

# 2024 ENVIRONMENTAL, SOCIAL AND GOVERNANCE (ESG) REPORT

Tianjin Capital Environmental Protection Group Co., Ltd. H Share Stock Code: 1065 A Share Stock Code: 600874

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## About the Report

This Report is the ninth Environmental, Social, and Governance (ESG) Report (referred to as "the Report") released Report by Tianjin Capital Environmental Protection Group Co., Ltd.(referred to as "the Group"). The Report is published Description annually, focusing on disclosing the Group's management, practices, and performance in environmental, social, and governance aspects. The Report is available in both Chinese and English versions and has been uploaded to the website of The Stock Exchange of Hong Kong Limited ("the Exchange") for public access. In case of any discrepancies between the Chinese and English versions of this Report, the Chinese version shall prevail.

**Basis** of Compilation

This Report is prepared in accordance with the Environmental, Social, and Governance Reporting Guide (referred to as ESG Reporting Guide) set out in Appendix C2 of the Rules Governing the Listing of Securities on the Stock Exchange of Hong Kong Limited (referred to as "Listing Rules"), as well as the requirements of the Shanghai Stock Exchange's Self-Regulatory Guidelines for Listed Companies No. 14 - Sustainable Development Reporting. It also references the Global Sustainable Development Standards Committee (GSSB) issued *GRI Standards* (2021 edition) and the United Nations Sustainable Development Goals (SDGs). The Report strictly adheres to the principle of "comply or explain" as outlined in the ESG Reporting Guide. The section on climate change is prepared in accordance with "Part D: Climate-related Disclosures" in the Exchange's Environmental, Social, and Governance Reporting Code.

Scope and Boundary of the Report

Unless otherwise specified, the data in this Report covers the period from January 1, 2024, to December 31, 2024 (hereinafter referred to as "the reporting period"), with some information extending beyond this period. The scope of the Report includes Tianjin Capital Environmental Protection Group Co., Ltd.and its subsidiaries (referred to collectively as "the Group," "we," or "the Company"). The term "Tianjin Capital Environmental Protection" is used to refer to the parent Company of the Group.

The Group's core businesses include wastewater treatment, water supply, recycled water, new energy for cooling and heating, sludge disposal, and hazardous waste treatment. The environmental and social key performance indicators ("KPIs") and other relevant statistical information cover the Group's directly operated sites within the aforementioned business scope. These businesses and operational sites are financially significant and operationally impactful to the Group, over which the Group exercises direct operational control. The Group will continue to enhance the internal data collection systems and, where feasible, expand the scope of reporting disclosures further.

The abbreviations of some subsidiary and holding companies mentioned in the Report are as follows: Tianjin Zhongshui Co., Ltd. Zhongshui Company Tianjin Caring Technology Development Co., Ltd Caring Company Tianjin Tianchuang Green Energy New Energy Technology Co., Ltd. Green Energy Company Tianjin Tianchuang Environmental Technology Co., Ltd. Tianchuang Environmental

Main Business Sectors	Regional Companies	Project Names
		Xianyang Road Wastewater Treatment Plant (New Plant/Old Plant)
		Tianyu Science and Technology Park Wastewater Treatment Plant of Tianjin Jinghai Chuangye Water Co., Ltd.
		Beicang Wastewater Treatment Plant
		Anguo Wastewater Treatment Plant
	Beijing-Tianjin-Hebei	Jinggu Wastewater Treatment Branch
	Regional Company	Dasi Wastewater Treatment Plant
		Dongjiao Wastewater Treatment Plant
	Yellow River Basin Regional Company	Jinning Wastewater Treatment Plant
		Zhenxing Wastewater Treatment Plant
Water Treatment		Dalian Dongfang Chunliuhe Water Quality Purification Co., Ltd.
and Water Resources		Wendeng Chuangye Water Co., Ltd.
Utilization		Xi'an Chuangye Water Co., Ltd.
		Inner Mongolia Bayannao'er Chuangye Water Co., Ltd.
		Jiuquan Chuangye Water Co., Ltd.
		Karamay Tianchuang Water Co., Ltd.
		Karamay Chuanghuan Water Co., Ltd.
		Linxia City Chuangye Water Co., Ltd.
		Fuyang Chuangye Water Co., Ltd.
	Marata Dian Dalta	Hanshan Chuangye Water Co., Ltd.
	Yangtze River Delta Regional Company	Jieshou Chuangye Water Co., Ltd.
		Hangzhou Tianchuang Water Co., Ltd.
		Deqing Chuanghuan Water Co., Ltd.

