上海实业环境控股有限公司
SIIC ENVIRONMENT HOLDINGS LTD.

2021
Sustainability Report

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About this Report

This Sustainability Report ("**Report**") aims to disclose the environmental, social, and governance ("**ESG**") performance of SIIC Environment Holdings Ltd. (together with its subsidiaries, collectively "**SIIC Environment**", the "**Company**" or "**we**") to its investors and related stakeholders.

Reporting Scope

Reporting Period: Unless otherwise specified, this Report covers the period from January 1, 2021 to December 31, 2021 ("**Reporting Period**").

Business Scope: This Report covers the Company's headquarter and the projects operating during the Reporting Period at the Company's major business units, including SIIC Environment Holdings (Wuhan) Co., Ltd. ("**Central BU**"), Nanfang Water Co., Ltd. ("**South BU**"), SIIC Environment Holdings (Weifang) Co., Ltd. ("**North BU**"), Longjiang Environmental Protection Group Co., Ltd. ("**Northeast BU**"), Fudan Water Engineering and Technology Co., Ltd. ("**East BU**"), and Ranhill Water (Hong Kong) Ltd. ("**Ranhill Water**").

Reporting Guideline

This Report is prepared in accordance with the Mandatory Disclosure requirement, the "Comply or Explain" provisions, and the Materiality, Quantitative, Balance, and Consistency principles of the *Environmental, Social and Governance Reporting Guide* set out in Appendix 27 to the *Rules Governing the Listing of Securities* (the "**Hong Kong Listing Rules**") on The *Stock Exchange of Hong Kong Limited* ("**SEHK**").

Materiality

The Company is able to identify material ESG issues by communicating with the internal and external stakeholders and listening to their expectations and concerns. The Company intends to reply to the most important ESG issues in this Report.

Quantitative

The Company establishes a data collecting system for ESG key performance indicators (KPIs). This Report contains standards and procedures for accounting emissions, energy consumption, and other aspects.

Balance

This Report provides objective facts and discloses both positive and negative indicators.

Consistency

This Report uses a consistent statistical methodology and KPIs as prior years, unless otherwise stated. This Report discloses historical data to ensure a meaningful comparison.

In addition, this Report is prepared with regard to rule 711B of *the Listing Manual of the Singapore Exchange Securities Trading Limited* ("**SGX**") and by referencing the guidance under the *Sustainability Reporting Guide* -- set out as Practice Note 7.6 of *the Listing Manual of the SGX*, and the internationally recognised *Global Reporting Initiative (GRI) Standards*, which represents the global best practices for Reporting on a range of economic, environmental, and social impacts.

We seek to adhere to the above reporting frameworks' generic sustainability considerations, general principles and indicators and apply them to report our sustainability policies, practices, performance and targets. This Report should be read in conjunction with the *Corporate Governance Report* within the Company's Annual Report for the financial year ended 31 December 2021 to gain full knowledge of the Company's ESG performance.

Disclaimer of the Report

This Report presents the Company's sustainability philosophy, actions, and achievements during the Reporting Period. The Company's Board ("**Board**") of Directors ("**Directors**") is responsible for the reliability, truthfulness, objectivity, and completeness of the content of this Report. The Board of Directors has reviewed the Report and confirmed that there are no false representations, misleading statements contained in this Report.

We recorded the ESG data in an online ESG data collection system and audited the data internally before they are released. We also engaged CECEP (HK) Advisory Company Limited, an external assurance provider, to verify this Report and to issue an independent assurance statement (see Appendix: Independent Assurance Statement).

This Report is published in both English and Traditional Chinese. Should there be any discrepancy between the two versions, the English version shall prevail.

Access and Feedback

This Report is available on the HKEx News website of the Hong Kong Exchanges and Clearing Limited (www.hkexnews.hk), the website of the SGX-ST (https://www.sgx.com) and the official website of the Company (www.siicenv.com).

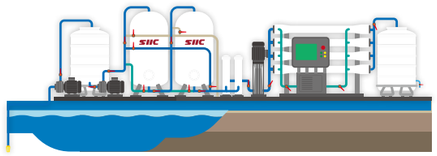
All stakeholders are welcome to give their valuable feedback in relation to this Report by contacting us at: info@siicenv.com.

About SIIC Environment

Overview

SIIC Environment is one of the leading investors and operators in the environmental industry in the People's Republic of China ("**PRC**"). We engage in wastewater treatment, water supply, sludge treatment, solid waste incineration, and other environmental related businesses across 19 municipalities and provinces in China.

Our water projects and sludge treatment services are offered and managed through Central BU, South BU, North BU, Northeast BU, and East BU. Ranhill Water mainly carries out industrial wastewater treatment and other public utility services.



At the end of 2021, SIIC Environment has:

about **250**
water projects

with a total capacity of
12.81
million tonnes/day

8
solid waste incineration projects

with a total capacity of
9,750
tonnes/day

13
sludge treatment projects

with a total capacity of
3,155
tonnes/day

2021 operating revenue
RMB **7.27** billion

Year-on-year increase of
16.2%

Business Outlook

The year 2021 marked the beginning of China's 14th Five-Year Plan. With the goal of preventing and controlling pollution and building a sound environmental governance system, China has launched various policies to promote the development of the environmental industry. Supported by a series of policies, the Company has successfully completed business development goals and has continuously promoted its ability of project mergers and acquisitions to support high-quality development. In 2021, 21 new water projects were acquired throughout the year, with a total designed capacity of 232,400 tonnes/day. In addition, agreements for 10 existing wastewater treatment projects, with a total designed capacity of 425,000 tonnes/day, were signed for upgrading, program expansion, price raising, and extension of operation-and-management ("**O&M**") service periods. 17 projects, designed with a total capacity of 420,300 tonnes /day, commenced commercial operation.

The Company actively seizes the opportunities arising from the country's "double carbon goal" and advances its development of renewable energy. Our solidwaste treatment and power generation project—Shanghai Baoshan Renewable Energy Utilization Center ("**Baoshan Center**") is expected to commence operation in 2022 with a designed capacity of up to 3,800 tonnes/day. The project adopts world-class processing technology, equipment and facilities, and is expected to generate 800 million kWh of green electricity per year. Following neighbourhood-friendly and eco-friendly principles, Baoshan Center is designed to have the functions of environmental education and cultural activities and will be completely open to the public in the future.

In addition, the Company will continue to enhance its resilience, increase it's research and development ("**R&D**") activities, and continue to promote modern, digital and technology-based management. Also, the Company will keep boosting its management capability and operational efficiency to deal with the challenges and uncertainties of frequent extreme weather events and recurrent COVID-19 outbreaks, so as to achieve high-quality and sustainable development.

Acquired
21
new water projects

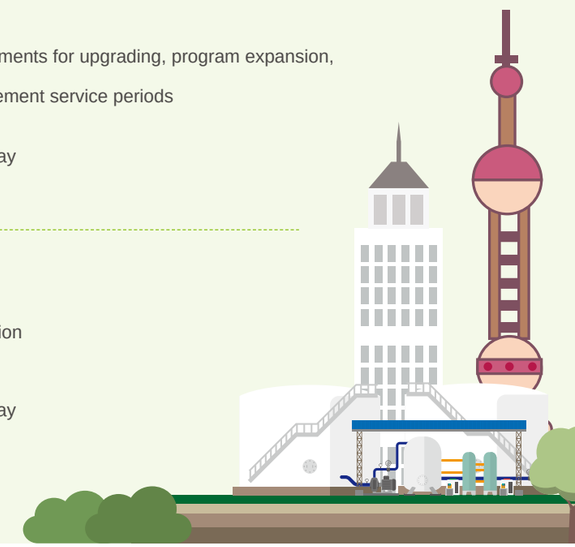
Total designed capacity
232,400
tonnes/day

10 existing water treatment projects signed agreements for upgrading, program expansion, price raising, and extension of operation-and-management service periods

Total designed capacity **425,000** tonnes/day

17 water projects commenced commercial operation

Total designed capacity **420,300** tonnes/day



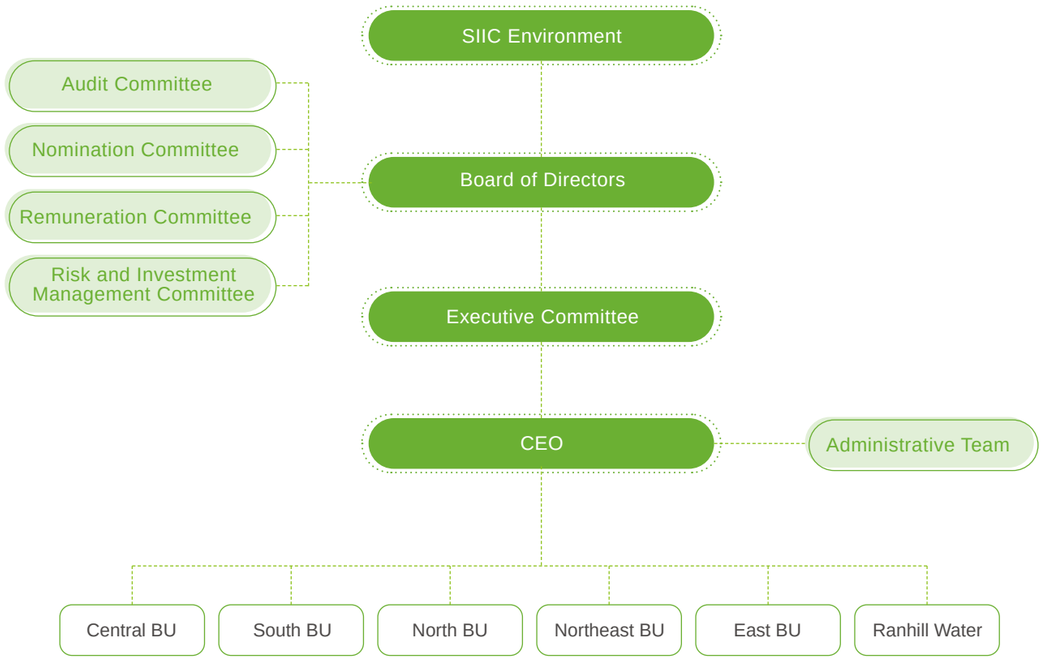
Corporate Governance

Governance Structure

Good corporate governance ensures interests of shareholders are protected and enhances corporate performance and accountability. The Company is committed to establishing a sound corporate governance system and increasing its corporate values in line with the SGX Listing Manual, the principles, provisions and recommendations of *the Code of Corporate Governance 2018* and the applicable code provisions of the *Corporate Governance Code* as set out in Appendix 14 to the Hong Kong Listing Rules.

Our Board oversees the Company's overall policies, strategies and objectives, key operational initiatives, performance and measurement, internal controls and risk management, etc. Our Board consists of nine members, including five executive Directors, one non-executive Director and three independent non-executive Directors. The Board has diverse compositions by considering multiple dimensions including but not limited to gender, age, culture, industry experience, skill and knowledge.

To assist the Board in the execution of its responsibilities, the Board is supported by five committees, namely the Audit Committee, the Nomination Committee, the Remuneration Committee, the Risk and Investment Management Committee ("**RIMC**") and the Executive Committee. The Board Committees operate within clearly defined terms of reference or scope, to ensure good corporate governance of the Company.



Organisation Chart of SIIC Environment

Risk Management

The Board is responsible for overseeing the Company's risk management policy and for providing intuitive guidance. The RIMC and the management are responsible for designing, implementing and monitoring the risk management and internal control systems within the Company. Scrutiny of those systems is performed at least once a year to ensure their effectiveness. Meanwhile, the RIMC and the management regularly review the Company's business and operational activities to identify material risks as well as take appropriate actions to control and mitigate those risks. Our internal auditors assist the RIMC in assessing whether the Company's internal controls are adequate, effective, and performing as intended.

In terms of risk identification and assessment, the Company issues a list of risk factors annualy and engages the headquarter and business units' management team in the annual risk identification and assessment. ESG risks have been integrated into the Company's overall risk assessment process.

During the Reporting Period, ESG risks, such as human resource risk, operational-safety risk, and ethical and integrity risk, have been included in the Company's risk list. The Company has formulated risk prevention and mitigation measures for the identified material ESG risks and implemented effective control measures (across the headquarter and business units) to address them.

Sustainability Governance

Board Statement

The Board is the highest governing body for SIIC Environment's sustainable development and takes full responsibility for the Company's overall ESG strategy and reporting. The Board has identified and evaluated material ESG factors (including ESG risks) and continues to oversee the management and monitoring of these factors. During the Reporting Period, the Company's Directors reviewed the results of the ESG materiality assessment and approved those issues of greatest importance as the focus of our ESG work in the future.

The Board has considered sustainability issues in its business and strategy and oversees the implementation of ESG strategies and manages ESG risks and opportunities according to the Company's business strategies, regulatory changes, and industry trends. In addition, the Board continues to improve ESG target setting and regularly reviews progress towards ESG-related goals and targets.

To further enhance the Board's sustainability capability and knowledge, SIIC Environment regularly organises trainings for the Board on material issues regarding sustainability. For example, during the Reporting Period, the Company organised all Directors to participate in an anti-corruption training.

Sustainability Governance Structure

To ensure that ESG-related work proceeds in an orderly and efficient manner, the Company improved its sustainability governance structure during the Reporting Period. ESG-related responsibilities were integrated into the overall authorities of the Board and the RIMC, which further institutionalises and standardises the Company's ESG management.

As the top governance body of ESG, the Board determines and monitors the Company's ESG strategies, actions and procedures, while reviewing sustainable performance periodically. Authorised by the Board, the RIMC also supervises and manages ESG issues. RIMC's responsibilities include designing ESG management approaches, policies and targets, overseeing and tracking progress in achieving ESG-related targets, reporting material ESG-related issues and risks to the Board and inspecting ESG disclosure compliance. The Company conducts internal reviews to the sustainability report every year to ensure the compliance of ESG disclosure.

Within the sustainability governance structure, the Company's ESG working group ("**ESG Working Group**") is at the lower level of RIMC. Consisting of senior management and employees from various departments who possess a good understanding of the Company's operations and relevant ESG matters, ESG Working Group implements the Company's ESG strategies and is responsible for ensuring that ESG factors are monitored on an ongoing basis and properly managed. ESG Working Group also participates in preparation of the annual sustainability report.

