge, safety production, internal training knowledge, flower arrangement technology, cosmetic skills, occupational health, etc., with more than 1,000 participants. A total of 3,007 training sessions were carried out at each station of the Toll Management Department, including skill training, safety production training, integrity education training, policy and regulation training, etc.

We continued to strengthen the talent pool and talent cultivation, and actively carried out internal recruitment. As of 2021, there was a pool of 34 talents in total in the Company. Through internal recruitment, a total of 10 staff were promoted to new positions in the monitoring and perception center of the Toll Management Department, including director, associate director, managers, supervisors, toll team leaders, team leaders and deputy team leaders.

Case Study: Charge Service and Other Themed Training for Management Personnel

During the year, we specially invited well-known lecturers to carry out “charge service and other themed training for management personnel”, focusing on improving employees’ civilized service, workplace etiquette, execution, emotional intelligence and other capabilities. Through organizing and carrying out training for internal trainers of the Company, trainees can gain knowledge on adult psychology principles, subject demand analysis methods, various teaching skills, and methods for rapid development of courseware. The Company also set up its own “internal trainer” team based on the trainees to promote high-quality development of internal training and comprehensively improve corporate governance capabilities.



Charge service training for employees

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

EQUAL OPPORTUNITIES AND LABOUR RIGHTS

The Group strictly complies with laws and regulations such as the Labour Contract Law of the People's Republic of China, the Social Insurance Law of the People's Republic of China as well as the Employment Ordinance and the Employees' Compensation Ordinance of the Hong Kong Special Administrative Region. It has formulated and implemented employment related rules and policies that comply with national and regional laws and regulations. We are committed to protecting the basic rights and interests of all employees and are devoted to establishing a diverse and equal working environment that is free of discrimination. As a responsible corporate, we have not implemented significant job cuts affecting more than 1,000 employees or more than 5% of the total workforce in the past three years to ensure stability in employment.

Meanwhile, adhering to the philosophy of "people-oriented", we provide employees with competitive salary and benefit packages, including paid annual leave, sick leave, maternity leave, paternity leave, marriage leave, bereavement leave and casual leave, as well as MPF contributions/housing provident fund contributions, purchase of labor insurance, life and accident insurance, medical insurance and other insurance for the employees. Meals and overtime transportation subsidies are also provided in daily work.

In addition, GDI cares about the physical health of employees. We arrange a comprehensive physical examination and influenza vaccination for employees every year to improve employees' health awareness and ability, and purchases medical and life insurance for employees to protect their physical health.



Water Resources

Water resources segment has robust employment systems in place, including the Remuneration and Welfare Management Policy, the Performance Assessment Measures and the Employee Reward and Punishment Measures to clearly set out the employees' remuneration structure, standards and distribution as well as welfare management.

For new projects during the year, we adhered to the principle of "no decrease in remuneration, but increase by one level" and successfully introduced a new remuneration system to ensure the stability of our team:

- **Remuneration orientation:** Remuneration based on duties and responsibilities as well as performance, breaking the old concepts on remuneration based on years of service, seniority and professional titles;
- **Differential pay raise:** Differential pay raise for employees at different levels, of which core and backbone employees with more responsibilities enjoy higher raise;
- **Distribution of performance-based remuneration:** Performance-based remuneration to stimulate the working enthusiasm.

Water Holdings has fully implemented the professional manager management mechanism on the leaders of subsidiaries during the year in order to advance the high-quality and high-speed development of the water resources segment. Through the adoption of the integrated management of the headquarters, it specified the tenure of professional managers and their targets and formulated detailed performance appraisal standards to stimulate long term performance improvement.



Property Investment, Development and Department Store Operation

Teem Group has implemented the Manual of Employee Performance Management, the Regulations on Salary Management and the Management Regulations on Working Hours, Leaves and Welfare and other rules and systems during the year to consistently optimise employee appraisal methods and improve the efficiency of performance management. The employees are offered fair working hours, leaves, remuneration and benefits. Adhering to the principles of openness and transparency, fairness and justice, the Group ensures the rights and interests of employees at all levels and encourages the employees to improve their abilities and performance continuously. During the year, based on system integration and management needs, we revised the Employee Performance Management Measures, the Implementation Rules for Total Wage Management of Teem Group, the Management Regulations on Performance Wage Examination and Distribution of Teem Group and other systems, which play an important role in improving corporate governance and standard operation and protecting the legitimate rights and interests of employees.

In addition, based on the actual situation of the Company's management, we have improved the management measures for employee performance evaluation, gave full play to the guidance of performance evaluation, and guided employees to take responsibility and work hard. We clarify work objectives, refine quantitative assessment indicators, formulate individual performance contracts for employees, and agree on work objectives and completion quality. Secondly, the lowest level adjustment and incompetent exit mechanism shall be implemented by classification. The evaluation results are fully applied to employee performance-based salary distribution, annual capital increase, selection and appointment, personnel adjustment, advanced selection and other links, strengthening the restraint management of employees at the end, and further improving employees' crisis and competition awareness. We implemented an employment mechanism that enables promotion and demotion and fair competition. At the same time, we strengthen the management of probation examination for new employees, and sign a probation examination contract. After comprehensive evaluation, those who fail to meet the standards will not be employed.



Hotel Ownership, Operation and Management

Hotel Management Company has formulated employment policies, such as the Management Measures on Employee Benefit Expenditure of Guangdong International Hotel Management (China) Limited, the Measures for Labour Relations and Administration of Social Insurance of Guangdong (International) Hotel Management Holdings Limited, the Leave Management Requirements of Guangdong (International) Hotel Management Holdings Limited and the Performance Assessment Management Measures of Guangdong (International) Hotel Management Holdings Limited to ensure that employee remuneration and benefits are protected. Meanwhile, the Hotel Management Company continues to strengthen its reforms of internal management and improves the remuneration system for professional managers by benchmarking the actual remuneration level of Hotel Management Company against the market remuneration level. The remuneration of different levels has been optimised and the transparency of remuneration and welfare is undergoing continuous improvement.