Main Business Sectors	Regional Companies	Project Names				
		Huoqiu Chuangye Water Co., Ltd.				
		Baoying Chuangye Water Co., Ltd.				
	Yangtze River Delta	Anhui Tianchuang Water Co., Ltd.				
	Regional Company	Hefei Chuangye Water Co., Ltd.				
		Yingshang Chuangye Water Co., Ltd.				
		Hanshan Chuanghuan Water Co., Ltd.				
		Wuhan Tianchuang Environmental Protection Co., Ltd.				
		Chibi Chuangye Water Co., Ltd.				
		Xianning Chuangye Water Co., Ltd.				
		Honghu Chuangye Water Co., Ltd.				
	Guangdong-Hong Kong- Macao Greater Bay Area	Honghu Tianchuang Environmental Protection Co., Ltd.				
	Regional Company	Honghu Tianchuang Water Co., Ltd.				
Water Treatment and Water Resources		Changsha Tianchuang Environmental Protection Co., Ltd.				
Utilization		Changsha Tianchuang Water Co., Ltd.				
		Hanshou Tianchuang Water Co., Ltd.				
		Enshi Chuanghuan Water Co., Ltd.				
	Southwest Regional Company	Guizhou Chuangye Water Co., Ltd.				
		Qujing Chuangye Water Co., Ltd.				
		Huize Chuangye Water Co., Ltd.				
		Weng'an Chuanghuan Water Co., Ltd.				
		Shibing Guichuang Water Co., Ltd.				
		Jinggu Reclaimed Water Plant				
		Xianyang Road Reclaimed Water Plant (New Plant/Old Plant)				
	Zhongshui Company	Dongjiao Reclaimed Water Plant				
		Zhangguizhuang Reclaimed Water Plant				
		Beichen Reclaimed Water Plant				
		Shandong Chuangye Environmental Protection Technology Development Co., Ltd.				
Solid Waste and Sludge		Shandong Tanchuang Environmental Protection Technology Co., Ltd.				
Sector	Caring Company	Jiangsu Yonghui Resources Utilization Co., Ltd.				
		Gaoyou Kangbo Environmental Resources Co., Ltd.				
		Jinnan Sludge Plant of Caring Company				
		Tianjin Cultural Center Energy Station				
Carbon Peaking and Carbon Neutrality and	Green Energy Company	Binhai Cultural Center Energy Station				
New Energy Sector	Green Lifergy company	Heiniuchengdao Energy Station				
5,7		Hesheng Mansion Heating Station				

This Report follows the reporting principles in the "ESG Reporting Guide" of the Exchange, including:

Reporting Principles

Source of

Reliability Assurance

and

and

Information

Importance: We have identified the important stakeholders and actively established normalized communication channels with each of them. We identify and assess key ESG issues by distributing substantive ESG issue surveys to stakeholders, rank their importance, and address stakeholders' concerns in the Report.

Quantifiability and Consistency: The Report discloses key quantitative performance indicators and provides disclosure on the standards, methods, or calculation tools used. The Report maintains consistency in the statistical and disclosure methods of the same indicators across different reporting periods; any changes in statistical and disclosure methods have been fully explained in the Report's notes.

Balance: We identify and elaborate on the achievements and challenges faced by the Group.

The information in the Report is sourced from internal data of the Group, investigation and interview records, and relevant documents. The Board of Directors of the Group (hereinafter referred to as the "Board," with its members as "Directors") commits that the Report does not contain any false or misleading information and is responsible for its truthfulness, accuracy, and completeness. Unless otherwise specified, the currency type and amounts related to the data in the Report are denominated in Renminbi (RMB).

This Report was approved by the Board of Directors on March 21, 2025, following a review by the management. Deliberation Approval

## Entering the Capital **Environmental Protection**

## Introduction of the Group

Tianjin Capital Environmental Protection Group Co., Ltd.is the first domestic state-owned holding Company listed in both Shanghai and Hong Kong with Wastewater Treatment as the main business. Since establishment, the Company has been focusing on the wastewater treatment sector, winning the title of "Top Ten Influential Enterprises in the Water Industry" for twenty consecutive years and being listed in the "Top 50 Revenue of Chinese Environmental Enterprises" (formerly known as "Top 50 Chinese Environmental Enterprises") for seven consecutive years.