Board of Directors

- Make decisions and supervise ESG strategies, initiatives and processes
- Identify important ESG issues (including ESG related risks), and continuously manage and supervise the issues
- Regularly review the Company's sustainability performance and its achievement of targets
- Review and approve the ESG Report

Risk and Investment Management Committee

- Formulate and review ESG management approaches, targets and strategies
- Review and confirm the Company's priority of ESG issues
- Identify ESG-related risks and opportunities of the Company, and review its performance in coping with these risks
- Monitor and assess the Company's ESG work, and check the performance and progress made in achieving ESG-related targets
- Review the Company's compliance with ESG disclosure and report to the Board for review and approval

ESG Working Group

- Assist in the formulation of ESG management approaches, targets and strategies
- Establish and maintain communication with stakeholders
- Analyse and evaluate ESG risks and report to the RIMC on a regular basis
- Promote the implementation of ESG-related work
- Collect ESG indicators and participate in ESG reporting

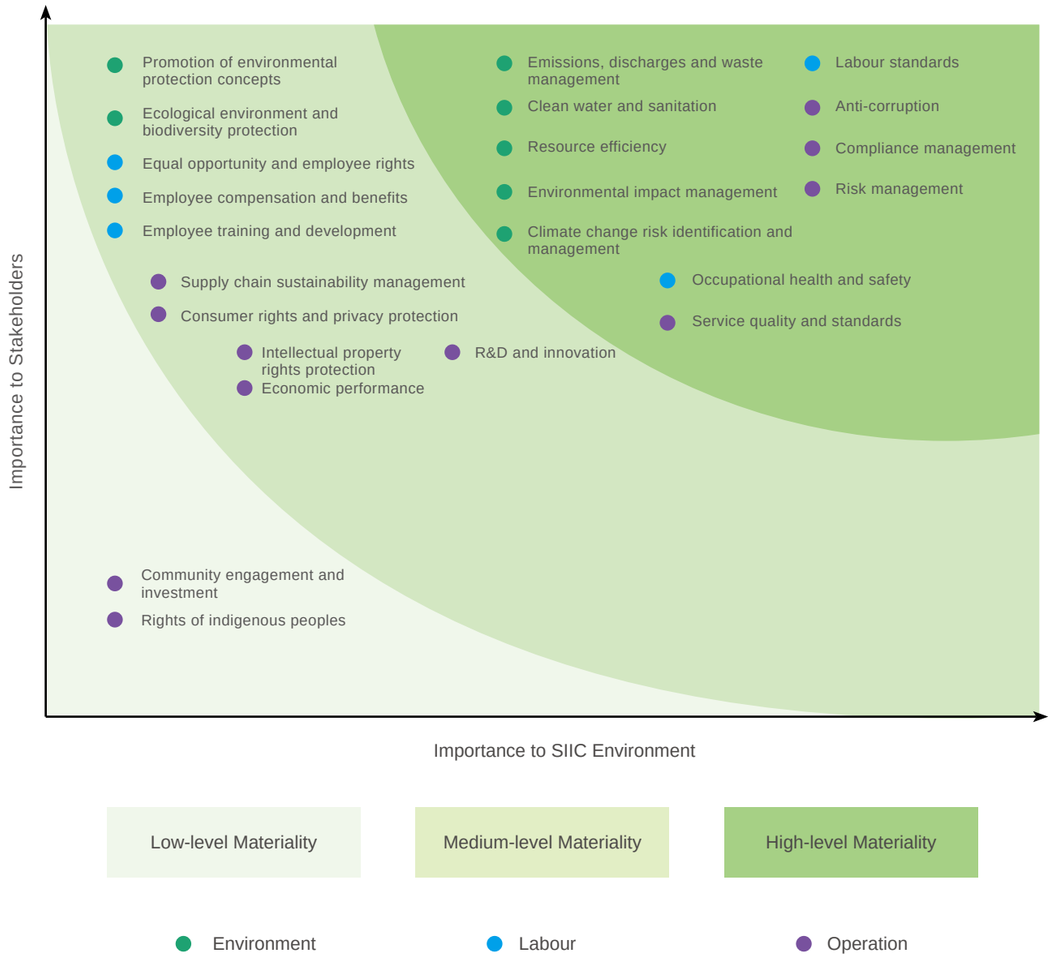
Stakeholder Engagement

Establishing and maintaining effective communication with stakeholders is of great importance in understanding and addressing their concerns and expectations. The Company has identified eight stakeholder groups that are crucial to its business operations, and tailored different communication channels for each group.

Stakeholders	Concerns and Expectations	Methods of Communication
Shareholders and Investors	· Compliance management and business ethics · Risk management · Energy efficiency · Climate change risk identification and management · Environmental impact · Economic performance	Annual reports, interim reports, quarterly results, public announcements, circulars, press releases, annual and extraordinary general meetings, non-deal roadshows, individual and group meetings
Employees	· Labour standards · Equal job opportunity and employee rights · Employee training and development · Occupational health and safety (OHS) · Employee compensation and benefits	Company-wide meetings and departmental meetings, annual staff meetings, questionnaires, internal emails
Customers	· Safe and stable water supply · Environmental compliance · Convenient service · Consumer rights and privacy protection	Customer meetings, customer satisfaction surveys, on-site visits
Business Partners and Suppliers	· Supply chain management · Anti-corruption · Safe production · Service quality and standards	Partner meetings, questionnaires, seminars, on-site visits
Industry Associations and NGOs	· Greenhouse gas emissions · Compliance management and business ethics · Environmental impact · Safe and stable water supply	Industry conferences, company website, official reports, online communication, offline surveys
Local Communities and the Public	· Community engagement · Rights of indigenous peoples · Compliance management · Safe and stable water supply · Public supervision	Volunteering activities, public hearings, open houses, on-site visits
Media	· Environmental education · Anti-corruption · Emissions, discharges, and waste management · Environmental impact	Press releases, interviews, announcements
Government and Regulators	· Compliance management and business ethics · Clean water and sanitation · Consumer rights and privacy protection · Environmental compliance · Safe production	Government meetings, supervision and assessments, questionnaires, on-site visits

Materiality Assessment

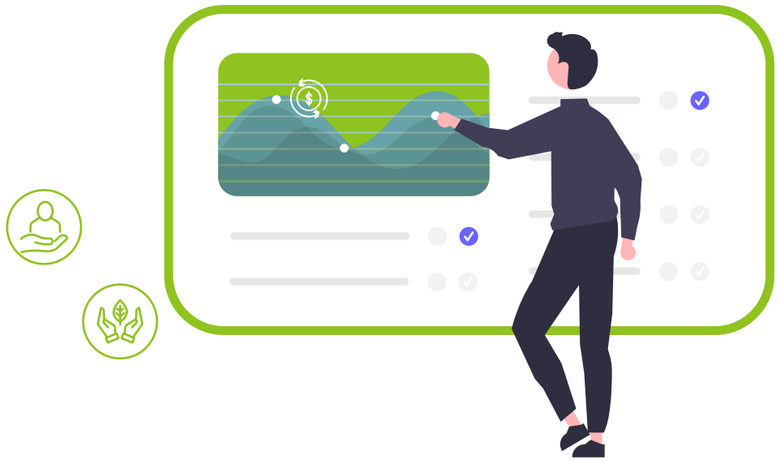
During the Reporting Period, we reviewed and updated material issues in accordance with the industry trends and the Company's business features. Through this exercise, we newly identified ecological environment and biodiversity protection and risk management as potentially material issues. The importance of each issue was evaluated, and the results are shown in the matrix below.



In 2021, the Company has identified 11 issues of high-level materiality, which are presented in the table below. The Board has reviewed and confirmed the materiality assessment results, and this Report will largely respond to and disclose ESG issues of high-level materiality.

Subject Area	High-level Materiality	Medium-level Materiality	Low-level Materiality
Environment	· Emissions, discharges and waste management · Resource efficiency · Clean water and sanitation · Environmental impact management · Climate change risk identification and management	· Promotion of environmental protection concepts · Ecological environment and biodiversity protection	-
Labour	· Occupational health and safety · Labour standards	· Equal opportunity and employee rights · Employee compensation and benefits · Employee training and development	-
Operation	· Service quality and standards · Anti-corruption · Compliance management · Risk management	· Supply chain sustainability management · Consumer rights and privacy protection · Intellectual property rights protection · R&D and innovation · Economic performance	· Community engagement and investment · Rights of indigenous peoples

As shown in the table below, we evaluated two new material issues in the 2021 assessment: (i) Climate change risk identification and management and (ii) Risk management, and set long-term targets for both. As for those existing material issues determined in past assessments, we reviewed and updated the previous targets based on the Company's actual operation and growth strategy, so that these targets can fit the Company's current business and development plan for the forthcoming year.



Subject Area	Issues with High-level of Materiality	Corresponding Chapter	Long-Term Targets	2021 Progress	Overachievements/ Shortfalls
Environment	Emissions, discharges, and waste Management	Emissions and Waste Management	To actively and continuously explore opportunities to minimise the adverse impact on the environment.	Formulated environmental targets; improved treatment processes and upgraded facilities to comply with relevant environmental laws and regulations.	Progressed steadily towards the target.
	Resource efficiency	Resource Consumption Management	To enhance consumption efficiency for energy, chemical, water, and other resources during production and office activities. To Promote an intelligent management system and support the development of urban smart water infrastructure.	Set qualitative and quantitative targets regarding electricity, chemical and water consumption at project companies; incorporated resource efficiency considerations into project companies' performance reviews and developed reward systems.	By continuously strengthening resource management, project companies have taken effective resource-efficient measures to reach annual targets, and made sure resources consumed in business operations have been fully utilised.
	Clean water and sanitation	Safeguarding Water Quality and Safety Wastewater Consumption	To meet public demand for high-quality water with adherence to stricter treatment requirements.	Implemented a comprehensive water quality monitoring mechanism and strengthened the response strategies to emergencies such as extreme weather events.	Our project companies have developed a sound emergency mechanism to prevent the potential risk to water safety. We also established a special emergency plan for extreme weather to ensure a stable supply of water resources. The water supply business has been carried out orderly and there has not been any major disruption to the water supply business in 2021.
	Environmental impact management	Emissions and Waste Management	To standardise the approach to environmental management, refine environmental management systems, implement environmental management strategy, and ensure compliance with regulatory requirements.	Formulated management system of air and water emissions, hazardous and non-hazardous waste, and resource consumption; set qualitative and quantitative environmental targets for project companies.	Progressed steadily towards the target.
	Climate change risk identification and management*	Responding to Climate Change	To improve energy consumption efficiency and actively explore renewable energy to reduce greenhouse gas emissions.	Identified and analysed climate-related risk and formulated risk prevention and mitigation measures; adopted measures, such as increasing energy efficiency, developing renewable energy, and planting trees to reduce GHG emissions.	The Company adopted effective energy-saving measures and used 1,640,837 kWh of solar power. Tree planting helped to offset 735.91 tonnes of CO_2 emissions.
Labour	Occupational health and safety	Occupational Health and Safety	To provide employees with a safe work environment by offering adequate protective clothing and gear, giving safety education and training, and appointing dedicated safety management personnel.	Set safety targets and monitored safety performance regularly; conducted safety training and emergency drills targeted at employees of different job functions; provided occupational health check-ups for employees.	The Company effectively practiced the occupational health and safety management system and achieved the annual workplace safety target of zero work-related fatality in 2021, and provided about 23,199 hours of occupational health and safety related training for 6,100 employees.
	Labour standards	Employment Management	To maintain zero case of forced labour and child labour, in compliance with Chinese and Singaporean laws; ensure thorough protection of employees' rights and interests related to labour practices and employment.	Adhered to labour laws and regulations and maintained comprehensive labour management systems.	In 2021, the Company strictly complied with relevant laws and regulations, and maintained zero case of forced labour and child labour.
Operation	Service quality and standards	Service Quality Management	To deliver outstanding product and high-qualtiy service as a commitment to our customers.	Ensured high-quality water supply; promptly handled customer complaints; invested in R&D to help improve service quality.	Progressed steadily towards the target.
	Anti-corruption	Anti-corruption Management	To maintain zero case regarding corrupt practices brought against the Company and its employees. To foster a culture of integrity among employees.	Implemented comprehensive anti-corruption policy; organised anti-corruption training for the Board, management and staff.	There was no concluded legal case regarding corrupt practices brought against the Company and its employees in 2021. 100% of the Directors were involved in anti-corruption training.
	Compliance management	Compliance Management	To tighten internal control management, enhance relevant employee training and strengthen our audits and inspections.	Business units and project companies implemented internal policies to ensure compliance with national and local laws and regulations.	Progressed steadily towards the target.
	Risk management*	Risk Management	To assess and evaluate risks (including ESG risks) regularly and strengthen risk prevention and mitigation measures.	The Company's Audit Committee and RIMC effectively carried out risk evaluation and management activities. ESG risks were integrated into risk management procedures.	Progressed steadily towards the target.

*Material issues newly identified in the 2021 materiality assessment.

Responsible Operations

Compliance Management

SIIC Environment attaches great importance to corporate compliance, and strictly abides by the *Company Law of the PRC* and other relevant laws and regulations.

The Company has established a sound and effective internal control system (including financial, operational, compliance, information technology control and risk management), which is regularly evaluated by the Board. The Company's Audit Committee and RIMC oversee, evaluate and manage risks arising from operations, and ensure the effectiveness of key internal control measures. The two committees also report assessment results to the Board for review. In addition, the Company conducts compliance training for senior management and employees on a regular basis to further foster the culture of compliance within the Company.

Anti-Corruption Management

SIIC Environment strictly complies with laws and regulations related to bribery, extortion, fraud, and money laundering such as the *Oversight Law of the PRC, Anti-Money Laundering Law of the PRC, and Anti-Unfair Competition Law of the PRC, and Prevention of Corruption Act of Singapore*, etc.

The Company regularly conducts audits and assessments of business ethics for its business units. Each year, we conduct internal control audits on corruption-prone areas in each business segment and major business units, including but not limited to procurement (with emphasis on bidding or price comparison, supplier selection, etc.) and accounts payable; internal control on cash and bank management; and internal control on revenue and receivables. The Company timely rectifies the problems revealed in audits and continues to improve the system accordingly. In 2021, SIIC carried out internal control audits on eight projects for its subsidiaries.

The Company has been improving its internal management system of business ethics. The business units have formulated internal anti-corruption policies based on actual operating conditions. For example, South BU has established *Insider Information Management System, Conflict of Interest Prevention System* and other relevant policies, and also engaged with external third-party agencies for internal audits on anti-corruption, anti-fraud, and anti-money laundering. During the Reporting Period, there was no reported incident of non-compliance with laws and regulations related to bribery, extortion, fraud, and money laundering.

Whistleblowing Policy

In order to timely detect and prevent fraud, the Company has established the internal *Fraud and Whistleblowing Policy*. The policy applies to all Directors, officers, employees, and external parties such as vendors and contractors. The policy specifies the acts which are considered as fraud, reporting procedures, complaint handling process, investigation responsibilities, and terms on confidentiality and whistle-blower protection. The policy is reviewed regularly and revised as needed.

The management is responsible for spotting and preventing fraud, misappropriations and other irregularities. Any employee who discovers or suspects any fraudulent activity has the right to report it to the Audit Committee, executive Directors, or the management of the Company. All allegations of fraudulent will be investigated. If the investigation confirms the fraudulent activities, the case will be immediately reported to authorised personnel, and if appropriate, to the Board through the Audit Committee.

Harassment or retaliation against the whistle-blowers for raising concerns over alleged wrongful acts will not be tolerated, and proper measures will be taken to protect whistle-blowers from reprisals as defined in the policy. We strictly protect whistle-blowers' identities. The complaints addressed by employees will be submitted confidentially and anonymously to the Audit Committee, executive Directors, or the management.

Number of cooruption cases concluded: **0**

Training for Anti-corruption

To promote ethical practices and awareness of employees on corruption prevention, SIIC Environment provides anti-corruption training for all staff across headquarter and business units, including the Board, the management and employees. In December 2021, the Company hired a third party to launch online training sessions dedicated to anti-corruption for all Directors and employees. Relevant training materials have been shared with our employees internally for further study. Our business units also organised various training events to instil ethics and integrity into business practices.

Percentage of Directors completed anti-corruption training

100%

Number of employees who completed anti-corruption training

5,974

Average anti-corruption training hours per employee

1.57 hours

In December 2021, the Company invited legal experts to provide an anti-corruption training. The headquarter and all business units participated in this training session.

Protection of Intellectual Property

SIIC Environment strictly complies with the *Trademark Law of the PRC*, the *Patent Law of the PRC* and other relevant laws and regulations. The Company protects intellectual property rights during its daily operation and strictly prevents infringement. We apply for and maintain patents to protect the Company's innovations. In case of infringement, we actively seek legal advice. Our business units hold intellectual property training as needed to familiarise employees with relevant laws and regulations and raise their law-abiding awareness. There was no violation of the above laws and regulations during the Reporting Period.

01

Adhering to Quality Assurance

- Service Quality Management
- Innovative Research and Development
- Supply Chain Management

Service Quality Management

SIIC Environment adheres to all relevant national laws and regulations as well as industry standards to deliver high-quality services to our customers. The Company's business activities, including wastewater treatment, water supply, sludge treatment, solid waste incineration, and other environmental related businesses, strictly comply with the *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plant* (GB18918-2002), the *Standards for Drinking Water Quality* (GB5749-2006), the *City Water Supply Quality Standard* (CJ/T206-2005), the *Standard for Pollution Control on the Municipal Solid Waste Incineration* (GB18485-2014) and other standards related to the health and safety of our products and services. We also abide by the *Advertising Law of the PRC*, the *Trademark Law of the PRC* and other laws and regulations related to the advertising, labeling and privacy of our products and services, and there was no reported incident of non-compliance with the above laws and regulations during the Reporting Period.