Energy Projects

During the year, Zhongshan GDH Energy completed the amendments to the Remuneration Management Standards of Zhongshan GDH Energy Co., Ltd. (revised in April 2021) and the Annual Performance Evaluation Management Standards of Zhongshan GDH Energy Co., Ltd. (revised in September 2021), and formulated the Management Standards of the Rank System of Zhongshan GDH Energy Co., Ltd. (Trial), which further standardised the position and rank management, clarified career development path, promoted the growth of functional management and technical and skilled personnel at all levels, encouraged and retained talents, and played a guiding role in the development of employees.

We truly appreciate that outstanding talents are core forces for corporate development. During the year, for internal employees, we implemented the annual promotion assessment for employees, and a total of 25 employees were promoted for their positions/ranks. Over the years, the company's annual promotion, internal competition, recommendation and inspection, and competition and adjustment of production departments cooperate with each other to form an effective mechanism. Young backbones and employees are trained and developed in line with the strategic goal of "accelerating the cultivation of backbone talents of the Company".

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Roads and Bridges

According to the latest Management Measures for Employee Performance Appraisal issued by the Group and taking into account the actual situation of the company, GDH Highway further optimised and improved the performance appraisal system, completed the latest revision of the Management Measures for Performance Appraisal during the year, strengthened the tracking and implementation of various appraisal work, and provided a greater stage for employees with outstanding performance.

During the year, GDH Highway carried out the grass-roots research work of “in-depth research, practical work and development” to understand employees’ satisfaction in eight aspects, including work content and working environment, salary and performance, management and communication, promotion and development, training and development, logistics support, and development vision. In addition, we promoted the implementation of the company’s enterprise annuity implementation plan, and invited relevant persons in charge of the enterprise annuity cooperation unit to give a virtual presentation on the plan for employees, so that the presentation of the enterprise annuity implementation plan covers all employees of the company. In August of this year, the company formulated the “Enterprise Annuity Withholding Plan of Guangxi GDH Highway Co., Ltd.”, and formally withheld the enterprise annuity from the wages of employees in September, so as to enhance the competitiveness and cohesion of the company, enhance the sense of belonging of employees and motivate employees to work hard.

STAFF CARING ACTIVITIES

Upholding the “people-oriented” tenet and spirit, the Group creates a healthy, harmonious and pleasant working environment for employees. We take full consideration of the needs of employees and ensure employees are provided with benefits in various aspects of life and work to support employees to achieve a good work-life balance.

In order to comprehensively enrich employees’ leisure life, we actively carried out a variety of sports and cultural activities during the year. While ensuring the welfare of employees, each segment continued to provide assistance to employees in need and brought care to employees in need at both financial and spiritual level through disbursing consolation money, home visit and care and other means.

In addition, we also provided holiday greetings to front-line employees on traditional festivals such as the Mid-Autumn Festival, Dragon Boat Festival and Spring Festival to promote mutual communication among employees and vitalise and motivate employees through visits and communication and distribution of holiday gifts, thus enhancing corporate cohesion.



Property Investment and Development and Department Store Operation

Teem Group is deeply rooted in the grassroots, listens to the voices of employees, understands the diversified needs of employees, takes a down-to-earth approach, and delivers the Company’s care and warmth to employees, so that each employee can feel the warmth of the Company, enhance the sense of belonging and happiness of employees, and thus enhance the centripetal force of the Company.

At the same time, we distributed holiday gifts and blessings on Labour Day, Dragon Boat Festival and other festivals, paid attention to the needs of employees for pandemic prevention and control materials, distributed disinfectants, hand sanitizers and other supplies to employees, strengthened the care for employees who were quarantined at home, and carried out condolences.

Case Study: Caring Assistance and Targeted Subsidies

During the year, the Company implemented the work of caring assistance and targeted funding, actively carried out warm-hearted activities to provide practical solutions for employees who were in difficult times. In particular, the Company provided caring assistance to 40 employees in need, with a support fund of RMB121,000. For 11 employees in need, we applied to the GDH Labour Union for targeted subsidies, with a subsidy amount of RMB89,000, and delivered the above consolation money to the employees in need. In addition, we paid attention to the sense of belonging of employees. Before the Spring Festival, we visited 39 employees in need with an assistance amount of RMB116,000, and provided targeted subsidies to 10 employees in need with a subsidy amount of RMB75,350.



Case Study: Helping Non-local Employees with Livelihood Issues such as Household Registration and Children's Schooling

We actively help to solve the livelihood issues of non-local employees such as household registration and children's schooling. At present, we have helped four employees get a household in Guangzhou and three employees' children be enrolled at local schools.



Hotel Ownership, Operation and Management

The Hotel Management Company continues to provide employees with various communication channels to ensure smooth communications, open and transparent information and information interaction across the company. It also guarantees timely feedback and handling of problems or concerns raised by employees. In addition, we have installed employee feedback mailboxes in public areas and set up an e-mail account for the general manager with a designated officer to maintain regular check and collection, which would be timely submitted to the company's management for review, handling and responding on a case-by-case basis, to deal with employees' opinions and suggestions in a timely manner, and reward employees who put forward management opinions. In addition, the general manager forum was held every month to listen to the opinions and suggestions of employee representatives at all levels on the Company. The Hotel Management Company actively facilitated the development of its labour union (employee representatives meeting) by electing staff representatives via voting to exercise management power on behalf of all employees, including the powers to deliberate on major corporate decisions and supervise the administrative leadership, thereby safeguarding the employee legitimate rights and interests.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

In the meantime, we are considerate of the well-being of our employees by offering gifts and greetings at festivals including Spring Festival, Dragon Boat Festival, Mid-autumn Festival and Women's Day and conducting various activities such as distributing refreshment in summer and Month of Protecting the Rights of Female Employees. In addition, we distributed festive benefits in kind with caring and blessing messages to union members. We also organise monthly birthday parties to provide warmth and caring for the employees, and set up pantry benefits to fuel hard-working colleagues. The company's management pays timely visits to employees who are sick or in difficulties. In 2021, the company applied for targeted subsidies, provided assistance to four employees in difficulties with a total amount of RMB28,500, and purchased poverty alleviation agricultural products of RMB19,870 from Jiexi County, so that employees can feel the collective warmth. In addition, the company provided a sound labour union welfare guarantee, established a long-term assistance and caring mechanism, and continued to do a good job in employee care and relief.