The Group has always closely monitored and thoroughly analyzed the development trends of the domestic and international industries, accurately grasping the pulse and trends of industry development. Based on this, we aim to upgrade the ecological industry of water environment governance with Wastewater Treatment as the core, and layout comprehensive environmental governance industries to become a top professional service provider in the domestic water treatment and water resources utilization field. Our overall strategic objectives include entering the forefront of China's water industry, being among the "Top 20 Environmental Enterprises in China", and constructing a comprehensive and multi-level environmental governance service system to transform into a comprehensive environmental service provider.

Currently, the Group has established a business layout of "One Core and Two Wings", creating a commercial model of "Five-dimensional Integration" (wastewater + recycled water + wastewater source heat pump + sludge + photovoltaic energy storage). The Group is dedicated to promoting various product combinations such as factory-grid integration, integrated water supply and drainage, urban-rural integration, and solid waste integration based on the concept of "one project, one city". This approach aims to achieve integrated resource cycling and provide a pathway for enterprises to transform into comprehensive environmental service providers, contributing actively to the development of ecological civilization.



- Hot and cold energy supply business, energy storage and virtual power plant
- Business scope: including hot and cold energy supply, energy storage, hydrogen energy, virtual power plant and other businesses

## Honors in 2024



## Interpret 2024 with Numbers

## Refine Governance and Stabilize the Foundation of Capital

- Held 24 the Board of Directors' meetings, with a Director attendance rate of 100%
- the training, and a total of 28 class hours.
- There were **()** records of litigation or concluded cases related to embezzlement cases.

### Drive Capital Development through Green and Low-Carbon

- The volume of wastewater treated was 1,706,278,299 cubic meters.
- The volume of reclaimed water sold externally was approximately 91,13 million cubic meters.
- The volume of tap water sold externally was approximately 58,46 million cubic meters.
- The amount of heat sold externally was approximately 185,452 megawatt-hours.
- The amount of cooling capacity sold externally was approximately 59,976 megawatt-hours.
- A total of 138,900 tons of hazardous waste and 762,000 tons of sludge were disposed of harmfully.

### Value People and Jointly Build the Future of Capita

- The number of employees is 2,312.
- The number of lost workdays of employees is ().

## Led by Technology to Forge Capital Quality

• As of the end of the reporting period, a cumulative total of **213** valid patents and **34** software copyrights have been obtained.

### Join Hands and Contribute Capital Efforts

- The number of complaints received regarding products and services is ().
- The Group carried out approximately **876** hours of volunteer service.
- Completed the issuance of "Green + Rural Revitalization" dual-labeled bills worth 500 million yuan.
- Purchased poverty alleviation products worth 160,200 yuan.

• Conducted 4 legal compliance training sessions, with a cumulative total of more than 300 person-times participating in

- Held 9 workers' congresses.
- The employee satisfaction rate is **100%**.

Topic

Promote arbon N 0 Õ nisr Q 0 **Green Development** eutrality Б th D D Strategy rbon Peaking to Jointly D no

In the global wave of green and low-carbon transformation, driving sustainable development has become an inevitable choice for the long-term development of enterprises. The Group actively responds to the "Carbon Peaking and Carbon Neutrality" strategic goal, upholding the concept of "technology empowerment, innovation-driven, and green leadership," integrating ecological civilization construction into the overall development. To this end, we have established the Technology Product Center (Carbon Peaking and Carbon Neutrality Research Center) as the core hub for technological innovation and practice, to help achieve green and low-carbon transformation and upgrading. The center aims to promote coordinated efficiency in pollution reduction and carbon reduction, providing solid support for green development through resource integration, technological empowerment, and market-oriented operations.

In 2024, the Group focused on green and low-carbon transformation, advancing technological innovation and practices in pollution reduction and carbon reduction. It closely followed domestic and international industry trends in science and technology, independently developed and integrated a batch of new technologies, processes, and equipment. Through extensive technical services, the Group significantly enhanced operational efficiency and industry competitiveness.