SIIC Environment has implemented a project management system and operational management procedures. The Company monitors and reviews each business unit's operational performances through quarterly meetings.

The Company's business units are required to establish internal management systems and standard operating procedures according to the nature of their operations, so as to ensure the high quality of their service and products. Specifically, policies such as *Water Quality Management System, Internal Control Manual for Water Quality Testing, Operation Management Regulations for Wastewater Projects, and Production and Operation Process Management System* are established and implemented for our water supply projects. We also encourage business units to develop ISO quality management systems. During the Reporting Period, the company's East BU and South BU received ISO 9001 Quality Management System Certification.

Multiple business units have obtained ISO 9001 Quality Management System Certificate

Safeguarding Water Quality and Sanitation

To ensure high quality of drinking water and thus safeguard public health and sanitation, our water supply project companies continue to revise and update management systems in accordance with changes in national and local standards, as well as standardize management process and enhance management ability.

In terms of water quality monitoring, we have established a three-level water quality monitoring and assurance system. Networked instruments continuously monitor influent and effluent for typical water quality parameters. Meanwhile, on-site laboratory staff sample and analyse water on a daily basis, and certified third parties test influent and effluent water on a regular basis. All water supply and wastewater treatment project companies are equipped with water quality warning systems to ensure adjustment of water treatment process.

Enhancing Customer Service

The Company places a strong emphasis on customer satisfaction. Internal policies, such as the *Customer Satisfaction Management System*, were set by business units to standardise procedures for conducting customer satisfaction surveys. In order to collect customer feedbacks and improve our service quality, the Company provides multiple channels for customers to express their questions and concerns, including customer satisfaction questionnaires, email of headquarter, message boxes on the project companies' websites, WeChat Official Accounts, and service hotlines.

Once complaints from our customers are received, we immediately carry out investigations based on the nature of the complaint and determine who should be held responsible. For the customer complaints, we take quick actions to resolve the issues and conduct follow-up customer surveys to ensure the customers are satisfied. We also review the complaint cases regularly and update the existing management system if necessary, so as to prevent similar issues from reoccuring. During the Reporting Period, we received 7 service-related customer complaints, mainly about abnormalities in water quality, water pressure and the amount of water. After receiving the complaints, our project companies immediately communicated with the complainants to obtain more information. Responsible departments were required to solve the problems, continuously follow up the processes, and provide feedbacks, until the complaints were effectively settled.

The Company is committed to protecting customer information and privacy. In terms of management, we standardise customer data management procedures. Our business units establish internal rules for employees in processing customer data. Relevant training was provided to employees to raise their awareness of customer data protection and information security. On the technical side, we strengthen the maintenance of critical hardware and software and reinforce technological solutions, in order to prevent data breaches, information theft, and unauthorised access to the system.

Innovative Research and Development

SIIC Environment is committed to technological research and development ("**R&D**"), which enables us to improve the quality of our services and boost our core competitiveness. During the Reporting Period, the Company continued to invest in R&D programmes and actively carried out various innovative research projects. The overall R&D expenditure[1] amounted to RMB 6.807 million, representing an increase of 65% compared with the year 2020.

Northeast BU has been successfully recognised as a High and New-Technology Enterprise ("**HNTE**") in Heilongjiang Province, China. The business unit has established an R&D Centre, with a professional R&D team of 52 personnel. Its R&D Centre is equipped with a specialised laboratory capable of bacteriological agent development, pilot testing, and comprehensive testing. The R&D centre mainly conducts researches about water treatment, sludge disposal and microbiology, and has been rewarded with various awards and recognitions.

R&D expenditure

RMB **6.807** million

Year-on-year increase of

65%

Northeast BU's Cold Water Environmental Technology R&D Centre

Laboratory of Northeast BU Technology R&D Centre

[1] As the statistical scope of R&D expenditure changed in 2021, the revelant data has been updated simultaneously. The data sources are from the Company's Annual Report for the financial year ended 31 December 2021 (page 190).

Case study

The research project "Domestic sewage treatment process and equipment research in Hanqu village", led by Northeast BU received an "excellent" rating from experts. The evaluation panel includes industry specialists from Harbin University of Science and Technology, Heilongjiang University, Heilongjiang Academy of Agricultural Sciences and other industries.

The research focused on difficulties in operating sewage treatment in villages and towns of cold environment, such as fluctuating water quality and consumption, low treatment capacity, high cost and unstable operations. The project seeks to research and develop small and medium-sized sewage treatment technology and equipment, with full consideration of the characteristics of wastewater discharge and pollutants in villages and towns and the need for decentralised treatment. More than 1,400 technologies have been commercialised in this project, with an output of nearly RMB 35 million; 6 patents were applied for and 3 have been granted. Apart from its social and economic benefits, the research results also provided theory and practice guides for the comprehensive treatment of rural water pollution in cold regions.

The project "Domestic sewage treatment process and equipment research in Hanqu village" successfully passed the evaluation

The project provided theoretical support for technology commercialisations

In addition, the Company actively explores and implements technological means to develop and promote intelligent water systems. The initial phase of the intelligent water system was completed by the end of 2021. In the future, we will accelerate the transformation towards modern, digital and technological management to achieve development of even higher quality.

Supply Chain Management

In order to assimilate sustainability into its supply chain, the Company has set requirements for its suppliers' environmental and social responsibilities. We have formulated internal policies to manage and evaluate suppliers to better control the environmental and social risks across the supply chain in business activities.

Supplier Assessment and Monitoring

The Company abides by the *Bidding Law of the PRC*, the *Regulation on the Implementation of the Bidding Law of the PRC* and other relevant laws and regulations to maintain a fair, open, and transparent bidding process. Our business units have formulated the *Procurement Management System, Project Company On-site Procurement Management System, Tendering Administration, Contract Management Protocol*, and other relevant policies to manage the procurement process.

In order to identify, screen, and assess different suppliers, the Company sets specific requirements targeting the products and services they provide. In terms of internal control, the Company adopts the principle of separate duties for incompatible positions, that is, the authorised functional departments comprehensively evaluate suppliers, and the senior management conducts the final reviews. The supplier assessment process involves a background check for the supplier's qualifications and certifications and field assessments at the supplier's production site. The assessment scope covers compliance, product and service quality, and safety management. We have set different entry requirements for different types of suppliers. For example, for suppliers of chemicals, we assess the quality and safety of the products, and whether they can be supplied on time.

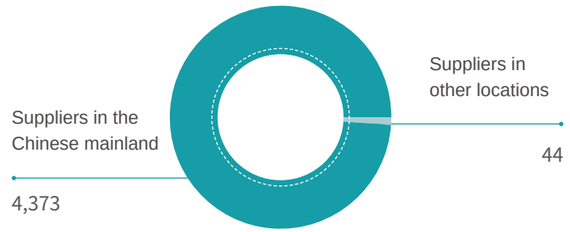
Each business unit has a supplier list that is assessed and updated annually. Unqualified suppliers are screened out and eliminated. Our contracts with qualified suppliers include provisions about their environmental and social responsibilities, such as adhering to safety and environmental rules, prohibiting bribery, and protecting labour rights and intellectual property.

We attach great importance to the safety risk management of suppliers. For outsourced construction units, we review their qualification in workplace safety and ask them to sign the letter of workplace safety responsibility. Our business units distribute Safety Notice to constructors, which clearly stipulates the requirements of occupational health and safety. Our business units also carry out safety training on construction sites to further improve constructors' awareness of safety, and conduct regular on-site inspections during the construction process, so as to prevent safety risks.

Number of suppliers implementing management policies

4,406

The number of suppliers distributed by geographical region



Green Procurement

The Company is committed to building a supply chain that exhibits more sustainability and awareness about green development. We look to establish a partnership with suppliers who practice sustainability in their products and services. In the procurement process, we give priority to green and sustainable products that are beneficial to human health and safety and have resource-saving, recycling and environment-friendly features. For instance, eco-friendly chemicals and energy-efficient equipment are favoured by our business units in the procurement process to minimise negative impacts on the enviornment.

02

Promoting Green Development

- Environmental Management
- Responding to Climate Change
- Emissions and Waste Management
- Resource Consumption Management
- Environmental Performance Data

Environmental Management

SIIC Environment has been concentrating on the environmental industry. In addition to the water business, the Company is also engaged in solid waste incineration, sludge treatment business and other public facilities services. With the mission of protecting the planet, the environment and natural resources, the Company has made positive contributions to a better environment and ecological system. While focusing on the development of environmental business, we strictly abide by the *Environmental Protection Law of the PRC*, the *Atmospheric Pollution Prevention and Control Law of the PRC, the Water Pollution Prevention and Control Law of the PRC*, the *Law of the PRC on the Prevention and Control of Environment Pollution Caused by Solid Wastes* and other laws and regulations associated with air emissions, wastewater discharge, and solid waste disposal.

We have established a top-down internal environment management system, engaging employees from headquarter to front-line wastewater treatment plants. A centrally-administrated mechanism, paired with management tailored to each project, has enabled the Company to obtain an effective environmental management system.

The Company headquarter leads the environmental management by defining and reviewing environmental targets, delivering overall policies, monitoring and tracking the environmental performance of business units, and taking other actions when necessary. The Company sets and reviews targets regarding pollutant discharge and resource consumption (including energy, water and chemicals), and cascades the targets down to business units and project companies on an annual basis.

Our business units, as the implementation level in the structure, develop more targeted environmental policies and management procedures for subordinate project companies, in accordance with the features of their main business. To ensure sound management, all business units have implemented integrated environmental management policies and systems, such as *Environmental Protection Management System in Project Operation* and *the Management System for Environmental Factor Identification and Evaluation*, to clarify the specific requirements of environmental management, including waste prevention and control, up-to-standard discharge of water and air pollutant, standard work procedures, emergency plan, as well as responsibilities for designated personnel and departments. Regular review and monitoring, training and technical support are provided to project companies to ensure their operations meet set standards.

Project companies have established management structures with defined responsibilities, and are required to incorporate policies developed by business units into their own systems and regular operation. In addition to the reviews and monitoring from business units, project companies are also subject to local environmental authorities' supervision and regular examinations.

Responding to Climate Change

As climate change has become a global challenge, countries all over the world have adopted various policies and measures to tackle climate issues. In 2015, global leaders signed the Paris Agreement to combat climate risks. In 2020, the Chinese government was committed to striving to peak CO_2 emissions before 2030 and achieving carbon neutrality before 2060 ("**Dual Carbon Goals**"). After the announcement of Dual Carbon Goals, a series of policies related to climate change have been issued by the Chinese government, such as *Action Plan for Carbon Dioxide Peaking Before 2030, Responding to Climate Change: China's Policies and Actions*, etc.

As a responsible company, SIIC Environment attaches great importance to the climate change issue and actively adopts measures and actions to help achieve relevant national goals and objectives.

Climate Risk Management

The Board takes full responsibility for monitoring and managing ESG issues, including climate-related issues. As one of the key ESG issues, climate risk has been integrated into the Company's risk management system and is evaluated and scored in the annual risk assessment process.

The Company recognises concerns that climate change may affect its business activities. Therefore, the Company references the Task Force on Climate-related Financial Disclosure (TCFD) framework to identify and analyse the Company's climate-related risks.

Climate-related risk	Potential impact	
Physical risk	Acute risk	•Extreme weather events may damage the Company's buildings and facilities. •Suppliers of the Company may be unable to deliver materials in time and thus disrupt business. •Extreme weather events may increase health and safety risks to employees who are exposed to extreme weather conditions.
	Chronic risk	•Sea level rise may cause damage to facilities and increase infrastructure maintainance costs. •Higher temperature may increase wastewater treatment plants' ("**WWTPs**") odour impacts and lead to higher odour treatment costs.
Transition risk	Policy and legal risk	•The Company's businesses such as wastewater treatment and solid waste incineration may be affected by authorities' restrictions on greenhouse gas ("**GHG**") emissions, leading to an increase in operating costs. •The requirements for climate-related disclosure may be strengthened, and thus increase the Company's cost of compliance.
	Technology risk	•In order to meet increasingly stringent GHG emission requirements, the Company's expenditures for decarbonisation technologies may increase.
	Market risk	•Stricter environmental policies may raise the price for chemicals used in water treatment, leading to a potential increase in operating costs.

For acute risks including floods, typhoons, extreme cold and other extreme weather events, the Company has established strict management procedures. Our business units and project companies have formulated a series of emergency response plans and prepared adequate supplies to ensure stable business operations and protect the safety of our staff under such conditions. Once acute risks occur, immediate actions will be taken to mitigate relevant effects.

Case study

To maintain a stable water supply in extremely cold conditions, North BU applies a series of measures to ensure normal business operation, such as issuing emergency notices, formulating relevant emergency plans and preparing various supplies in advance. Those measures protect the lifeline of the urban water adequacy. 4 working groups with a total of 281 staff are established in the water supply project company under North BU to respond to emergency problems in a timely manner, which helps to ensure a stable water supply in the local area.

During the cold snap of 2021, North BU urgently issued the *Notice on Taking Anti-Freezing Measures for Urban Water Supply Facilities in Winter*. The reminders were set in advance and widely disseminated on the news media channels. Its subordinate project companies for water supply visited communities to remind residents of protection measures. In addition, to prevent pipes and water meters from being frozen, North BU continues to increase the efficiency of emergency repairs by optimizing the response process and ensuring that orders are received on time and processes quickly.

Water supply project companies under North BU established

4 working groups

A total of

281 staff responding to emergency problems

The project company of water supply conducted thawing for pipeline in extremely cold weather

严寒来了！我们时刻准备着！

潍坊市自来水有限公司 2021-01-04 18:25

元旦过后，冷空气也随着“上班啦”，根据气象部门预测，本周三开始，又将迎来第二波严寒天气，气温最低要下16度！！

为应对严寒，潍坊市自来水有限公司已组织了80余台套解冻设备，200多名服务人员，随时准备入户为民众解决因寒潮带来的用水问题。如用户有需求，请随时拨打潍坊市自来水有限公司24小时热线电话：8666110。

为保障您用水无忧，现再次敬您几招用水说短防冻“小常识”：

1、“穿衣戴帽”

管道室外供水管道的保温材料是否完整，若发现损坏或脱落，可以对裸露部位用海绵、棉布等保温材料进行包裹缠扎；室外表井（箱）应盖好井盖或关闭箱门，有通风的地方用旧棉织物塞住缝隙进行保温。使用太阳能热水器的用户，也请您做好暴露在外的太阳能热水器管道的防冻保护措施。如果外出长期不用的水表，可关闭水表前控制阀，并放尽水表及表后管中的水。

2、“温水解冻”

龙头、水管、水表等设施一旦被冻住了，不要慌张，可以先用电吹风吹冷冻位置；用70度温开水浇冰冻管、水表处。特别注意，不要用开水直接浇冰，要用旧毛巾等衣物覆盖，预防破裂！另外切忌用火烤！

3、“预防为主”

请用户打开水龙头滴流，以预防室内供水设施上冻，并适当排水，保证日常供水。

再次温馨提示广大用户，请您做好防冻措施，以免造成不必要的损失。我们将竭诚为您服务，随时帮您解决用水问题。

潍坊市自来水有限公司

2021.1.4

Antifreezing reminder issued by project companies of water supply

Case study

To comprehensively prevent and combat floods during the flood season, Mudanjiang Water Supply Project Company of Northeast BU has formulated the *2021 Flood Control Work Plan*. The plan defines the responsibilities of each department, response procedures, emergency response knowledge and other contents, as well as the annual plan for emergency drills. To ensure emergency drill runs smoothly, the project company prepared the *Emergency Plan For Flood Control and Fighting* in accordance with the *Workplace Safety Law of PRC*, the *Emergency Response Law of PRC* and *the National Overall Emergency Plan for Public Emergencies* and the project's actual status.