The Labour Union of Hotel Management Company carried out tea party activities for female employees and sent books and gifts to female employees



Birthday party for employees held by the Labour Union of Hotel Management Company



The Zhuhai-Guangdong Labor Union held a Seminar held by the Labour Union of Zhuhai GDH hotel



Outing activities held by the Labour Union of Zhuhai GDH hotel



Consolation money to employees in need granted by Zhuhai GDH hotel



Energy Projects

Being considerate of employees' physical and mental health, Zhongshan GDH Energy deepens its understanding of the expectations from our employees, enriches leisure activities for our employees and strives to maintain harmonious workplace conditions. During the year, we organised activities such as New Year's Day Cultural Evening Party, calligraphy, painting and photography competition, safety production knowledge competition, and employee lectures, and carried out learning activities, cultural and sports activities in various forms to explore employees' talent and give a full play to employees' value. In addition, during the year, the company also held the "Celebration of Mid-Autumn Festival and National Day" fun sports meeting for employees with more than 200 participants to enhance team collaboration, combat effectiveness and the cohesion of employees.



At the same time, we identified the union members in all labour unions to understand our employees in a dynamic manner, and set up feedback boxes, complaint hotlines and bulletin boards to meet the needs of information collection and feedback at any time, collect employees' opinions and suggestions, and further promote the practice of "I do practical things for the public" to provide real-time information for corporate management. In the first and second half of the year, we organized one employee feedback collection activity respectively, and collected 39 feedback and suggestions from employees throughout the year, all of which have been addressed.

During the year, we continued to increase our efforts in caring and visiting employees. On the one hand, the labour union purchased the "Comprehensive Mutual Support Plan for Inpatient Medical Care" for all employees, applied for secondary medical claims for 15 employees, organised collective donation of more than RMB50,000 for 1 seriously ill employee, and applied for a total of RMB45,000 for financial assistance from the Group twice to relieve the needs of difficulties. On the other hand, we provided condolence work to hospitalised employees and the immediate family members of deceased employees. In 2021, we visited a total of 46 employees, and distributed consolation money and gifts of RMB34,133.40.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Roads and Bridges

In persisting in the philosophy of “prioritising employee interests”, GDH Highway actively carries out campaigns focusing on employee care and concern, including maintaining good communications with our employees by on-site visits, grassroots research, seminars and routine work meetings to understand their expectations and thoughts.

Case Study: Assistance to Employees in Need



Every year, GDH Highway pays visitations as a message of consolation to the people in difficulties during traditional festivals, especially for employees with illness and initiates confiding conversations with the employees in difficulties. We paid 7 visits during the Spring Festival of 2021 and 41 visits throughout the year to employees in difficulties with total consolatory money amounting to RMB8,000.



Case Study: Construction Site Visits during Spring Festival



On 5 February 2021, during the construction of the road surface renovation project of Xingliu Expressway, GDH Highway carried out the “Construction Site Visits during Spring Festival” to send warm regards and holiday blessings to the front-line workers.



Case Study: "3•8" Female Workers Quality Development Activity

On 8 March 2021, GDH Highway carried out the "3•8" quality development activity for female employees. In the form of hiking and quality development activities, GDH Highway fully implemented the national women's policy, created a rich festive atmosphere, enriched the amateur cultural life of female employees, and improved the quality of female employees.



Case Study: Carrying out Four Types of Ball Games for Employees with the Theme of "Striving for Sports Star"

In 2021, GDH Highway carried out four types of ball games for employees with the theme of "Striving for the Star of Sports" to encourage employees to stay true to their original aspiration and keep their mission firmly in mind, enrich their spare-time cultural life, and integrate team spirit and sports spirit, so that employees can enjoy the happiness brought by sports while further enhancing corporate cohesion, centripetal force and work enthusiasm.



6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



6.5

GIVING BACK TO SOCIETY AND CREATING VALUE TOGETHER

PANDEMIC PREVENTION AND CONTROL

In 2021, the outbreak of COVID-19 continued to bring challenges to the country, society and enterprises. Against the COVID-19 pandemic, the Group has always maintained a high degree of vigilance, strictly abided by the national pandemic prevention and control requirements and management mechanisms, and worked with all employees with firm determination to help fight the pandemic.

In order to protect the health of every employee, we set up “the leading group for the prevention and control of COVID-19 pandemic” and formulated the GDI Emergency Response Plan for Prevention and Control of COVID-19 pandemic at the beginning of the outbreak. The leading group coordinated all aspects of work arrangements, actively improved the rules and regulations governing the emergency management of production safety of each business segment, and implemented the measures for safety production emergency management and anti-epidemic work with practical actions. According to the emergency response plan, each business segment of the Group would also seek to unite all members to win the battle against the pandemic by leading its employees in carrying out effective prevention and control of the pandemic, and strengthening the publicity and education of its employees and the public on pandemic prevention and control.



Water Resources

The companies under the water resources segment are widely distributed, with complex personnel and ever-changing policies, making it extremely difficult to prevent and control the pandemic. We continued to improve the existing pandemic prevention and control system, and formulated and updated the rules and regulations, including the Work Guidelines on Water Companies in Operation During the Pandemic, the Notice on Strengthening Operation Management of Sewage Treatment Plants of Subsidiaries During Pandemic, and the Emergency Monitoring Plan of Dongshen Water Supply Project in Response to the COVID-19 Pandemic to ensure the normal operation of water services.