# Breakthrough Achievement: Technological Application in Practice

#### ( 01 ) Technological Breakthroughs in Carbon Monitoring Sector

In September 2023, Jin-Gu Wastewater Treatment Plant and Xianyang Road Wastewater Treatment Plant were successfully selected for the *Pilot Work Plan for Deepening Carbon Monitoring and Assessment*, becoming pilot units in the waste treatment industry. From December 2023 to December 2024, the Group's Technology Product Center utilized independently developed greenhouse gas online monitoring equipment to systematically monitor the greenhouse gas emissions from the aerobic tanks of the Jin-Gu Wastewater Treatment Plant and Xianyang Road Wastewater Treatment Plant. This monitoring enabled the Group to understand emission patterns, develop auxiliary equipment such as gas collection hoods and static boxes, and propose a method for calculating greenhouse gas emission fluxes applicable to urban wastewater treatment plants, thereby providing valuable technical support for carbon monitoring in the domestic industry.

### (02) Successful Exploration of Sludge Resource Utilization

The Jinnan Sludge Plant of Caring Company Treatment Plant has achieved energy self-sufficiency through the "high-concentration anaerobic digestion + plate and frame dewatering + thermal drying" process. The plant meets its heat source demand with self-produced biogas, saving approximately 10,000 tons of carbon emissions annually. This demonstrates significant achievements in sludge resource utilization and carbon reduction, providing an exemplary model for resource circulation and low-carbon development in the industry.

Looking ahead, the Group will continue to integrate internal and external resources, improve the construction of the technology product center, promote the project-based and market-oriented transformation of technological achievements, and further enhance the synergy level of the industrial chain. Through multidimensional and cross-domain innovative applications, we will provide core technological support for achieving green and high-quality development, help build a resourcesaving and environmentally friendly society, and jointly create a new chapter in green and low-carbon transformation.



Stationary greenhouse gas on-line monitoring site

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3



▲ Greenhouse gas collector for on-line monitoring





▲ Mobile greenhouse gas on-line monitoring equipment



▲ Stationary greenhouse gas on-line monitoring equipment



## Refine Governance and Stabilize the Foundation of Capital

We firmly uphold the leadership of Party building. By optimizing the corporate governance structure and enhancing ESG governance capabilities, we have established a governance system that integrates standardization and flexibility. This system effectively supports the high - quality development of the enterprise.

12 13

18

Benchmarking the United Nations Sustainable Development Goals (SDGs)



### Material issues

Corporate Governance · ESG Governance
 Internal Cont<u>rol and Risk Management</u>

Business Ethics · Anti-corrug
Investor Relations Management

· Fconomic Performanc

Adhering to Party Building Leadership Enhancing Corporate Governance ESG Governance

## Adhering to Party Building Leadership

The Group adheres to the guidance of Xi Jinping Thought on Socialism with Chinese Characteristics for a New Era, thoroughly implements the overall requirements for Party building in the new era, and continuously promotes the deep integration of Party building work with enterprise development. By 2024, we will strengthen the leadership of Party building, actively carry out the construction of Party building brands and Party organizations.

In accordance with the work requirements of the Party Committee of the Tianjin Urban Infrastructure Construction Investment Group Co., Ltd., we have focused on the strategic layout of "One Core and Two Wings" and formulated the *Key Points of Party Building Work of Tianjin Capital Environmental Protection Group Co., Ltd.for 2024,* specifying 75 specific measures under 25 categories to provide a fundamental guideline for the year-round Party building work. Simultaneously, to strengthen the construction of Party conduct and integrity, we have detailed the main responsibilities of comprehensively governing the Party strictly and improved the system and mechanisms of comprehensively governing the Party strictly.

The Group is advancing the establishment of a Party building brand framework to promote a comprehensive improvement in the level of Party building. We have inherited the "Three Integration and One Service" Party building brand of Tianjin Urban Infrastructure Construction Investment Group Co., Ltd., and combined it with our own "One Core and Two Wings" business layout and "Five-dimensional Integration" business model. Through top-level design, matrix construction, and precise creation of a "three-step" approach, we have established the Party building main brand as "Red Leadership Tianjin Capital, Joint Success," creating three distinctive "Tianjin Capital +" segments. We are comprehensively promoting the "Six Convergences" to build a Party building framework of "1+3+6".