On the day of emergency drill, following the *Emergency Plan For Flood Control and Fighting*, the project company reported the flood to the higher authorities at the first instance. Meanwhile, the project company also coordinated with the production management department, safety management department and other departments to protect the key parts near the water intakes by building cofferdams using sandbags and shipping anti-flood materials with rescuing ships. After the drill, the participants made reviews and summaries and continued the training on the problems revealed.

The purpose of the emergency drill is to improve employees' response to floods and confirm whether the work site has been fully prepared for flood control, so as to minimise the possible loss of personnel and property caused by extreme weather. This drill greatly strengthened the project company's capability to responds to floods, improved the coordination and cooperation among departments, and enhanced employees' awareness and knowledge of flood control and disaster relief.

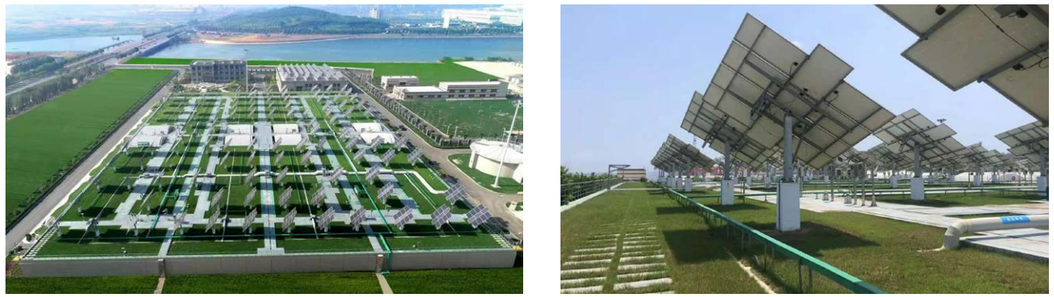
Mudanjiang water supply project company of Northeast BU carried out the flood drill

As climate risks become increasingly serious, the Company will continue to improve its climate risk identification, evaluation and management system, in order to strive for long-term sustainable development.

Climate Change Action

Climate change is a challenge for all mankind. In the context of the China's promotion of green transition and pursuing harmonious co-existence with nature, the Company adopts a systematic climate risk management, while reinforcing its greenhouse gas emission reduction measures, to contribute to global and national carbon neutrality goals.

During the Reporting Period, the Company's direct (scope 1) GHG emissions mainly came from direct energy consumption and waste incineration, while indirect (scope 2) GHG emissions primarily resulted from purchased electricity. The Company continually adopts energy saving measures during production activities, such as strengthening the energy management system, regularly monitoring energy consumption, and applying energy-efficient equipment. In 2021, total GHG emissions of the Company reduced by 2.8% compared to 2020, and its GHG emissions intensity has a year-on-year decrease of 16.4%. We also promote the development of renewable energy. Our business units, such as North BU, have installed solar panels to generate green electricity, successfully reducing carbon emissions from energy consumption. In 2021, we used 1,640,837 kWh of solar electricity, reducing CO_2 emission by 1,365.2 tonnes compared to coal-fired power generation. To further offset GHG emissions, we have planted trees at the project sites. At the end of the Reporting Period, a total of 31,996 trees[1] were planted at our project sites, supposed to offset 735.9 tonnes of CO_2 emission per year.



Solar panels installed at the Dalian Quanshui River WWTP Project 2nd Phase

In addition to exploring our own model of low-carbon operation, we also carry out low-carbon research projects, fully utilising our expertise. In 2021, the Northeast BU participated in the research project "Carbon Footprint Accounting and Technology for Reducing Carbon Emissions and Pollution in Wastewater Treatment Industry", which explores carbon emission conditions and mitigation measures in the environmental field. We also provide employees with climate-related training, so as to deepen their understanding of climate-related issues and raise their awareness of potential climate risks.

Case study

In October 2021, Northeast BU held a training session about Dual Carbon policy and technology. The training introduced China's "1+N policy system" based on Dual Carbon Goals and presented innovative technologies for low-carbon development in the wastewater industry. The training effectively improved employees' knowledge about climate-related policies and raised their awareness of low-carbon development.

[1]Only includes trees able to reach at least five metres in height.

Emissions and Waste Management

The Company abides by national discharge standards for wastewater, air emissions and solid waste disposal, including *Discharge Standard of Pollutants for Municipal Wastewater Treatment Plants* (GB18918-2002), *Environmental Quality Standards for Surface Water* (GB3838-2002), *Standard for Pollution Control on the Municipal Solid Waste Incineration (GB18485-2014), Emission Standards for Odour Pollutants* (GB14554-1993), *Disposal of Sludge from Municipal Wastewater Treatment Plant-Quality of Sludge Used in Land Improvement* (GB/T24600-2009) and *Disposal of Sludge from Municipal Wastewater Treatment Plant-Quality of Sludge Used in Gardens or Parks* (GB/T23486-2009). During the Reporting Period, the Company continued to implement its internal policies and adopted prevention and mitigation measures to reduce its business operation's negative impacts on the environmental system. There was no reported incident of major non-compliance with relevant standards and regulations.

Wastewater Management

The main pollutants generated from the Company's wastewater treatment business include chemical oxygen demand ("**COD**"), biochemical oxygen demand ("**BOD**"), ammonia nitrogen, total nitrogen, total phosphorus, and suspended solids.

During the Reporting Period, the WWTPs have reached a higher standard for effluent through overall upgrading to better meet the ever-higher emission standards and achieve environmental benefits while improving product quality. In 2021, the Company has upgraded the standards of 6 projects, with a designed capacity of 185,000 tonnes /day. Currently, 7 of our projects meet the standard of Quasi Grade IV and 90% of wastewater treatment projects reach superior Class I Standard A (excluding O&M projects).

During the Reporting Period, we took effective measures to ensure that wastewater treatment was operated consistently and efficiently and that pollutants were discharged in accordance with national standards. Daily routine laboratory tests were undertaken by our business units and project companies to sample contaminants in wastewater on a regular basis. Some business units developed pollutant discharge monitoring systems to improve the accuracy and efficiency of monitoring.

Meanwhile, our project companies operate and manage facilities and equipment in strict accordance with the requirements of operating procedures, carry out maintenance regularly, repair, renewal and replacement of key mechanical, electrical and automatic control equipment. Through automatic control and online system, we monitor every unit of the process, in which we proactively explore the optimal operating parameters according to the change in water quality. We have also introduced intelligent dosing systems to accurately add chemicals, reducing operating costs and better protect the environment under the condition of effectively removing pollutants and emiting water in line with the standards. We were able to effectively remove COD and ammonia nitrogen while reducing energy consumption by adjusting the operating parameters in the aeration system.

In 2021, the Company upgraded **6** projects

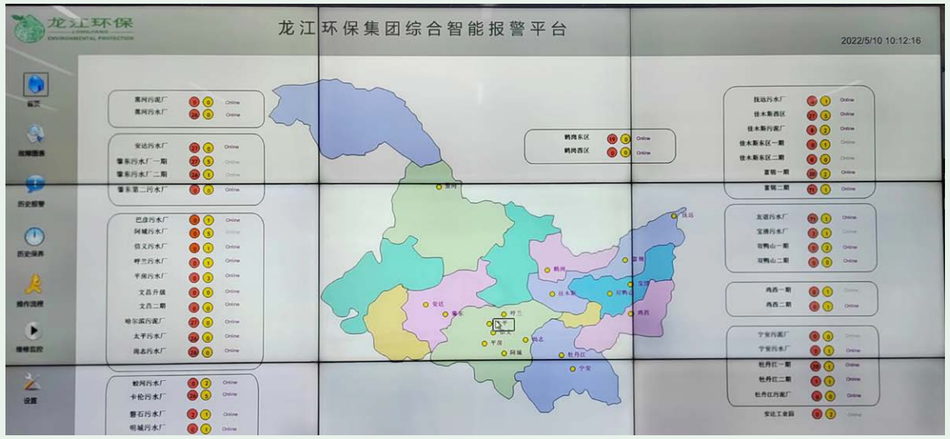
Designed capacity of upgraded projects **185,000** tonnes /day

Number of projects reaching the standard of Quasi Grade IV **7**

Nearly **90**% of wastewater treatment projects reach superior **Class I Standard A**

Case study

Northeast BU has developed an automatic real-time pollutant monitoring system. Once abnormity is detected, the digital platform will raise the alert promptly. The collected data are properly stored and transferred to a digital platform for further evaluation. Based on the evaluation results, Northeast BU manually collects and sends real-time water samples for laboratory testing. The results provide data for subsequent process adjustment and ensure that the effluent is stable and up to standard.



The digital platform for discharge monitoring in Northeast BU

Case study

In order to accomplish discharge targets and reduce the concentration of COD, BOD and other pollutants, Wuxi Huishan Economic Development Zone WWTP Project upgraded and transformed its plants. Each phase of the project utilises different treatment techniques, and treats water pollutants in a stable and effective manner. The project company also continually strengthens the supervision of influent water from external pipeline and proactively assists local regulatory authorities in the maintenance of pipelines system to minimise the pressure of operational regulation. By implementing measures such as strengthening internal management, enhancing employees' ability in wastewater treatment and controlling operating parameters with high accuracy, the project company has achieved comprehensive and stable effluent that meets standards.

In 2021, the project company successfully accomplished its discharge targets, even though the total influent volume increased by 1.7%. The emission of COD and BOD reduced by 1,069 and 353 tonnes, with year on year increase in reduction amount of 29% and 24.3% respectively. Other pollutants, such as suspended solid, ammonia nitrogen, total nitrogen and total phosphorus also declined remarkably, with an increase of 10.5%, 17.5%, 14.3% and 2.8% in reduction amount year on year, respectively.

Environmental information disclosure

The Company strives to disseminate environmental information during business operations to ensure transparency of environmental information, and protect the public right of knowing and supervision. Our business units proactively publish operation-related environmental data through public channels. For example, North BU regularly publishes water quality reports on its official website to encourage public supervision, ensuring a responsive, open, transparent and authentic operation.

Environmental information about our business units is presented on public websites

Air Pollutant Management

Air pollutants from our operation process mainly include sulphur oxides, nitrogen oxides, dioxins, carbon monoxide, and smoke generated from the waste incineration process, as well as odorous gas generated from wastewater and sludge treatment, such as hydrogen sulphide and ammonia gas.

For air pollutants generated by the waste incineration business, the Company strictly follows emission standards and adopts a series of chemical and physical techniques, including semi-dry desulphurisation, activated carbon adsorption for heavy metal and organics removal, bag filtration for dust removal, and selective non-catalytic reduction ("**SNCR**") for the removal of nitrogen oxides, ensuring full compliance of air pollutant emissions.

For odorous gas generated from wastewater and sludge treatment, we apply sealing covers to relevant treatment facilities and develop a negative pressure collection system to prevent odorous gas from being released into the atmosphere. We also adopt a variety of biological, chemical and physical techniques for odorous gas treatment, such as biofiltration, plasma deodorisation, and activated carbon adsorption. Moreover, we plant air-purifying plants around relevant projects to help absorb odorous gas and thus mitigate impacts on the surrounding environment and communities.

Case study

The inflow into Taixing Huangqiao WWTP Project is sourced from multiple industrial effluents containing diverse pollutants, which likely cause odour release. To mitigate the potential risk of dissipation, the project company applies fiberglass cover to units where odorous gas tends to concentrate, such as lift pump room for influents and primary sedimentation tanks. The odorous gas is then collected in a negative pressure system and gets purified. At the same time, the project company hires qualified testing agencies to regularly monitor the concentration of pollutants at the inlet and outlet of the odor treatment system every year and to issue a certified testing report in accordance with national qualifications. The report shows that the concentration of various pollutants is far lower than the national standard, and the odorous gases are effectively controlled. The project company is also surrounded by a large number of trees, which helps odour and dust removal and beautifies the environment.

Liquid chlorine, which is used in the disinfecting process of water supply projects, may pose the risk of chlorine gas leakage and thus result in negative impacts on air quality and human health. To prevent such accidents, we have established and strictly followed *Safety Management Regulation for Chlorine*. Our project companies have installed chlorine gas absorption devices to mitigate impacts in case of a leakage incident. The devices are maintained on a regular basis. Alarm systems for leakage detection are also installed in the chlorination room and are tested regularly to ensure proper functioning. In 2021, there was no leakage incident reported in the Company's water supply business.

Hazardous and Non-Hazardous Waste Management

Hazardous waste generated in our operation process mainly includes fly ash and used activated carbon generated from waste incineration business, as well as small amounts of hazardous sludge, laboratory waste liquid, waste motor oil, and empty reagent container produced by other businesses.

In accordance with relevant regulations and standards, we treat all hazardous waste in a proper and safe manner. Fly ash, produced from solid waste incineration, is solidified with cement and chelating agents before being transported to landfills for disposal. Used activated carbon, produced from flue gas treatment, is collected and delivered to certified waste removal agencies or fed back into the waste incinerator for processing in accordance with local regulations. Other hazardous wastes, such as hazardous sludge, laboratory waste liquid and waste motor oil are stored properly at the designated area before being transported to certified third parties for concentrated treatment.

The Company adopts multiple measures to reduce the amount of hazardous waste generated, such as implementing standard procedures in the laboratory and applying advanced technologies to improve process efficiency. We are also dedicated to the recycling and reusing of hazardous waste. Waste motor oil, for example, is utilised as lubricants for valves, nuts and bolts, and other parts. In 2021, the hazardous waste discharge intensity of the Company decreased by 12.2% compared to 2020.

Case study

In order to reduce the amount of hazardous waste generated during operation, Taixing Huangqiao WWTP Project has established strict regulations on laboratory wastes. It is strictly prohibited to mix domestic wastewater with laboratory wastewater, in prevention of the increase of the volume of the latter. In 2021, the project company produced 0.56 tonnes of laboratory wastewater, beyond the annual target of 0.98 tonnes.

The laboratory of the research centre of the Northeast BU strictly follows management standards. The laboratory chemicals are placed in order, and the laboratory waste liquid is properly classified and collected

Case study

Northeast BU uses laboratory robots to monitor pollutant concentrations and test water samples. The robots can automatically clean the samples, wash or empty solutions, move liquids, and conduct operations such as measurement and detection. With the help of the robots, the number of laboratory utensils, samples, and chemicals required is significantly reduced, and the annual output of laboratory waste liquid is lowered by about 10%.

Laboratory robot for water monitoring

Non-hazardous wastes produced from our business activities mainly include non-hazardous sludge from wastewater treatment, water supply and sludge treatment businesses, as well as slag generated from solid waste incineration.

To reduce the amount of sludge generated, we use mechanical dewatering processes such as mechanical filter presses and centrifugal dewatering to reduce the water content of sludge, and thereby reduce sludge volume. Some project companies adopt low-temperature drying or similar drying processes after sludge dewatering to further decrease sludge's water content. Through such treatment, the amount of sludge can be reduced by about 75%. Our business units regularly measure sludge water content, and ensure it meets relevant standards.

The generated sludge is treated in strict compliance with relevant regulations. Some of the sludge is transported to local landfills for centralised treatment. Some is recycled for project companies' landscaping, while the rest is collected by certified third-party companies and repurposed into fertilisers, construction materials, and mine restoration, or incinerated for power and heat generation. Our business units regularly commission professional institutions to carry out centralised transhipment for sludge. The sludge transport sheet is filled in as required for supervision of the process of delivery and treatment.

Case study

During the Reporting Period, Harbin City WWTP Sludge Disposal 1st Phrase Project has developed a thermophilic aerobic fermentation production line. This highly mechanised process requires less space and labour, while stably producing quality products. With the addition of bulking agent, organic compounds in the sludge are absorbed, oxidised, decomposed, and then transformed into humus through biological reactions. Rising temperature, caused by the biological decomposition process, also helps to kill harmful bacteria in the sludge. Such treatment brings sludge a looser texture, lower weight and higher content of plant-usable nutreints, which qualifies it for garden soil and soil improvmenet material. Stablisation, reduction, harmlessness and reutilisation of the sludge is thus achieved.