The water resources segment took multiple measures to jointly fight the pandemic and prevent and control the pandemic. We focused on conducting personnel investigation to identify all possible sources of infection and ensure "zero infection", so as to minimise the impact of the COVID-19 pandemic on its business. At the same time, we strictly controlled the travel of personnel, and implemented the health review and registration of personnel in the production and office area as well as the construction sites. People from areas with high risks of COVID-19 pandemic were not allowed to enter, and those from other areas suffered by the pandemic were required to hold valid nucleic acid certificates before entering. During the year, the second needle intake rate of Water Holdings was 100%. We will continue to promote the third dose of vaccination.

On the other hand, we also revised the Emergency Plan for Pandemic Prevention and organized employees to carry out emergency drills for COVID-19 pandemic to improve their emergency response capabilities.



Nucleic acid testing for all employees at the headquarters



Emergency drill for pandemic prevention and control at the headquarters of GD Water

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Property Investment and Development and Department Store Operation

Since the normalization of pandemic prevention and control, under the guidance of the leading group for the prevention and control of COVID-19 pandemic of Teem Group, we have formulated the “Emergency Response Plan for Prevention and Control of COVID-19 Outbreak of Teem Group”, to strictly and earnestly implement the information reporting mechanism of pandemic prevention and control, and timely report the development of pandemic in various regions under the overall prevention and control strategy of “preventing inbound cases and domestic resurgence”. At the same time, we organised all subsidiaries to carry out monthly investigation of hidden dangers in pandemic prevention and control, and established a ledger for rectification of such hidden dangers to ensure the effectiveness of pandemic prevention and control.

In response to the recurrence of the pandemic, Teem Group followed the guidelines for pandemic prevention and control and took timely measures to reduce the impact on merchants. We actively communicated with our tenants to understand the recent operating conditions of tenants, collect and compile statistics on rent reduction applications from tenants, while providing comfort to tenants and stabilizing their business confidence. We paid close attention to the development trend of the pandemic in Guangzhou, especially the operation requirements of government departments on special businesses such as amusement centers, cinemas, catering, etc., so as to communicate with tenants in a timely manner for implementation.



Hotel Ownership, Operation and Management

In response to the pandemic prevention and control, Hotel Management Company has internally formulated the Guidelines on the COVID-19 Pandemic Prevention and Control and Emergency Response Plan for Suspected Cases Caused by COVID-19 Infection. At the same time, the leading group for pandemic prevention and control of each hotel strictly implemented the pandemic prevention and control instructions issued by the Group and carried out various prevention and control work, so as to strengthen employees’ awareness of pandemic prevention and control and emergency response capabilities.

The Hotel Management Company has always attached great importance to pandemic prevention and control. The leaders in charge of production safety and the Production Safety (Emergency) Management Department continued to follow up the development of the COVID-19 pandemic across the country and the province, and timely released the pandemic situation through the WeChat group of “Hotel Management Safety”, reminding and supervising all units to properly carry out normalised pandemic prevention and control measures such as providing disinfection hand sanitizers at entrances and front desks, requiring all personnel to wear disposable medical masks, maintaining social distance, conducting daily disinfection of public areas such as elevators and toilets, and reporting activities for more than 50 people. During the year, the headquarters of the Hotel Management Company and its units in various provinces also organized an emergency drill for COVID-19 pandemic to enhance their emergency response capabilities.

At the same time, by making full use of the market platform, the headquarters and hotels of the Hotel Management Company conducted temperature checks and observation on employees returning to work and only the employees free from abnormal health conditions were allowed. They were required to submit a record of their recent travel history, flight or high-speed train numbers. We also strictly enforced the 14-day quarantine rule for our employees returning from high-risk areas.



Energy Projects

Zhongshan GDH Energy has formulated internal systems such as the the Emergency Plan of Zhongshan GDH Energy Co., Ltd. for Prevention and Control of COVID-19 Incidents, the Work Resumption Plan of Zhongshan GDH Energy Co., Ltd. for Prevention and Control of the COVID-19 Pandemic after Chinese New Year, the Emergency Response Plan of Zhongshan GDH Energy Co., Ltd. for Suspected Cases Caused by COVID-19 Infection and the Work Plan of Zhongshan GDH Energy Co., Ltd. for Normalised Prevention and Control of the COVID-19 Pandemic, and assigned special personnel to follow up and implement the pandemic prevention and control related work. We collected information on employees leaving and coming back Guangdong, and required employees to submit a nucleic acid report when necessary, so as to guide our stranded employees to return to their posts in a safe and orderly manner. At the same time, we conducted random checks on the temperature measurement, registration and wearing of masks by employees every month to ensure that all prevention and control measures are in place, strictly control the spread of the pandemic, and reduce the risk of infection of COVID-19, so as to protect the health of all employees at the plants.

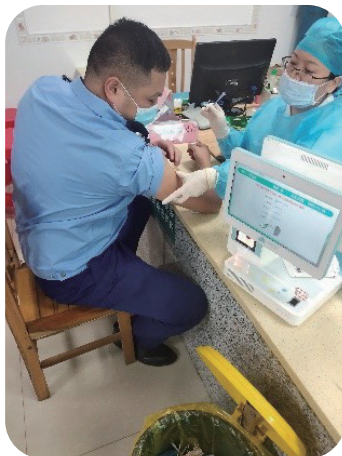


Roads and Bridges

Under the guidance of the Group, GDH Highway actively carried out pandemic prevention and control. In accordance with the Company's important instructions and work arrangements for pandemic prevention and control, we have formulated the Notice Concerning Normalised Pandemic Prevention during the Mid-autumn Festival and the National Day Holidays and Notice Concerning Standardised Health Code Scanning and Inspection to further promote pandemic prevention and control.

We promoted pandemic prevention and control knowledge by posting posters, hanging banners, sticking stickers and other measures in various management areas and the project departments of the participating units of road renovation projects, and vigorously carried out pandemic prevention and control publicity activities to enhance the awareness of pandemic prevention. At the same time, strictly following the travel management principle of "no travelling to high and medium risk areas, no non-essential travel, minimize non-essential travel, and strengthening personal protection during travel", we implemented the travel approval and filing system for travel away from the company's location and permanent residence. We also arranged special personnel to be responsible for the pandemic investigation, and reported the whereabouts and health conditions of employees on a daily basis as required, so as to keep abreast of the development of employees at any time and prevent the occurrence of emergency events.