Harmlessness and Reutilisation of sludge achieved through thermophilic aerobic fermentation

Resource Consumption Management

The Company strictly abides by the *Energy Conservation Law of the PRC*, strives to continuously improve resource efficiency and reduce resource consumption. The Company has established the long-term goal of "enhancing consumption efficiency of energy, chemical, water and other resources during production and office activities", as well as a top-down management system to track the main resources used in operation. While ensuring the quality and stability of projects and controlling costs, we endeavour to improve the efficiency of the use of resources and minimise the impact on environment and resources.

Our business units have formulated internal policies to help project companies improve resource efficiency and comply with the Company's requirements, such as *the Production and Operation Cost Management System.* With the help of business units, and in regard to each project's nature and needs, our project companies develop their own systems, standards and targets for energy, chemicals and water consumption. The targets are included in annual assessments of the project companies and responsible personnel. In 2021, our project companies took effective measures to improve resource efficiency and achieved relevant targets, including but not limited to upgrading and maintaining current equipment, exploring best operational parameters and using chemicals in a granular manner.

Energy Consumption

To improve energy efficiency, our project companies actively implement energy-saving plans to strengthen energy-efficient operations and management. Necessary measures have been taken to reduce energy consumption and improve the energy efficiency of facilities. Those measures include: installing frequency converters on water pumps and air blowers, which adjust the number of operating equipment and parameters according to the real-time water quality monitoring results; conducting regular maintenance for energy-intensive equipment, so as to maintain good performance of equipment and reduce unnecessary power consumption to make full use of energy.

Case study

Zhejiang Linhai Park WWTP Project maintained and updated some key systems and equipment (including Fenton oxidation, and membrane bioreactors) that have been in operation for a relatively long period of time. As a result of such actions, energy consumption has decreased and energy efficiency has increased. The project company also developed special forms to record daily electricity consumption, analyse and compared it with the planned number. By regularly tracing the energy consumption, proposing improvement measures and regularly checking and maintaining electrical equipment, in 2021, the project company fully achieved its annual energy efficiency target of reducing the average electricity consumption per tonne of water treated by 5%, compared to 2020.

Our project companies also actively promote the use of renewable energy. For example, Luohe Sludge Treatment Plant Project and Taixing Huangqiao WWTP Project plan to replace their current lighting equipment with solar lighting; Harbin City Acheng WWTP Project plans to install solar power facilities to generate electricity for production. In addition, our waste incineration projects turn waste into electrical energy. A portion of the electricity generated supplements the solid waste incineration projects' daily energy supply, while the rest is uploaded to the power grid.

During the Reporting Period, we used a total of

109,584,249 kWh
of electricity generated from waste incineration

1,930,148 cubic metres
of electricity generated from biogas

Chemical Consumption

Our water treatment business uses different chemicals and carbon sources. To improve the efficiency of chemical usage, we experiment on the main chemicals such as flocculant in the early stage of dosing to figure out the optimal dosing approaches. During treatment, we monitor real-time water quality indicators such as COD and BOD through online monitoring facilities, and adjust the dosage of chemicals in a timely manner. For example, we adjust the dose of coagulant based on factors such as the content of total phosphorus (or orthophosphate) and the concentration of suspended solids in the biological tank, and we adjust the dosage of disinfectant according to the concentration of residual chlorine in the effluent. We also proactively explore the precise dosing of chemicals. Currently, several project companies have introduced intelligent dosing systems to dose chemicals more accurately, reduce chemical wastes, and thus reduce costs and increase efficiency.

Moreover, to reduce the use of carbon sources and their impacts on the environment, we practice the principle of green procurement. We insist on choosing carbon sources that generate less environmental impact, produce obvious denitrification and will not react to generate other refractory pollutants. We reasonably control the dosage of carbon sources based on parameters such as the amount of water, water quality and temperature, so as to improve the use efficiency and reduce residual waste.

Water Consumption

In terms of water usage, we have developed a complete water reuse system and actively improved the efficiency of water recycling. Used water from plant operations and effluent from the wastewater treatment process are mainly reused for landscaping, equipment cooling, facility cleaning, and chemical preparation.

Reclaimed water pump room of North BU

Reclaimed water tank in the water treatment project of North BU

To boost water efficiency even more, we do regular inspections for leaks in pipes, execute equipment maintenance and upgrades, install water-saving faucets and toilets, put flow meters on main pipes, and provide associated education to staff, among other things. In addition, our project companies such as the Zhaodong WWTP BOT Project and the Hegang WWTP Project upgraded their water recycling facilities and significantly increased the amount of water reused. During the Reporting period, our project companies recycled and reused a total of 45,780,433 tonnes of water, representing a 40% increase compared to 2020.

Most of our projects have easy and stable access to water for production and operation. A few water supply projects, however, may face the instability of water sources due to seasonal weather and droughts. Based on actual conditions, our business units and project companies have come up with countermeasures to address such risks. For instance, during dry seasons, our project companies withdraw water from midstream rather than regular water intake sites near the shore. As for projects that usually draw groundwater, they enhance well cluster maintenance, and increase well wash depths to ensure a stable source water supply and thus meet clients' demands.

In addition, our water diversion projects have established a pipeline inspection management system to enhance the safety management of water delivered via a single pipeline, and maintain close contact with water source suppliers to ensure timely water transfer.

Green Office

The Company continuously follows the principles of green office and encourages employees to save water, electricity, paper, and other resources during daily work. We post resource-saving notice in our workplace, including office rooms, meeting rooms, canteens, and rest rooms, to raise employee awareness of saving resources. We advocate the use of environmental friendly office supplies and eco-lighting facilities and promote a paperless working environment. Meanwhile, we continue to standardise the procurement process for office supplies to reduce unnecessary purchases.

Case study

The Shuyang County South City WWTP has adopted a green office approach to enhance resource reuse. The project company prints all general documents double-sided, only with necessary ledgers and outgoing reports as exceptions. Furthermore, the project company actively mobilises staff to save office suppliers and adopts paperless offices wherever possible. In the year 2021, the project company's domestic waste decreased by 5% year on year, and successfully met its environmental target.

The Company follows the concept of sustainable development and strives to create more value for society. In order to reduce the amount of solid waste generated in the office, we have implemented garbage classifying measures and promoted the "Clean Up Your Plate Campaign" in canteen to reduce the amount of food waste generated. In addition, we constantly standardise and improve the management system of our official vehicles, and appoint personnel responsible for recording vehicle use. Vehicles are regularly inspected and maintained to avoid oil leakage and reduce fuel consumption. We also encourage employees to engage in green and low-carbon travel and commute via public transport, walking or cycling wherever possible, benefiting both personal health and the environment.

Environmental Performance Data

Summary Table of Key Environmental Indicators[1]

Emissions					
Emission Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Greenhouse gases[2]	Direct emissions (Scope 1)	tonnes CO_2e	406,015	365,748	-
	Indirect emissions (Scope 2)	tonnes CO_2e	500,252	566,578	498,794
	Total greenhouse gases emissions	tonnes CO_2e	906,267	932,326	-
	Total greenhouse gases emissions intensity	tonnes CO_2e/RMB million	124.71	149.12	-
Solid waste	Total discharge of hazardous waste	tonnes	11,048	10,822	8,519
	Hazardous waste discharge intensity	tonnes/RMB million	1.52	1.73	1.43
	Total discharge of non-hazardous waste	tonnes	2,039,334	1,751,269	1,656,606
	Non-hazardous waste discharge intensity	tonnes/RMB million	280.63	280.11	277.95

[1]Summary Table of Key Environmental Indicators includes environmental data of four main business lines (wastewater treatment, water supply, sludge treatment, solid waste incineration) of the Company.

[2]Scope 1 emissions mainly generated from direct energy (petrol, diesel, and natural gas) consumption and waste incineration process. Scope 2 emissions were from the purchased electricity consumption during the Reporting Period.

Use of Resources					
Resource Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Energy consumption	Total direct energy consumption	kilowatt hours	34,323,905	27,279,502	-
	Intensity of direct energy consumption	kilowatt hours/RMB million	4,723	4,363	-
	Total indirect energy consumption	kilowatt hours	861,019,078	817,574,333	761,734,309
	Intensity of indirect energy consumption	kilowatt hours/RMB million	118,483.43	130,770.05	127,807.77
Water consumption	Total water consumption	tonnes	442,654,447	435,818,336	393,526,105
	Intensity of water consumption	tonnes/RMB million	60,912.96	69,708.63	66,027.87

Wastewater Treatment Business Line

Emissions					
Emission Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Air Pollutants	Ammonia gas	/	In compliance	In compliance	In compliance
	Hydrogen sulphide	/	In compliance	In compliance	In compliance
Greenhouse gases[1]	Direct emissions (Scope 1)	tonnes CO_2e	2,219.84	1,037.76	983.56
	Indirect emissions (Scope 2)	tonnes CO_2e	414,850.71	462,574.93	406,119.08
Wastewater	Wastewater	tonnes	2,509,567,643.12	2,376,508,851.82	2,371,773,168.72
	COD	tonnes	49,176.70	49,697.03	51,992.19
	BOD	tonnes	11,867.97	12,602.84	12,581.52
	Total suspended solids	tonnes	15,170.96	16,868.23	15,514.21
	Ammonia nitrogen	tonnes	1,938.85	1,862.43	2,239.06
Hazardous wastes[2]	Hazardous sludge	tonnes	3,749.71	3,163.53	1,729.83
	Other hazardous wastes[3]	tonnes	91.48	71.22	54.65
Non-hazardous wastes	Regular sludge	tonnes	1,540,076.95	1,375,615.88	1,332,828.95
	Other non-hazardous wastes[4]	tonnes	33,620.94	33,827.00	32,811.08

[1]Scope 1 emissions mainly generated from direct energy consumption and were calculated using *Industrial Enterprises Greenhouse Gas Emissions Accounting and Reporting Guidelines (Trial)* published by National Development and Reform Commission of the PRC. Scope 2 emissions were from the purchased electricity consumption during the Reporting Period and were calculated using 2021 average emission factors of the National Grid as defined in the *Notice on the 2022 Greenhouse Gas Emission Reporting Management* issued by the Ministry of Ecology and Environment of the PRC.

[2]Hazardous wastes were defined according to the *Directory of National Hazardous Wastes (2021 Revision)* published by the Ministry of Ecology and Environment of the PRC.

[3]Other hazardous wastes mainly include laboratory waste liquids, waste motor oil, and a small quantity of waste reagent bottles and other hazardous waste.

[4]Other non-hazardous wastes mainly include screening waste and grit, domestic waste, packaging cardboard box, and a small quantity of chemical packaging and other non-hazardous wastes.

Initiatives and processes to reduce emissions/discharges					
Initiatives and processes	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Trees	Number of trees able to reach at least five metres in height	trees	23,054	21,352	19,410
	Amount of CO_2 offset[5]	tonnes CO_2	530.24	491.10	446.43
Wastewater treatment	COD reduced after treatment	tonnes	491,457.41	456,736.07	462,068.12
	BOD reduced after treatment	tonnes	221,204.10	199,400.50	207,316.00
	Ammonia nitrogen reduced after treatment	tonnes	50,192.46	47,917.17	61,734.51
Water recycling	Recycled water used[6]	tonnes	45,286,648.10	32,123,475.00	29,358,613.80
Reclaimed water supply	Reclaimed water produced[7]	tonnes	66,454,166.00	23,614,106.13	25,459,359.00
Sludge recycling	Regular sludge reused	tonnes	989,721.40	838,375.04	792,519.45

Use of Resources						
Resource Type		**Indicator**	**Unit**	**2021**	**2020**	**2019**
Energy consumption	Direct energy	Petrol	litres	116,940.10	161,941.35	147,526.07
		Diesel	litres	52,734.34	41,156.70	53,413.85
		Natural gas[8]	cubic metres	840,758.27	260,527.54	236,004.09
		Renewable energy (solar)	kilowatt hours	1,617,662.00	1,713,670.00	1,816,574.50
		Total direct energy consumption	kilowatt hours	12,318,032.29	6,443,673.29	6,268,256.28
	Indirect energy	Purchased electricity	kilowatt hours	714,028,755.08	681,160,652.92	621,803,352.05
Water consumption		Purchased freshwater	tonnes	2,293,738.85	2,008,736.21	1,700,259.74
Raw materials consumption		Disinfectants	tonnes	32,113.27	34,570.92	16,386.95
		Adsorbents[9]	tonnes	3,862.19	1,951.29	1,967.63
		Carbon sources[10]	tonnes	96,047.76	67,068.03	521,778.67
		Coagulants and flocculants	tonnes	160,848.90	150,330.38	150,914.01
		Acid-base regulators	tonnes	11,086.24	12,284.01	10,006.91
		Other raw materials [11]	tonnes	31,614.40	25,956.75	24,544.76

[5]CO_2 offsets were calculated using the methodology outlined in the *Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 Edition)* published by the Environmental Protection Department and the Electrical and Mechanical Services Department.

[6]During the Reporting Period, various WWTP projects upgraded and reconstructed water recycling facilities, resulting in a significant increase in recycled water consumption.

[7]From 2020 to 2021, new reclaimed water projects in WWTPs have been put into operation, therefore the production of reclaimed water increased significantly.

[8]During the Reporting Period, the project companies newly added heating boilers, stoves and other facilities, resulting in a significant increase in natural gas consumption.

[9]During the Reporting Period, the consumption of adsorbents increased due to changes in the types of adsorbents used.

[10]During the Reporting Period, due to the factors such as water quality fluctuations, the amount of carbon sources consumption increased significantly.

[11]Other raw materials mainly include hydrochloric acid, lime, liquid oxygen and NS-A Reagent.

Water Supply Business Line

Emissions					
Emission Type[1]	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Greenhouse gases[2]	Direct emissions (Scope 1)	tonnes CO_2e	20.16	14.89	-
	Indirect emissions (Scope 2)	tonnes CO_2e	74,873.79	92,949.99	79,866.07
Wastewater	Wastewater	tonnes	14,526,302.71	16,353,578.99	20,131,104.41
Non-hazardous wastes	Regular sludge[3]	tonnes	98,126.24	17,723.00	15,892.00
	Other non-hazardous wastes[4]	tonnes	56.50	55.70	66.80
Initiatives and processes to reduce emissions/discharges					
Initiatives and processes	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Trees	Number of trees able to reach at least five metres in heighzt[5]	trees	6,645	3,543	3,567
	Amount of CO_2 offset[6]	tonnes CO_2	152.84	81.49	82.04
Water recycling	Recycled water used	tonnes	370,000.00	360,000.00	422,000.00
Sludge recycling	Regular sludge reused	tonnes	1,927.00	2,860.00	5,000.00
Use of Resources					
Resource Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Energy consumption – Direct energy	Petrol[7]	litres	8,865.00	6,545.50	Not reported
	Total direct energy consumption	kilowatt hours	82,464.200	60,887.696	-
Energy consumption – Indirect energy	Purchased electricity	kilowatt hours	128,870,553.99	122,085,123.39	123,100,846.99
Water consumption	Surface water	tonnes	379,267,824.67	362,798,921.00	323,909,897.42
	Groundwater	tonnes	60,447,575.84	70,318,538.00	67,200,076.00
Raw materials consumption[8]	Disinfectants	tonnes	5,266.69	2,875.32	2,895.94
	Coagulants and flocculants	tonnes	5,249.89	4,072.28	4,830.91
	Water purification agents	tonnes	4,524.32	3,875.18	2,383.01

[1]Hazardous waste is not material to the water supply business line and is therefore not disclosed.