On the other hand, in order to ensure that employees can receive COVID-19 vaccines in a timely manner, the roads and bridges segment actively contacted the local health departments, and arranged vaccination schedule for all departments and management areas in an orderly manner by batch to ensure that the vaccination and work are not interrupted. During the year, we applied for the "Signs for COVID-19 Vaccination as widely as possible" from the pandemic prevention and control center of the Group, and posted it at the gates of each management area. In the meantime, 200 signs of "I have vaccinated" were produced, and distributed to front-line employees at toll collection department and road administration department for wearing at work, so as to ensure the normalized pandemic prevention and control and consolidate the results of pandemic prevention and control.



COVID-19 Vaccination

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

SUPPLY CHAIN MANAGEMENT

GDI has always attached great importance to inter-industry cooperation. We continuously improve the management and cooperation of upstream and downstream business partners and suppliers in the industry chain to empower the development of the industry chain and promote the sustainable development of the entire industry chain. During the year, with the Policy on Sustainable Supply Chain of Guangdong Investment Limited revised, we not only encouraged and prioritised our cooperation with suppliers who have environmental and safety certifications, but also required suppliers to practice the concept of green environmental protection when entering into business contracts and conducting performance evaluation, so as to achieve a good partnership of mutual benefit and win-win.

GDI requires the construction units involved in the tender documents and procurement contracts for products and services in all business segments to enter into an integrity agreement with the bid-winning units and suppliers at the same time, confirming that they are aware of and undertake to comply with the Company's bidding and procurement policies and the relevant penalties for any breach, so as to create an honest and healthy environment. We uphold the working principle of fair price comparison and independent procurement, maintain a fair competition mechanism for suppliers, and prohibit any personnel from designating suppliers, designating procurement prices, designating payment methods, etc. We will immediately terminate the employment contracts with those responsible employees who falsify, collude with the suppliers or accept benefits from the suppliers in the procurement process.

Additionally, GDI continues to promote local supply chain. We give priority to suppliers in the same region if other interest conditions remain unchanged, so as to reduce the carbon footprint and negative impact on the environment during the transportation of materials and improve the efficiency of resource utilization. We strive to build a standardized, fair and unified supplier management system, to enhance the competitiveness of the industry supply chain, and achieve win-win development with partners.



Water Resources

As for the water resources segment, we clarified the responsibilities of the person in charge and relevant personnel involved in the entire process of bidding and procurement based on the Management Measures for Procurement, the Management Measures for Tendering, the Supplier Rating Operation Guidelines, and the Management Measures for Supplier Information Database, which specify the same personnel should abstain from tendering to regulate supplier management. For all units and suppliers who successfully won the bidding, we require them to sign the Commitment to Honesty and Integrity with the construction unit in accordance with the requirements of the Interim Provisions on Registration and Report of Guangdong Yue Hai Water Holdings Limited on Project Bidding and the Guidelines of Guangdong Yue Hai Water Holdings Limited on the Supervision of Integrity in Construction of Major Projects to ensure that the project is conducted in accordance with laws and regulations. At the same time, the audit department will also audit the tender and bidding work to ensure the rationality, scientificity and implementation of the entire tender and bidding process. We also rate our suppliers. The relevant working groups hold regular meetings to rate suppliers in accordance with the List of Rating Criteria for Suppliers. Suppliers will be assigned with different grades according to their rating results, which will serve as the basis for determining the cooperation with high-quality suppliers, so as to ensure product quality and supply stability.

During the procurement process, GDI continuously improves the procurement process and mechanism and establishes a transparent procurement system process, through which the procurement system is monitored to ensure that the procurement process is open, fair and just, creating a good competitive environment for suppliers. At the same time, we take into account the environmental and social responsibility performance of suppliers, fully consider factors such as environmental protection, resource conservation, safety and health, recycling and low-carbon, and recycling promotion, and give priority to suppliers who can provide raw materials, products and services that are conducive to environmental protection such as energy conservation, water conservation and material conservation.



Property Investment, Development and Department Store Operation

During the year, Teem Group revised its Procurement Management System Manual, which clearly requires all suppliers to sign the Commitment to Honesty and Integrity. In order to jointly create a good procurement environment, we issued the Management Measures of Teem Group for Engineering Project Tendering and the Management Measures of Teem Group for Procurement of Goods and Services, which include requirements of incorporating complaint channels, and guidelines on handling large differences between the awarded amount and the budget, and removing unreasonable clauses such as business scope and specific local performance in the public tender, so as to improve the transparency and fairness of supply chain management.

In addition, we continuously improve the supplier management mechanism to ensure the openness, transparency, impartiality and competitiveness of the bidding, so as to avoid the tendency problem. The bidding projects shall comply with the spirit of the Law of the People's Republic of China on Tenders and Bids and the principles of openness, fairness and justice. The scoring rules of the bidding projects shall be open and subject to external supervision as required. It is no longer a regional requirement for the qualifications of bidders, such as "domicile in the province or having branches in the province", nor can it specify a particular award as a scoring item. At the same time, we strengthened the process management of tendering evaluation. On the one hand, we checked the scoring rules, reduced the proportion of individual technical scores, and increased the quantifiable and objective scores. On the other hand, we reminded and controlled the self-scoring behaviour for the review to avoid the excessive difference of subjective scoring items or the occurrence of one-side scoring. We also promoted the implementation of innovative practices in the new version of the tendering and procurement system, and applied the method of "calculating business scores by applying the progressive deduction of differences" to the actual tendering and procurement work, mainly in technology-oriented projects (such as promotion, design and service projects with a higher degree of customization), so as to reduce the possibility of business evaluation sharing higher than that resulting in low-price tendering, and increase the influence of technical scores on the selection results.

In order to further standardise the procurement system, we have conducted internal audits and inspections on the tendering and procurement work of our subsidiaries, and put forward advices and suggestions on the relevant situation to urge our subsidiaries to continuously improve their procurement process and management mechanism.