[2]Scope 1 emissions mainly generated from direct energy consumption and were calculated using *Industrial Enterprises Greenhouse Gas Emissions Accounting and Reporting Guidelines (Trial)* published by National Development and Reform Commission of the PRC. Scope 2 emissions were from the purchased electricity consumption during the Reporting Period and were calculated using 2021 average emission factors of the National Grid as defined in the *Notice on the 2022 Greenhouse Gas Emission Reporting Management* issued by the Ministry of Ecology and Environment of the PRC.

[3]During the Reporting Period, several project companies carried out dredging and desilting, resulting in a significant increase in the production of regular sludge. The regular sludge produced has been treated in compliance.

[4]Other non-hazardous wastes mainly include domestic garbage and packaging cardboard boxes.

[5]The number of trees increased due to the inclusion of trees in the newly operated plants in 2021.

[6]CO_2 offsets were calculated using the methodology outlined in the *Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 Edition)* published by the Environmental Protection Department and the Electrical and Mechanical Services Department.

[7]Petrol consumption during the Reporting Period mainly came from the use of vehicles, and the increase of petrol consumption is related to the increase of inspection frequencies of engineering vehicles.

[8]During the Reporting Period, the consumption of disinfectants, coagulants, flocculants and water purification agents fluctuated due to the changes of the type of chemicals.

Sludge Treatment Business Line[1]

排放物					
Emission Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Air Pollutants[2]	Ammonia gas	/	In compliance	In compliance	In compliance
	Hydrogen sulphide	/	In compliance	In compliance	In compliance
Greenhouse gases[3]	Direct emissions (Scope 1)	tonnes CO_2e	1,320.78	1,214.25	1,313.59
	Indirect emissions (Scope 2)	tonnes CO_2e	10,371.15	10,622.54	12,658.03
Hazardous wastes	Other hazardous wastes[4]	tonnes	3.98	3.19	2.85
Non-hazardous wastes	Regular sludge	tonnes	300,403.07	240,835.05	200,092.88
	Other non-hazardous wastes[5]	tonnes	244.00	234.69	233.00
Initiatives and processes to reduce emissions/discharges					
Initiatives and processes	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Trees	Number of trees able to reach at least five metres in height	trees	2,179	1,720	240
	Amount of CO_2 offset[6]	tonnes CO_2	50.12	39.56	5.52
Water recycling	Recycled water used	tonnes	109,325.00	116,835.00	116,100.00
Sludge recycling	Regular sludge reused	tonnes	226,402.20	201,037.43	164,925.43
Use of Resources					
Resource Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Energy consumption – Direct energy	Diesel	litres	386,971.79	371,457.10	334,103.13
	Natural gas	cubic metres	149,284.50	118,520.78	209,017.00
	Renewable energy (biogas)	cubic metres	1,930,148.00	1,912,544.00	2,248,032.00
	Renewable energy (solar)	kilowatt hours	23,175.00	-	-
	Total direct energy consumption	kilowatt hours	17,578,421.06	16,958,882.54	19,675,765.82
Energy consumption – Indirect energy	Purchased electricity[7]	kilowatt hours	17,850,513.00	13,719,816.00	16,607,310.00
Water consumption	Purchased freshwater	tonnes	12,037.00	12,553.00	19,058.00
Raw materials consumption	Straw	tonnes	30,502.75	30,875.17	33,620.77
	Rice husk	tonnes	26,462.75	26,825.85	25,250.77
	Other raw materials[8]	tonnes	761.66	5,384.15	Not reported

[1]Since wastewater generated from the sludge treatment process is treated in-house and reused at the sludge treatment plant or discharged to the WWTP that belongs to the same project company for treatment, the discharge of wastewater is not material to the sludge treatment business line and is therefore not disclosed.

[2]Since some sludge treatment projects are not equipped with quantitative data monitoring systems, this table discloses the sludge treatment business line's performance on air pollutant emissions by evaluating whether the emissions met the local emission standards.

[3]Scope 1 emissions mainly generated from direct energy consumption and were calculated using *Industrial Enterprises Greenhouse Gas Emissions Accounting and Reporting Guidelines (Trial)* published by National Development and Reform Commission of the PRC. Scope 2 emissions were from the purchased electricity consumption during the Reporting Period and were calculated using 2021 average emission factors of the *National Grid as defined in the Notice on the 2022 Greenhouse Gas Emission Reporting Managemen*t issued by the Ministry of Ecology and Environment of the PRC.

[4]Other hazardous wastes mainly include waste motor oil and laboratory waste liquids.

[5]Other non-hazardous wastes mainly include domestic waste and screening waste and grit.

[6]CO_2 offsets were calculated using the methodology outlined in the *Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 Edition)* published by the Environmental Protection Department and the Electrical and Mechanical Services Department.

[7]During the Reporting Period, the electricity consumption increased due to the expansion of treated sludge.

[8] Other raw materials mainly include corncob and wood chips.The decrease in the other raw materials consumption is related to optimisation of treatment process.

Waste Incineration Business Line

Emissions					
Emission Type	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Air pollutants[1]	NO_x	tonnes	214.14	250.75	226.29
	SO_x	tonnes	30.56	44.52	43.95
	CO	tonnes	27.11	12.55	15.58
	Smoke	tonnes	12.73	6.09	7.17
	Dioxins[2]	/	In compliance	In compliance	In compliance
Greenhouse gases[3]	Direct emissions (Scope 1)[4]	tonnes CO_2e	402,454.24	363,481.13	266,609.1
	Indirect emissions (Scope 2)	tonnes CO_2e	156.44	430.95	151.03
Wastewater	Wastewater	tonnes	104,586.00	254,677.00	166,777.77
	COD	tonnes	6.61	14.91	13.92
	Ammonia nitrogen	tonnes	0.09	1.30	1.04
Hazardous wastes	Used activated carbon from treatment of waste gases generated during waste incineration	tonnes	153.45	152.39	156.96
	Fly ash from domestic waste incineration	tonnes	7,045.23	7,424.64	6,572.72
	Other hazardous wastes[5]	tonnes	4.31	6.75	2.25
Non-hazardous waste	Slag	tonnes	66,806.00	82,978.00	74,681.00

Initiatives and processes to reduce emissions/discharges					
Initiatives and processes	**Indicator**	**Unit**	**2021**	**2020**	**2019**
Trees	Number of trees able to reach at least five metres in height	trees	118	118	17
	Amount of CO_2 offset [6]	tonnes CO_2	2.71	2.71	0.39
Water recycling	Recycled water used[7]	tonnes	14,460.17	19,837.92	11,474.96
Electricity generation from waste incineration	Electricity generated	kilowatt hours	109,584,249.00	113,133,332.26	116,624,780.00
Waste recycling/ reuse	Slag reused	tonnes	64,382.00	79,583.00	77,335.00

Use of Resources						
Resource Type		**Indicator**	**Unit**	**2021**	**2020**	**2019**
Energy consumption	Direct Energy	Diesel	litres	440,239.00	386,647.29	242,320.15
		Total direct energy consumption	kilowatt hours	4,344,987.73	3,816,058.39	2,391,605.64
	Indirect Energy	Purchased electricity	kilowatt hours	269,256.00	608,741.00	222,800.00
Water consumption		Purchased freshwater	tonnes	633,271.00	679,588.00	696,814.00

[1] Air pollutants only include those generated from waste incineration during the Reporting Period.

[2] During the Reporting Period, dioxins emission did not violate the local emission standards of the project operation site.

[3] Scope 1 emissions mainly generated from direct energy consumption and waste incineration. Scope 1 emissions were calculated using *Industrial Enterprises Greenhouse Gas Emissions Accounting and Reporting Guidelines (Trial)* published by National Development and Reform Commission of the PRC and *Greenhouse Gas Accounting Tool for Chinese Cities (Pilot Version 1.0)* published by the Greenhouse Gas Protocol. Scope 2 emissions were from the purchased electricity consumption during the Reporting Period and were calculated using 2021 average emission factors of the National Grid as defined in the *Notice on the 2022 Greenhouse Gas Emission Reporting Management* issued by the Ministry of Ecology and Environment of the PRC.

[4] During the Reporting Period, the Company continued to improve its greenhouse gas emissions calculation system and expanded the scale of Scope 1 emissions calculation, therefore Scope 1 emissions data for 2019 and 2020 have been updated simultaneously.

[5] Other hazardous wastes include waste lead batteries, laboratory waste liquids, waste mineral oil, materials contaminated by waste mineral oil and laboratory waste liquids.

[6] CO_2 offsets were calculated using the methodology outlined in the *Guidelines to Account for and Report on Greenhouse Gas Emissions and Removals for Buildings (Commercial, Residential or Institutional Purposes) in Hong Kong (2010 Edition)* published by the Environmental Protection Department and the Electrical and Mechanical Services Department.

[7] During the Reporting Period, the statistical methodology of recycled water consumption has been adjusted, and the data of the past three years have been updated simultaneously.

03

Protecting Employee Rights

- Employment Management
- Safety and Occupational Health
- Training and Development
- Compensation and Benefits

Employment Management

Employment and Labour Practices

SIIC Environment believes that employees are indispensable to the sustainability development of the Company. In 2021, we continued to uphold responsible employment and insisted on a “people-oriented” management principle. We care for employees in all aspects and are committed to creating a platform for employees’ growth, and ensuring a safe, harmonious and inclusive working environment.

The Company highly values the legal rights of employees. We strictly abide by relevant laws and regulations including *the Labour Law of the PRC, the Labour Contract Law of the PRC, the Regulation on the Implementation of the Labour Contract Law of the PRC, the Regulation on Public Holidays for National Annual Festivals and Memorial Days, the Employment Act of Singapore, the Employment of Foreign Manpower Act of Singapore*, and other laws and regulations related to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, anti-discrimination, remuneration and benefits in countries and regions where the Company operates. During the Reporting Period, the Company had no reported violation of the above laws and regulations.

The Company holds a zero-tolerance attitude towards child labour and forced labour, and strictly complies with relevant laws and regulations such as *the Labour Law of the PRC* and *the Provisions on the Prohibition of Using Child Labour.* During the recruitment, we verify applicants’ identity and eligibility to prevent the employment of under age. We engage in equal and voluntary labour relations with employees and do not sign illegal agreements or contracts with them or withhold their identification documents. If forced labour or child labour is detected, employees can report it directly to the local labour inspection team. In receipt of such a report, the Company will take immediate action to remedy the situation, and then review and refine the employment management system to avoid future violation.

The Company adheres to fair and non-discriminatory employment principles and complies with *Special Rules on the Labour Protection of Female Employees* and the *Law of the PRC on the Protection of Women's Rights* to ensure equal pay for equal work regardless of gender and secure the legal rights and interests of female employees. For candidates with special needs, the Company also offers appropriate positions during recruitment to help them better integrate into society, realise their self-worth and pursue a better life. At present, the Company employs 22 disabled persons and 181 ethnic minority employees. No incident of discrimination was reported during the Reporting Period.

We maintain a close watch on labour issues of potential and existing business partners and conduct due diligence or internal audits when appropriate to ensure their legal rights are protected.

At present, the Company employs

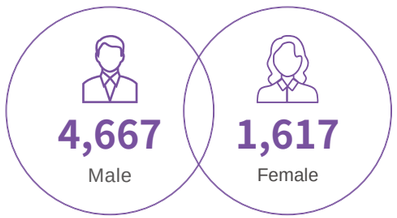
22
disabled persons

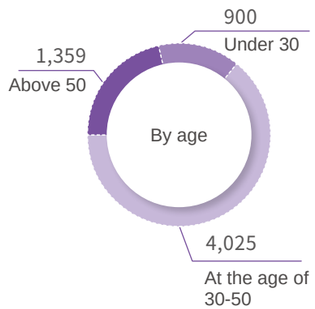
181
ethnic minority employees

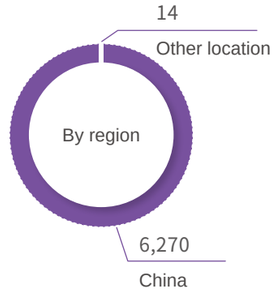
The Company has established and implemented a sound human resources management system in all business units to ensure that the rights and interests of the Company's employees are maintained and protected in all aspects. We have developed employee manuals to standardise the code of conduct of employees, covering the management requirements of office procedures, reporting, attendance, performance evaluation, rewards and punishments, compensation and benefits, training and employee rights. Our business units have set up policies for employment, remuneration, promotion and benefits that are tailored to their specific needs., so as to standardised human resources magagement work.

Compensation	*Remuneration Management System*
Dismissal and promotion	*Change Management System*
Recruitment, equal opportunity, diversity, and anti-discrimination	*Recruitment Management System, Employee Relations Management Measures*
Working hours	*Attendance Management System, Overtime Duty Management System*
Rest periods	*Leave Management System*
Welfare	*Welfare Management System*
Communication	*Employee Communication Management Measures, Labour Disputes Management Measures*
Performance assessment	*Performance Appraisal Management System, Rewards and Punishments Management Measures*

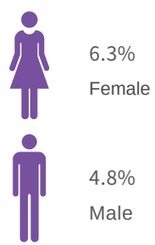
As of 31 December 2021, the Company had **6,284** employees (all of them are full-time employees and the number of part-time employees is 0). A breakdown of our employees by gender, age group, and geographical region is shown below:



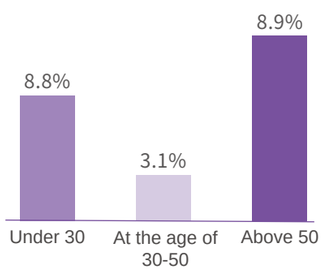




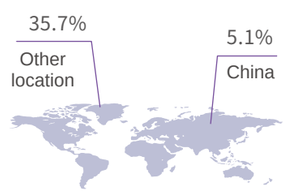
Total employee turnover:**325**



Employee turnover rate by gender



Employee turnover rate by age



Employee turnover rate by region

Employee Engagement

Employee perks and rights are the top focus for the Company. We strive to engage our employees in corporate decision making through mutual dialogue and direct communication, and encourage employees to join trade unions, which advocate for the rights of employees and provide them with relevant training. We fully respect our employees' thoughts and ideas, and have set up employee suggestion boxes, employee seminars, and internal satisfaction surveys to listen to their voices.

During the Reporting Period,

6,081 employees joined the trade union

East BU held general staff meeting

Safety and Occupational Health

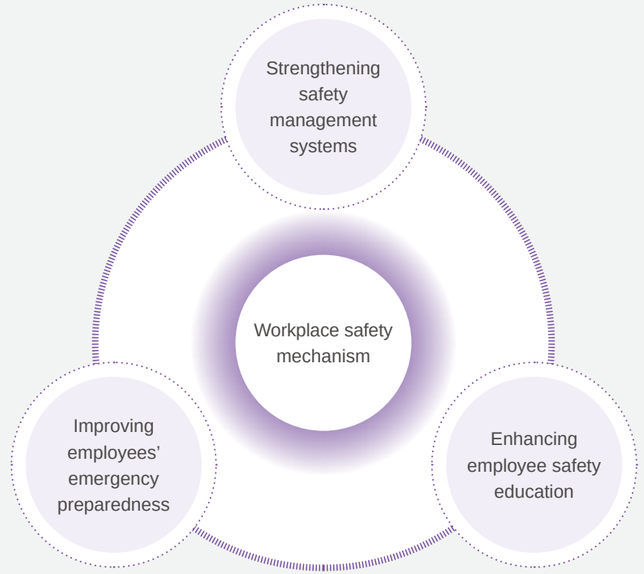
SIIC Environment strives to reach higher safety standards in production activities and operations. We stringently comply with the *Work Safety Law of the PRC and the Law of the PRC on the Prevention and Control of Occupational Diseases, Fire Protection Law of the PRC, the Provisions on the Administration of Occupational Health at Workplaces*, and other relevant laws and regulations. During the Reporting Period, there was no case of non-compliance related to occupational health and safety that would have a significant impact on the Company .

The Company's business units have either implemented or have been developing the occupational health and safety ("**OHS**") management system, and some of our business units, such as East BU and South BU, have passed GB/T45001 (ISO 45001) Occupation Health and Safety Management System Certification. In 2021, we well implemented our OHS management system and reached the annual workplace safety target of zero fatality.

The Occupational Health and Safety Management System Certificate acquired by East BU (left) and South BU (right).

Workplace Safety

The workplace safety mechanism is based on three main aspects, as shown in the diagram below. The business units have incorporated the mechanism when building their own safety management systems.



The Company has created a specialist team to coordinate, plan, organise, develop, and execute with health and safety matters. The Company headquarter has authorised a workplace safety team that convenes quarterly meetings to understand and supervise each business unit's latest workplace safety information. In the meantime, on behalf of the Company's headquarter, Board members are assigned to coordinate and conduct routine inspections and spontaneous inspections of workplace safety at each business unit and the project companies every quarter.

In addition, according to the nature of different production activities, our business units have implemented different management policies to standardise the safety management of project companies, such as:

- Develop a safety committee at business unit level, and require project companies to establish safety teams
- Guide the safety monitoring system, organise monthly safety inspections along with safety analysis meetings, and conduct regular safety assessment for project companies
- Promote graded control of safety risks, identify risks, formulate countermeasures and implement responsibilities according to the identification results
- Conduct comprehensive due diligence and internal audit on potential projects and existing projects

To further prevent safety risks, the Company has standardised the safety incident reporting procedures so that safety incidents can be timely reported to supervisory personnel and regulatory authorities. We regularly submit reports to regulatory authorities to disclose the results of safety risk self-assessment, and make full use of the advice from the regulators to further improve safety standards and standardise operations. Additionally, we organise regular emergency drills for fire, water quality, and other catastrophes, to equip employees with the necessary knowledge and abilities to deal with emergent situations.



Fire drills held at our business units

In 2021, a total of 483 days were lost due to work injury, with no incident of work-related fatality.

Indicator	2021	2020	2019
Number of work-related fatalities	0	2	0
Rate of work-related fatality (per 100 employees)	0	0.033	0

To ensure the Company's safety management system can be accurately communicated to external suppliers or stakeholders who need access to our production area, we have developed the *Stakeholder Safety Management System*, the *Safety Risk Notification Card and the Outside Personnel Safety Notification Letter* for external parties to observe and follow.

Our business units also take actions to regulate the behavior of external personnel and ensure their safety. For example, East BU requires project contractors to sign responsibility letters for safety and fire prevention work, and safety commitment letters, which define the safety specifications and requirements to be observed during construction; also, the health and safety notices are issued to contractors to remind them of the potential safety hazards and precautions during production. North BU requires constructors to sign "Construction Safety Agreement" before projects commence construction, and to construct in strict accordance with specifications; during the construction, relevant personnel should regularly check workplace safety, and timely deal with problems if any is identified, so as to prevent safety risks.

Protecting Occupational Health

In order to ensure a safe and healthy workplace and prevent the occurrence of occupational diseases, we have formulated systems and norms such as *Occupational Health Management System, Occupational Disease Hazard Notice System and Occupational Disease Prevention Responsibility System*, and defined the code of conduct related to the protection of employees' occupational health. North BU, Ranhill Water and other business units have continuously improved their responsibility systems for the prevention and control of occupational hazards, as well as established health management teams to be fully in charge of the work of preventing and controlling occupational hazards.

During the Reporting Period, some of our business units formulated the *2021 Occupational Disease Prevention and Control Work Plan,* which defines the annual targets for occupational disease prevention and control and rules on occupational health management. The work plan provides a strong guarantee to prevent and control occupational diseases. As required by the work plan, each business unit equips all on-site employees with protective equipment such as helmets, gloves and masks to ensure the safety for on-site operation. For positions exposed to serious occupational hazards, we post warning signs and instructions at prominent places in the factory and hire third parties to inspect occupational hazard factors. We also carry out occupational health checks. In addition to the physical check-up for new employees and annual routine check-ups, we also conduct check-ups of occupational diseases for certain positions, for example, lung examinations for employees exposed to productive dust, so as to ensure the occupational health of all employees. The examination results are properly saved and recorded into the "occupational health monitoring file" as required by rules.


Protective clothing and activated carbon filter canister (left) and positive pressure respirator (right)

Occupational disease hazard notification card

In addition, by organising safety education and training sessions periodically, the Company raises employees' safety awareness and builds a culture of workplace safety. Our business units have established training management systems and conducted safety training around different topics, including the occupational safety education for new employees, regular and specialised safety education for designated teams, "three new" safety training (new processes, new technologies, and new equipment), safety training in preparation for job changes, and education on safety accident. The training contents include occupational health and safety laws and regulations and the Company's policies, knowledge of using safety equipment, and emergency response measures.

In 2021, a total of **6,100** employees spent **23,199** hours in training related to occupational health and safety standards, averaging to nearly **3.8** hours per person.

Case study

To popularise fire safety knowledge, improve fire safety awareness and effectively prevent all kinds of fire accidents, our employees from Central BU participated in a fire safety training held by Hubei Province Fire Education Centre on June 25. The training mainly explained the current form of fire accidents in China, the five major causes of fire accidents, response procedures, method of escaping from high-rise building fire, ways to prevent fire in vehicles, and operational instructions for fire extinguishing equipment.

Fire-related knowledge training was held at North BU

Confined space safety training was held at East BU

Safety trainings were held at North BU

Occupational Disease Hazards Identification & Analysis Training held at East BU

Epidemic Prevention and Control on a Permanent Basis

Since the onset of the COVID-19 pandemic, we have strictly practiced the pandemic containment requirements, and have always prioritised our employees' health and safety. During the Reporting Period, the Company's headquarter in Singapore prepared short-term and long-term policies described below to help employees resolve difficulties and express solicitude towards them through the pandemic.

Short-term policies

- Provide office supplies required for work from home, such as display screens and printers
- Distribute fruits, vegetables, small air purifiers and other useful materials to employees
- Give special care to the employees who are diagonised with COVID-19, such as providing health care products and medicine to alleviate their symptoms

Long-term policies

- Develop a pandemic prevention process to manage confirmed cases and close contacts
- Provide pandemic prevention supplies, such as masks, and test kits
- Continuously keep track of employees' health status and maintain communication with them

In addition, our business units have taken a series of anti-pandemic measures. Policies such as the *COVID 19 Prevention and Control Work Plan* and the *COVID 19 Prevention and Control Emergency Plan* were established and the pandemic prevention and control team was set up to take charge of the pandemic control management. Depending on local status and actual needs, each business unit distributed masks, disinfectants, protective clothing, goggles and other anti-pandemic supplies to employees. The business units also adjusted the work and rest schedule of employees to reasonably arrange their commuting time period, so as to avoid the risk of cross infection.

The Company provided employees with office supplies required for work from home, such as display screens and printers

Training and Development

SIIC Environment attaches great importance to personnel training. Based on the nature and needs of the business operations, our business units have formulated the *Training Management System* and the *Training Management Measures* regarding employee training management. Targeted training programmes for different categories of employees, such as managers, specialists, technicians, personnel needing position transfer, and new employees have also been developed.

To continuously improve the overall quality of employees and develop a more professional management and operational team, we provide employees with plentiful learning and training programmes. The programmes take on various forms such as cross-department exchange programmes, position rotations programmes, online and offline seminars, self-study, external training, and skillset competitions. The training covers professional and technical skills, health and safety, legislation and regulations, environmental protection, and anti-corruption. We also grant leave to employees who need to prepare for professional examinations. When an employee completes a training programme, we evaluate the training efficacy and the evaluation results will be included in the annual employee performance review.

During the Reporting Period, **5,198** employees, or **82.7%** of our workforce received **62,634.7** hours of training related to career development. The average training hours per employee were approximately **10.0** hours.

Male

Percentage of staff trained: **80.4**%

Average training hours: **10.0** hours

Accounting for **72.2**% of total employees who took part in training

Female

Percentage of staff trained: **89.4**%

Average training hours: **10.0** hours

Accounting for **27.8**% of total employees who took part in training

Portion of trainees and average training hours per employee by gender

Senior Management

Average training hours: **15.9** hours

Accounting for **1.0**% of total employees who took part in training

Middle-level Managers

Average training hours: **16.7** hours

Accounting for **5.4**% of total employees who took part in training

General Staff

Average training hours: **9.0** hours

Accounting for **76.9**% of total employees who took part in training

Technical Staff

Average training hours: **15.8** hours

Accounting for **12.9**% of total employees who took part in training

Others

Average training hours: **3.8** hours

Accounting for **3.8**% of total employees who took part in training

Portion of trainees and average training hours per employee by positions

The law and regulation preaching and training at East BU

Financial knowledge training held at Central BU

Compensation and Benefits

Employee Benefits

The Company follows the *Employee Benefits Management System* and continues to improve its benefits management system to ensure all employees have access to the benefits program, and thus raise employee satisfaction. Our employee benefits consists of statutory benefits, monetary benefits, and various supplemental benefits.

Statutory Benefits

- housing provident fund
- pension
- unemployment benefits
- medical insurance
- work injury and maternity insurance
- other statutory benefits

Monetary Benefits

- holiday payments
- duty allowance
- summer heat protection allowance
- transportation allowance
- communication allowance
- Other allowances

Supplemental Benefit

- annual medical check-up service
- supplemental commercial medical insurance
- meal allowance
- festival gifts
- Other supplementary benefits

Categories of employee benefits

Special Care

The Company continues to pay attention to the needs of special groups. We actively offer assistance to employees with financial difficulties. Some business units provide special funds for employees suffering long-term family financial difficulties, and call on other employees to participate in donation initiatives. We also pay regular visits to employees in need and send warm care during special occasions such as festivals.

In addition, we pay full attention to the protection of rights and interests of female employees and provide them with marriage leave, maternity leave and breastfeeding leave in strict accordance with relevant laws and requirements and are willing to extend them as appropriate. Each International Women's Day, our business units arrange group activities for female employees, such as floral art, movie shows, and outdoor activities, so as to further enrich personal life outside of work. Female employees also receive a half-day vacation and holiday welfare. Female employees' physical and mental wellness are also very important to us. Our business units provide women-specific health examinations, as well as organise activities such as women's health lectures to continuously improve their wellbeing and sense of belonging.

The one-day donation was held for employees that needed support at East BU

Employee Activities

During the Reporting Period, the business units and project companies organised a variety of sports games and recreational activities to improve employee well-being and help them achieve better work-life balance.

Badminton game held by East BU

Tug-of-war held at South BU

Basketball game held by South BU

Multi-person cooperative game held by South BU

Outdoor staff dinner held by South BU

04

Giving Back to the Community

- Contributing to Environmental Protection
- Community Welfare
- Rural Revitalisation

SIIC Environment proactively devotes itself to public welfare. The Company has its own volunteer team, and supports employees to form public welfare groups and enage in charitable activities. The Company strictly abides by the *Charity Law of the PRC* and follows the principles of legality, voluntariness, and honesty to fulfil our corporate social responsibility. We are actively engaged in various public welfare activities including environmental education, rural revitalisation, and donations to community. As a leading operator in water and environmental business, we are committed to making the best use of our expertise and resources to promote the sustainable development of the industry. In the future, we will continue to work with the public and help create an eco-friendly society.

During the Reporting Period, SIIC Environment invested over RMB **2.925** million in social contribution

And contributed **5,563** hours of volunteer services

Contributing to Environmental Protection

Based on its main business of environmental protection, and through various means such as social media and open visits, SIIC Environment promotes its environmental protection practices and raises public awareness of environmental protection. Our business units have established volunteer teams to widely conduct presentations and activities related to environmental protection in communities. The aim is to spread environmental concepts, lead environmental behavior, promote public environmental governance, and provide students with opportunites to expand environmental knowledge.

Case Study

In June 2021, North BU organised a media campaign named "Exploring Weifang's advanced wastewater treatment process". On the day of the event, relevant personnel introduced the latest sewage treatment technology and process to the public and promoted the business unit's green development achievements. The campaign deepened the public's understanding of environmental knowledge and improved their awareness of water conservation.

In order to strengthen its influence and communication power, this campaign was creatively promoted online. More than 30 social media celebrities and key opinion leaders were invited to the campaign site, and the campaign was reported on various media platforms such as Weibo, Wechat, Tiktok, Toutiao, and NetEase, and gained more than 22 million reads within ten days.

Group photo of the media campaign "Exploring Weifang's advanced wastewater treatment process" organised by North BU

Photo covered by media

Case Study

The Northeast BU Youth Volunteer Service Team actively participated in activities such as river protection and the volunteer publicity of garbage classification in Harbin. The team has produced a great social impact with nearly 1,460 hours of volunteer services since its establishment. In 2021, the Harbin Youth Volunteer Lecturer Group held 34 volunteer lectures on garbage sorting and 86 hours of volunteer services. By delivering lectures on the "Going Into the Government, Schools, Communities, Enterprises, Troops, Villages and Towns" campaign, the volunteer group focused on teaching teenagers about garbage classification, while influencing all citizens to work on environmental protection. The group successfully spread the experience and concept of garbage classification.

In 2021, South BU participated in the "Refreshing Bantian" voluntary activities, which invovled environmental cleaning, traffic civilisation persuasion, and garbage sorting.

South BU participated in the "Refreshing Bantian" voluntary activities

The opening of environmental facilities to the public is one of the key ways we have sought to promote national ecological and environmental protection efforts. It is also a necessary means of spreading the concept of environmental protection and promoting public supervision. SIIC Environment has firmly encouraged open visit activities among all business units. It fosters communication between companies and public through activities such as open days, collaborating with schools, and organizing visits and exchanges. According to statistics, the South BU held 23 open visits to 1,126 public visitors in 2021; the East BU organised 26 free visits in 2021, attracting more than 1,000 public visitors.

In 2021, the South BU held

23 open visits

Number of public visitors

1,126

East BU organised

26 free visits

Number of public visitors

1,000

Teachers and students of Nanyang Institute of Technology visited Nanyang Zhonghui Sludge Treatment and Resource Utilisation Project

Ranhill Water welcomed students from Jiangxi Agricultural University majoring in environmental engineering

North BU organised students from Hunan City University to visit and study at the project site

In addition, we actively fulfill the mission of protecting ecological environment, promote the idea of respecting and protecting nature, and take actual practices to protect animals and plants. We contribute to the harmonious coexistence between human beings and natural environment.

Case Study

We advocate respect for all lives in nature and the kind treatment and protection of animals. The East BU voluntarily founded the Alliance for Animal Care. The Alliance regularly holds activities such as rescuing stray cats, and actively engages employees in animal care. Most of the stray cat feeds come from the leftover food from canteen, and are served in recycled soft-drink cans and food containers, so as to reduce the impacts on the environment.

Case Study

On Arbor Day in 2021, Northeast BU launched a tree planting activity for "helping carbon neutrality and a new green lifestyle". Nearly 100 employees engaged in this activity.

Northeast BU organised a tree-planting activity on "helping carbon neutrality and a new green lifestyle"

Community Welfare

SIIC Environment actively invests in various social welfare activities, cares about groups with financial difficulties and local communities, and engages its staff in various public charity events.

In 2021, our business units organised public welfare activities such as community service, blood donation, anti-epidemic volunteering, and charity donations. Some innovative activities such as "Convenient Services in the Community" and "Zero Errands" were also conducted, further improving water supply services to our customers and the public.

Case Study

In 2021, four four water supply project companies of North BU in Weifang, Yiyang, Hanting and Fangzi carried out "Community Convenience Services "activities. By providing free repairs, handling business on site, and answering people's queries, volunteers provided convenient water supply services for community residents.

In addition, in response to the recurrent pandemic situation and to avoid gathering of people, the North BU has further optimised its online processing channels to provide residents with a "Zero Errands " service. Residents can use WeChat and Alipay to get access to water services, regardless of time and space.

North BU provided "Community Convenience" services for local communities

North BU provided residents with a "Zero Errands " service

Case Study

In 2021, Weifang Water Supply Co., Ltd. of North BU organised a blood donation activitiy. Several employees from East BU voluntarily participated in the blood donation activity organised by the Shanghai Municipal Health and Wellness Commission.