Hotel Ownership, Operation and Management

During the year, Hotel Management Company revised a number of system documents such as the the Implementation Rules for Tendering and Procurement of Guangdong (International) Hotel Management Holdings Limited, the Rules for Materials Procurement and Approval Procedures of Guangdong (International) Hotel Management Holdings Limited, the Supplier Management Measures of Guangdong (International) Hotel Management Holdings Limited and the Management Measures for Centralised Procurement of Guangdong (International) Hotel Management Holdings Limited. In accordance with the relevant systems of the Group, we sorted out the tendering and procurement management system, and controlled the key links of risk and efficiency management, so as to control risks from the source, reduce losses, and improve quality and efficiency.

We continued to strengthen the functions of departments and the implementation of the "Transparent Procurement Strategy", and be open and transparent in the implementation of relevant procedures of Hotel Management Company and holding companies under the supervision of audit and other departments throughout the procurement process so as to ensure procurement work is transparent and efficient.

6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)



Energy Projects

During the year, Zhongshan GDH Energy revised the Tendering Management Standard of Zhongshan GDH Energy Co., Ltd. and the Coal Procurement Management Measures of Zhongshan GDH Energy Co., Ltd. to optimize the tendering process, and ensure the relevant work is carried out in an orderly manner, thus saving manpower and time costs.

In 2021, the international coal supply saw a tight supply and surging coal prices. In order to ensure smooth supply, we strengthened communication and coordination with existing coal suppliers to stabilize them and encourage them to ensure supply to the company through multiple sources by giving full play to their own advantages. Secondly, we strengthened market research to keep abreast of the coal market dynamics in a real-time manner, and submitted price inquiry and procurement in a timely manner when necessary to ensure that coal can be purchased at an appropriate price. In addition, we strengthened the tracking of coal transportation, paid close attention to the loading of suppliers, and monitored the movement of each coal vessel through the ship information network. Once the coal vessel is found to be unable to be shipped in time, we would immediately contact and urge out suppliers or designate a person to the loading terminal for inspection and ensure the timely shipment of the coal vessel and the punctuality of coal delivery to the plant. Through the above measures, we not only ensured the stable supply of key materials, but also effectively prevented the virulent price competition during the year.

In addition to working closely with suppliers in its daily operations, Zhongshan GDH Energy also attaches great importance to the training of suppliers, especially the safety training for suppliers and the management of transportation vehicles. The Material Management Department under the competent departments conducts quarterly training for transportation drivers to ensure that on-site safety management is in place to avoid any safety incidents.



Roads and Bridges

GDH Highway has established a series of management systems and internal control systems, such as the Implementation Rules for Tendering Management, the Management Requirements for Goods and Services Procurement, the Management Measures for the Evaluation of Contract Performance, the Regulations on Discipline Inspection and Supervision and the Accountability Management Measures, to conduct comprehensive management of key businesses. We continue to standardise the tendering and bidding of highway construction projects, and have formulated relevant documents such as the Measures for Tendering and Bidding for Construction Projects and the Measures for the Administration of Tendering and Bidding for Highway Construction Projects to improve the highway construction market management system. In the meantime, we strengthen the supervision and management of daily operation and procurement activities by standardising the procurement of goods and services in daily operation to safeguard the interests of the Company.

The number of suppliers by region during the reporting period is as follows:

Region	2021
North China	372
Northeast China	44
East China	566
Central China	155
South China	3,739
Southwest China	59
Northwest China	22
Hong Kong, Macao and Taiwan	174

ENGAGEMENT IN COMMUNITY BUILDING

While developing its own business, GDI actively participated in various public welfare activities jointly organised by the industry and the community. We have formulated the Policy on Charity and Public Welfare Activities Management to strengthen and standardise the management of the sector on charity and public welfare activities, carry out social organisation cooperation, give full play to the advantages of the enterprise to give back to the society, actively solve social problems, and achieve common growth together with all parties.

During the year, we actively fulfilled our social responsibilities, took the initiative to care for different community groups and strived to help those in need through different types of public welfare activities such as targeted poverty alleviation, donations, fundraising, public welfare promotion and participation in voluntary blood donation. During the year, our volunteer activities totalled 234,575 hours and the total donations amounted to RMB10,411,400.

Targeted Poverty Alleviation

GDI attaches great importance to targeted poverty alleviation, actively responds to the call of the nation, lead all segments to carry out poverty alleviation work in various fields, and solidly carries out targeted poverty alleviation work.

Case: Poverty Alleviation Through Consumption by Purchasing Instead of Donation



Teem Group carried out consumer poverty alleviation publicity and actively promoted poverty alleviation. We focused on the combination of the New Year's Day, Spring Festival, Dragon Boat Festival and Labor Day with poverty alleviation through consumption, and carried out poverty alleviation through consumption by "purchasing instead of donation". The total consumption of this activity was RMB342,400.

Case: Participation in the "Salvation Army" Clothing Donation Campaign for the Underprivileged



Cheer Space of Oasis Avenue A GDH Hotel (Hong Kong) actively responds to the call of the nation and the Group for targeted poverty alleviation. During the year, it organised and participated in the "Salvation Army" clothing donation campaign and donated clothes to social vulnerable groups to help more people in need and continuously pass on warmth.

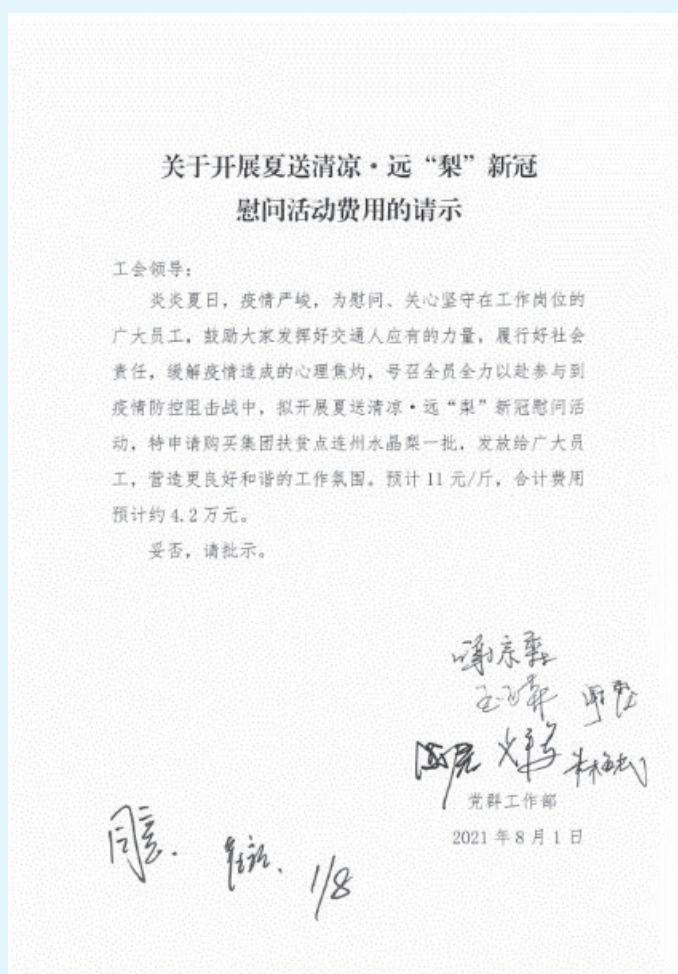


6. OUR SUSTAINABLE DEVELOPMENT PERFORMANCE (CONTINUED)

Case: Purchasing Agricultural Products for Poverty Alleviation and Carrying Out Targeted Poverty Alleviation



In 2021, the total value of agricultural products purchased by GDH Highway from poverty alleviation sites amounted to RMB281,000, among which RMB17,900 was the purchase of crystal pears, the poverty alleviation product of Lianzhou City, RMB56,600 was the purchase of crystal rice dumplings, the poverty alleviation product of Guangxi, and RMB35,500 was the purchase of poverty alleviation products from other places. Through purchasing agricultural products from poverty alleviation sites, we demonstrated the responsibility of a state-owned enterprise, encouraging more employees to understand and participate in poverty alleviation activities, and jointly promoting and gradually forming a good atmosphere where everyone is willing, able and capable to do so.



Contribution to Community

GDI actively gives back to the society, conveys love and responsibility through participating in various public welfare activities, and strives to contribute to the development of local communities.

Case: Going to the Community to help Carry Out Voluntary Nucleic Acid Testing Services



Since May 2021, the COVID-19 pandemic has aroused the hearts of the citizens of Shenzhen. Shenzhen has carried out nucleic acid testing for all people in multiple districts, and spared no effort to run with time to launch a comprehensive overall battle of pandemic prevention. Guangdong Hotel (Shenzhen), after knowing that the pandemic prevention work in the community was tight, took the initiative to contact the community and have 15 hotel employees forming a volunteer service team, and going to Jiabei Community to visit the hard-working workers for pandemic prevention in the front line of the community, and helped the community to carry out nucleic acid testing volunteer services.



Case: "Lunchboxes for the Elderly" Campaign




Oasis Avenue A GDH Hotel (Hong Kong) participated in the "Lunchboxes for the Elderly" campaign and visited a number of communities, including Tai Ping Shan Street in Sheung Wan, Third Street in Sai Ying Pun and Smithfield Road in Kennedy Town. Over 200 lunchboxes were delivered to the elderly, and young hotel volunteers were invited to participate in the event to promote the integration of the elderly and the young.



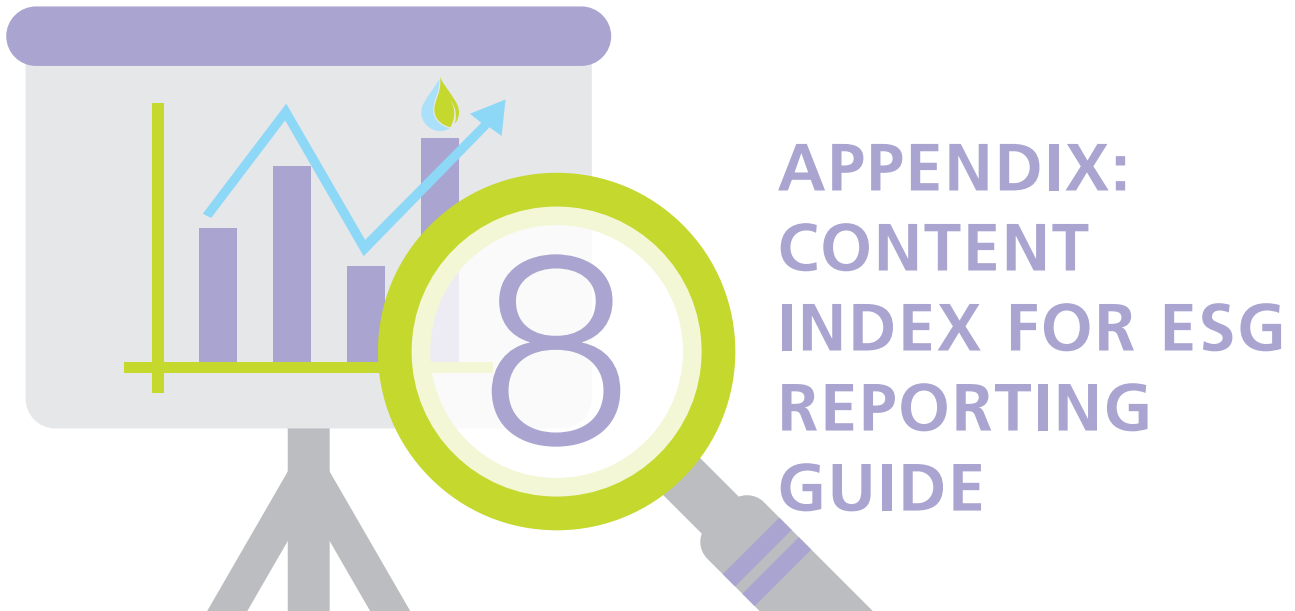
AWARDS AND HONOURS

	Awards	Issuing Organisation	Recipient	Award Information
	 <p>First-class unit of water conservancy safety production standardization</p>	Ministry of Water Resources of the PRC	Guangdong Yue Gang Water Supply Company Ltd.	The award represents the recognition of the safety production standardization of Yue Gang Water Supply
	National Exemplary Enterprise for Safety Culture Development	China Association of Work Safety	Guangdong Yue Gang Water Supply Company Ltd.	Yue Gang Water Supply was awarded the title of National Exemplary Enterprise for Safety Culture Development