Voluntary blood donation activities in the project company

Case Study

On 24 June 2021, young volunteers of East BU helped local authorities to carry out vaccination at the temporary vaccination site. They helped maintain site order, guided people to register or stay for 30-minute medical observation.

Young volunteers of East BU guide community vaccination

Case Study

In May 2021, the Central BU donated 315 books and 78 school stationery sets and sporting goods to the Hope Primary School in Luotian County, Hubei Province.

Number of donated books

315

Number of donated stationery set and sporting goods

78

The Central BU donated books and school supplies to Hope Primary School in Luotian County

Rural Revitalisation

Promoting the practical connection between poverty alleviation and rural revitalisation is one of China's national priorities in the 14th Five-year Plan Period. During the Reporting Period, SIIC Environment actively contributed to the sustainable development of rural areas via paired assistance through consumption, donations, and assistance through industrial development.

Case Study

In 2021, East BU involved in paired assistance with Qingyun Village in Midu County, Yunnan Province. The company signed the *Enterprise and Village Partnering Agreement for Village Revitalisation from 2021 to 2022* with the village committee of Qingyun Village in Meidu County, and formulated the *Implementation Plan for Village Revitalisation from 2021 to 2022* in the areas of environmental protection, industrial support, providing assistance to people in difficulties and village education assistance. According to the plan, an investment of RMB 800,000 is expected to be put into the Qingyun Village revitalisation project.

Sewage remediation project

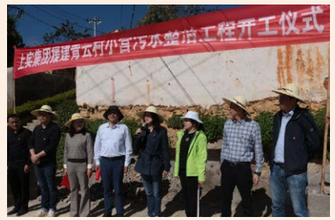
A new sewage collection system is planned to be built in the village camp under the Qingyun Village Committee. The collected sewage will be returned to the fields as irrigation water after treatment through an artificial wetland. After the project is completed and put into use, 54 households with 186 villagers and all teachers and students of Qingyun Primary School will benefit directly.

Rural schooling

We continue to pay attention to the quality of learning and life in local schools and have invested over RMB 40,000 to improve the living and learning conditions of local students.

Consolation for families in need

We donated money and materials to families and students in need in Qingyun Village, as well as birthday greetings for the elderly aged 80 or above.



Sewerage remediation project commencement ceremony

Donating funds to Qingyunwan Primary School

Celebrating birthday for the elderly aged 80 or above in Qingyun Village

Case Study

- The Northeast BU involved in rural support organised by the Heilongjiang Federation of Industry and Commerce and donated RMB 1 million.
- The South BU donated RMB 550,000 to the Shanghai Charity Foundation for a comprehensive assistance project in Chongming District, Shanghai.
- Yiyang Water Supply Co., Ltd. of North BU participated in the poverty alleviation through consumption in Anhua County. The project company spent RMB 12,000 to purchase rice produced in Anhua County.
- The East BU also purchased RMB 86,900 worth of products through the Paired Assistance Life Gallery and directly-managed shops to support the construction of villages in Yunnan and Xinjiang.

Project companies participated in poverty alleviation programs

Case Study

Weifang Hanting Water Supply Project of North BU improved the security of rural drinking water by upgrading information technology and optimising water supply service mechanisms, which contributed to the rural revitalisation strategy. During the Reporting Period, the project company upgraded and renovated rural pipeline networks, managed urban and rural water supply in a granular manner, and upgraded the revenue system for rural water supply. The measures have significantly improved the project company's management level and service efficiency. By the end of the Reporting Period, Weifang Hanting Water Supply Project has established 37.43 kilometers of pipelines and 13 water pressure monitoring spots, ensuring the stability and safety of rural water supply.

Pipelines construction length

37.43 kilometers

Number of water pressure monitoring spots set **13**

Appendix

Independent Assurance Statement

To SIIC Environment Holdings Ltd.:

CECEP (HK) Advisory Company Limited ("CECEPAC (HK)" or "We") has been engaged by SIIC Environment Holdings Ltd. ("SIIC Environment") to conduct an independent assurance on SIIC Environment's 2021 Sustainability Report ("Sustainability Report"). This independent assurance statement applies to the related information included within the scope of work described below.

I.SIIC Environment's Responsibility

SIIC Environment is responsible for providing the information and documents required by CECEPAC (HK) to conduct the assurance, and ensuring that all relevant documents, information and data provided are true and reliable. SIIC Environment is also responsible for implementing relevant internal control procedures to ensure that the contents of the Sustainability Report are free from material misstatement, whether due to fraud or error.

II.Assurance Provider's Responsibility

CECEPAC (HK) is responsible for conducting evidence review and other procedures that we deem necessary based on the Sustainability Report and related information provided. This independent assurance statement applies solely to the Sustainability Report in the specified scope, expresses a conclusion on the assurance work, and does not serve any other intents or purposes.

III.Independence and Competence

CECEPAC (HK) was not involved in collecting and calculating the data, or in the development of the Sustainability Report. CECEPAC (HK)'s assurance activities are independent from SIIC Environment. The assurance team of CECEPAC (HK) is composed of experienced consultants in the industry and has extensive experience in conducting assurance work.

IV.Assurance Scope

- The accuracy and reliability of information and management system included in the Sustainability Report for the reporting period from January 1, 2021, to December 31, 2021;
- Evaluating the suitability of SIIC Environment's stakeholder engagement and materiality assessment process;
- Evaluating the collection, aggregation, analysis, and review process of the data included in the Sustainability Report;
- Evaluating the reporting process of the information included in the Sustainability Report;
- Excluded from the scope of our work is any assurance of information relating to:

  Activities outside the defined assurance period

  Positional statements (statements of beliefs, goals, future intention and future commitment) of SIIC Environment

  Financial data and information audited by an external auditor

V.Methodology

As part of its independent assurance, CECEPAC (HK) undertook the following activities:

- Conducting interviews[1] with SIIC Environment's sustainability management and other personnel involved in the preparation and provision of the content and information in the Sustainability Report;
- Review of documentary evidence provided by SIIC Environment;
- Assessment of data and information collection and management systems;
- Evaluating the quality of reporting and the basic documentation provision, procedures and capabilities to support performance with reference to the principles of Inclusivity, Materiality, Responsiveness and Impact of the AA1000 Assurance Standard v3 ("AA1000AS v3");
- Performing other procedures we deemed necessary.

The conclusions within the assurance were based upon the assumption that the information provided by SIIC Environment to CECEPAC (HK) was complete and accurate.

VI.Conclusions

The Sustainability Report compiled by SIIC Environment objectively reflects the company's sustainability management status, practice and achievements in 2021. The information in the report is reliable and objective, and CECEPAC (HK) found no systematic or substantial errors. With reference to the principles of Inclusivity, Materiality, Responsiveness and Impact in the AA1000AS V3, our conclusions are detailed as follows:

- Inclusivity

SIIC Environment has identified key stakeholders, including Shareholders and Investors, Employees, Customers, Business Partners and Suppliers, Industry Associations and NGOs, Local Communities and the Public, Media, Government and Regulators. Regular communication with the key stakeholders is carried out in various way to understand their expectations and concerns. On this basis, SIIC Environment has formulated policies in consideration of key stakeholders' expectations and concerns.

- Materiality

Based on the expectations and concerns of key stakeholders, SIIC Environment has identified and disclosed major sustainable development related issues through appropriate methods based on its own industry characteristics, legal and regulatory requirements, and outward economic and social impacts.

- Responsiveness

Through the Sustainability Report, SIIC Environment has disclosed corporate sustainability strategies, management systems, management key points, key stakeholder participation activities as well as major sustainable development related issues to respond to key stakeholders.

- Impact

Through the Sustainability Report, SIIC Environment has disclosed that it closely monitors and measures how its corporate behaviour affects various stakeholders, and it is being responsible for its impacts.

CECEP (HK) ADVISORY COMPANY LIMITED
中國節能綠信(香港)咨詢有限公司

May 29, 2022

Hong Kong, China

[1]Due to the COVID-19 situation and other factors, the Assurance Engagement was conducted through online means and interviews were conducted over the phone or online meetings.

Hong Kong Stock Exchange ESG Reporting Guide Content Index

General Disclosures and Key Performance Indicators (KPIs)	Description	Relevant Section	Page Number
Environmental			
Aspect A1：Emissions			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to air and greenhouse gas emissions, discharges into water and land, and generation of hazardous and non-hazardous waste.	Promoting Green Development:Emissions and Waste Management	28
KPI A1.1	The types of emissions and respective emissions data.	Promoting Green Development:Enviromental Performance Data	36-42
KPI A1.2	Direct (Scope 1) and energy indirect (Scope 2) greenhouse gas emissions (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Promoting Green Development:Enviromental Performance Data	36
KPI A1.3	Total hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Promoting Green Development:Enviromental Performance Data	36
KPI A1.4	Total non-hazardous waste produced (in tonnes) and, where appropriate, intensity (e.g. per unit of production volume, per facility).	Promoting Green Development:Enviromental Performance Data	36
KPI A1.5	Description of emission target (s) set and steps taken to achieve them.	Promoting Green Development:Emissions and Waste Management	28-30
KPI A1.6	Description of how hazardous and non-hazardous wastes are handled, and a description of reduction target (s) set and steps taken to achieve them.	Promoting Green Development:Emissions and Waste Management	31-32
Aspect A2：Use of Resources			
General Disclosure	Policies on the efficient use of resources, including energy, water and other raw materials.	Promoting Green Development: Resource Consumption Management	33
KPI A2.1	Direct and/or indirect energy consumption by type (e.g. electricity, gas or oil) in total (kWh in '000s) and intensity (e.g. per unit of production volume, per facility).	Promoting Green Development: Resource Consumption Management	37
KPI A2.2	Water consumption in total and intensity (e.g. per unit of production volume, per facility).	Promoting Green Development:Enviromental Performance Data	37
KPI A2.3	Description of energy use efficiency target (s) set and steps taken to achieve them.	Promoting Green Development: Resource Consumption Management	33
KPI A2.4	Description of whether there is any issue in sourcing water that is fit for purpose, water efficiency target (s) set and steps taken to achieve them.	Promoting Green Development: Resource Consumption Management	33-35
KPI A2.5	Total packaging material used for finished products (in tonnes) and, if applicable, with reference to per unit produced.	Not Applicable (the Company's business activities mainly involve providing services and do not involve products)	
Aspect A3：The Environment and Natural Resources			
General Disclosure	Policies on minimising the issuer's significant impact on the environment and natural resources.	Promoting Green Development:Enviromental Management	23
KPI A3.1	Policies on minimising the issuer's significant impacts on the environment and natural resources.	Promoting Green Development:Enviromental Management	23

General Disclosures and Key Performance Indicators (KPIs)	Description	Relevant Section	Page Number
Aspect A4：Climate Change			
General Disclosure	Policies on identification and mitigation of significant climate-related issues which have impacted, and those which may impact, the issuer.	Promoting Green Development:Responding to Climate Change	23
KPI A4.1	Description of the significant climate-related issues which have impacted, and those which may impact, the issuer, and the actions taken to manage them.	Promoting Green Development:Responding to Climate Change	23-27
Social			
Aspect B1：Employment			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to compensation and dismissal, recruitment and promotion, working hours, rest periods, equal opportunity, diversity, antidiscrimination, and other benefits and welfare.	Protecting Employee Rights:Employment Management	45-46
KPI B1.1	Total workforce by gender, employment type (for example, full-or part-time), age group and geographical region.	Protecting Employee Rights:Employment Management	46
KPI B1.2	Employee turnover rate by gender, age group and geographical region.	Protecting Employee Rights:Employment Management	46
Aspect B2：Health and Safety			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to providing a safe working environment and protecting employees from occupational hazards.	Protecting Employee Rights:Safety and Occupational Health	47
KPI B2.1	Number and rate of work-related fatalities occurred in each of the past three years including the reporting year.	Protecting Employee Rights:Safety and Occupational Health	49
KPI B2.2	Lost days due to work injury.	Protecting Employee Rights:Safety and Occupational Health	49
KPI B2.3	Description of occupational health and safety measures adopted, and how they are implemented and monitored.	Protecting Employee Rights:Safety and Occupational Health	50
Aspect B3：Development and Training			
General Disclosure	Policies on improving employees' knowledge and skills for discharging duties at work. Description of training activities.	Protecting Employee Rights:Training and Development	52
KPI B3.1	The percentage of employees trained by gender and employee category (e.g. senior management, middle management).	Protecting Employee Rights:Training and Development	53
KPI B3.2	The average training hours completed per employee by gender and employee category.	Protecting Employee Rights:Training and Development	53
Aspect B4：Labour Standards			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to preventing child and forced labour.	Protecting Employee Rights:Employment Management	45
KPI B4.1	Description of measures to review employment practices to avoid child and forced labour.	Protecting Employee Rights:Employment Management	45
KPI B4.2	Description of steps taken to eliminate such practices when discovered.	Protecting Employee Rights:Employment Management	45

General Disclosures and Key Performance Indicators (KPIs)	Description	Relevant Section	Page Number
Aspect B5：Supply Chain Management			
General Disclosure	Policies on managing environmental and social risks of the supply chain.	Adhering to Quality Assurance:Supply Chain Management	20
KPI B5.1	Number of suppliers by geographical region.	Adhering to Quality Assurance:Supply Chain Management	20
KPI B5.2	Description of practices relating to engaging suppliers, number of suppliers where the practices are being implemented, how they are implemented and monitored.	Adhering to Quality Assurance:Supply Chain Management	20
KPI B5.3	Description of practices used to identify environmental and social risks along the supply chain, and how they are implemented and monitored.	Adhering to Quality Assurance:Supply Chain Management	20
KPI B5.4	Description of practices used to promote environmentally preferable products and services when selecting suppliers, and how they are implemented and monitored.	Adhering to Quality Assurance:Supply Chain Management	20
Aspect B6：Product Responsibility			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to health and safety, advertising, labelling and privacy matters relating to products and services provided and methods of redress.	Adhering to Quality Assurance:Service Quality Management	17
KPI B6.1	Percentage of total products sold or shipped subject to recalls for safety and health reasons.	Not Applicable (the Company's business activities mainly involve providing services and do not involve products)	
KPI B6.2	Number of products and service related complaints received and how they are dealt with.	Adhering to Quality Assurance:Service Quality Management	18
KPI B6.3	Description of practices relating to observing and protecting intellectual property rights.	Adhering to Quality Assurance:Service Quality Management	14
KPI B6.4	Description of quality assurance process and recall procedures.	Adhering to Quality Assurance:Service Quality Management	17
KPI B6.5	Description of consumer data protection and privacy policies, how they are implemented and monitored.	Adhering to Quality Assurance:Service Quality Management	18
Aspect B7：Anti-corruption			
General Disclosure	Information on: (a) the policies; and (b) compliance with relevant laws and regulations that have a significant impact on the issuer relating to bribery, extortion, fraud and money laundering.	Responsible Operation:Anti-Corruption Management	13
KPI B7.1	Number of concluded legal cases regarding corrupt practices brought against the issuer or its employees during the reporting period and the outcomes of the cases.	Responsible Operation:Anti-Corruption Management	14
KPI B7.2	Description of preventive measures and whistle-blowing procedures, how they are implemented and monitored.	Responsible Operation:Anti-Corruption Management	13-14
KPI B7.3	Description of anti-corruption training provided to directors and staff.	Responsible Operation:Anti-Corruption Management	14
Aspect B8：Community Investment			
General Disclosure	Policies on community engagement to understand the needs of the communities where the issuer operates and to ensure its activities take into consideration the communities' interests.	Giving Back to the Community	59
KPI B8.1	Focus areas of contribution (e.g. education, environmental concerns, labour needs, health, culture, sport).	Giving Back to the Community	59
KPI B8.2	Resources contributed (e.g. money or time) to the focus area.	Giving Back to the Community	59

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