	Awards	Issuing Organisation	Recipient	Award Information
	The title of Group Standards Preparation Unit of the Standardized Construction Specification for Safety Production in Sewage Treatment Enterprises	Guangdong Provincial Association of Work Safety	Guangdong Yue Hai Water Holdings Limited* (廣東粵海水務股份有限公司)	In recognition of Guangdong Yue Hai Water's success in the selection of the group standards preparation unit of the Standardized Construction Specification for Safety Production in Sewage Treatment Enterprises
	"Excellent Organization Unit" of the Work Safety Publicity Work Collection Activity of Guangdong Provincial Association of Work Safety	Guangdong Provincial Association of Work Safety	Guangdong Yue Hai Water Holdings Limited* (廣東粵海水務股份有限公司)	Guangdong Water was awarded the title of "Excellent Organization Unit" in the Work Safety Publicity Work Collection of the Provincial Association of Work Safety
	"Excellent Organization Unit" of the First Session of Excellent Publicity Work Selection for Emergency Management	Department of Emergency Management of Guangdong Province	Guangdong Yue Hai Water Holdings Limited* (廣東粵海水務股份有限公司)	Guangdong Water was awarded the title of "Excellent Organization Unit" in the first session of excellent publicity work selection for emergency management organized by the Provincial Department of Emergency Management
	Grade 1 qualification for safety production standardization for expressway operators	Hebei Luhang Inspection and Certification Co., Ltd.* (河北陸航檢測認證有限公司)	Guangxi GDH Highway Co., Ltd.* (廣西粵海高速公路有限公司)	The award represents the recognition of safety production standardization of GDH Highway

7. AWARDS AND HONOURS (CONTINUED)

	Awards	Issuing Organisation	Recipient	Award Information
	Second Prize of Guangdong Environmental Protection Science and Technology Award	Guangdong Society of Environmental Sciences	Guangdong Yue Gang Water Supply Company Ltd.	The Award represents the recognition of the environmental protection science and technology of Yue Gang Water Supply
	Guangdong Province Water Conservancy Construction Civilized Construction Site	Guangdong Provincial Water Conservancy And Hydropower Industry Association	Guangdong Yue Hai Water Holdings Limited* (廣東粵海水務股份有限公司)	The “Civil Engineering, Installation and Construction of Water Supply Project from Hanjiang to Raoping” achieved excellent results



Environmental, Social and Governance Guide			Disclosure page
Environmental			
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	P.36-49, 68-77
	A1.1	The types of emissions and respective emissions data	P.44-45, 70-77
	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)	P.44-45
	A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P.74
	A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility)	P.74
	A1.5	Description of emission target(s) set and steps taken to achieve them	P.35-49, 68-77
	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	P.35, 68-77

8. APPENDIX: CONTENT INDEX FOR ESG REPORTING GUIDE (CONTINUED)

Environmental, Social and Governance Guide			Disclosure page
A2: Use of Resources	General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials	P.36-49, 68-77
	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)	P.76-77
	A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility)	P.76-77
	A2.3	Description of energy use efficiency target(s) set and steps taken to achieve them	P.35-49, 68-77
	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	P.46-49, 68-77
	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.
A3: The Environment and Natural Resources	General Disclosure	Policies on minimising the issuer's significant impacts on the environment and natural resources	P.36-45, 60-61
	A3.1	Description of the significant impacts of activities on the environment and natural resources and the actions taken to manage them	P.36-45, 60-61
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	P.20-34
	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	P.20-34

Environmental, Social and Governance Guide			Disclosure page
Social			
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.	P.96-109
	B1.1	Total workforce by gender, employment type (for example full- or part-time), age group and geographical region	P.97
	B1.2	Employee turnover rate by gender, age group and geographical region	P.97
B2: Health and Safety	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards	P.78-95
	B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year	P.79
	B2.2	Lost days due to work injury	P.79
	B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored	P.78-95

8. APPENDIX: CONTENT INDEX FOR ESG REPORTING GUIDE (CONTINUED)

Environmental, Social and Governance Guide			Disclosure page
B3: Development and Training	General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities	P.96-109
	B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management)	P.98
	B3.2	The average training hours completed per employee by gender and employee category	P.98
B4: Labour Standards	General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour	P.96-109
	B4.1	Description of measures to review employment practices to avoid child and forced labour	P.96
	B4.2	Description of steps taken to eliminate such practices when discovered	P.96
B5: Supply Chain Management	General Disclosure	Policies on managing environmental and social risks of the supply chain	P.114-116
	B5.1	Number of suppliers by geographical region	P.116
	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	P.114-116
	B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored	P.114-116
	B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored	P.114-116

Environmental, Social and Governance Guide			Disclosure page
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	P.50-59
	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.
	B6.2	Number of products and service related complaints received and how they are dealt with	P.50-59, 66-67
	B6.3	Description of practices relating to observing and protecting intellectual property rights	P.50-59
	B6.4	Description of quality assurance process and recall procedures	P.50-59
	B6.5	Description of consumer data protection and privacy policies, and how they are implemented and monitored	P.50-59, 66-67
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	P.62-67
	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	P.62-67
	B7.2	Description of preventive measures and whistle-blowing procedures, and how they are implemented and monitored	P.62-67
	B7.3	Description of anti-corruption training provided to directors and staff	P.62-67
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	P.117-119
	B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport)	P.117-119
	B8.2	Resources contributed (e.g. money or time) to the focus area	P.117-119