To strengthen ideological foundations, the Group optimizes the education and training mechanism for Party members and systematically promotes Party discipline learning and education. The Group implements a hierarchical and customized training approach, adopting a "Party member ordering, Party committee placing orders" model. It extensively collects and precisely matches the training needs of Party members to develop a Party member education and training plan. In 2024, the Group conducted four sessions of off-the-job centralized training for Party members, covering over 300 Party members. The Group delves into Party discipline learning and education, formulating the *Arrangements for Conducting Party Discipline Learning and Education* to clarify the goals and tasks of grassroots Party organizations. Through various forms such as thematic exchanges and discussions, "Three Meetings and One Lesson," and viewing thematic exhibitions, the Group promotes the internalization of Party discipline learning and education. By integrating political theory learning with business training, implementing on-site learning methods, and moving Party member training to the front-lines of business operations, the Group achieves a deep integration of Party building and business operations. This comprehensive approach enhances the quality of the Party member team, supports high-quality development, and facilitates the in-depth fusion of Party building and business operations.

build a Party

building

framework

#### 2024

the Group conducted **4** sessions of off-the-job centralized training for Party members, covering over **300** Party members.

## **Enhancing Corporate Governance**

# Standardized governance

The Group has established a sound corporate governance structure, with core decision-making bodies such as the shareholders' meeting, the Party Committee, the Board of Directors, and the Board of Supervisors. The operations are strictly regulated in accordance with the requirements of the Company Law of the People's Republic of China, the Guidelines on Corporate Governance of Listed Companies, relevant laws and regulations of the China Securities Regulatory Commission, and the internal Company Articles of Association. Shareholders' meetings, Board of Directors' meetings, and Board of supervisors' meetings are convened in compliance with the requirements of the Rules of Procedure for Shareholders' Meetings, Rules of Procedure for Board of Directors Meetings, and Rules of Procedure for Board of Supervisors Meetings. The management of the Group is responsible for the daily operational management of the Company in accordance with the Rules of Procedure for General Manager, under the authorization and leadership of the Board of Directors. The Board of Directors has established committees including the Audit and Risk Control Committee, the Remuneration and Assessment Committee, the Nomination Committee, and the Strategic and ESG Committee, responsible for the specialized affairs management of the Company. In 2024, a total of 24 Board meetings were convened with a 100% attendance rate of Directors.

2024

a total of **24** Board meetings were convened with a **100%** attendance rate of Directors.

The Company values and rigorously implements the principle of Board diversity. Board members exhibit diversity across various dimensions such as gender, age, professional background, industry experience, and cultural background to ensure the scientific and comprehensive nature of decision-making. As of the end of the reporting period, the Board consists of 9 Directors, including 3 executive Directors, 3 independent non-executive Directors, and 3 non-executive Directors, with 2 female Directors among the Board members.





# Compliant operation

The Group is dedicated to the continuous enhancement of its compliance management system. It focuses on optimizing internal control and risk management mechanisms, while vigorously strengthening institutional development and dynamic risk control. Simultaneously, the Group is committed to cultivating a culture of integrity. Through these efforts, the Group aims to ensure the stable advancement of the Company.

## Establishment of internal control system

The Group has established the *Internal Control Construction Management System* to standardize internal control construction work. We continuously improve the internal control system. During the reporting period, we systematically updated and formed the "Three Ones" work results, which include "a set of system compilation, a set of internal control manuals, and a set of process forms." Furthermore, by issuing the *Normative Statements on the Applicability of Internal Control System of the Group Company and the Requirements for the Construction of Systems for its Subsidiaries*, we standardized the institutional construction standards of the Group, enhancing the level of internal control precision management.

## Risk management

In 2024, the Group established an Audit and Risk Control Committee to enhance risk management functions, in addition to the existing Legal Construction Leadership Group and Compliance Management Committee. The Company conducted a risk identification exercise across 12 dimensions based on operational realities, resulting in the formulation of a *Risk Identification Checklist*. This document delineates criteria for defining significant and general risks, risk factors, mitigation measures, and advances dynamic risk management while implementing quarterly identification mechanisms. Furthermore, to proactively mitigate legal risks, the Company conducted six special risk assessments focusing on legal review, contract management, internal control,

#### 2024

conducted a risk identification exercise across **12** dimensions; conducted **6** special risk assessments; issuance of **3** risk advisory letters

#### During the reporting period

We held **4** compliance training sessions covering all management and business personnel of the Group, with a total of over **300** participants and **28** training hours.

To further enhance the internal control system, the Group has standardized the internal audit management system and rigorously implemented internal audit work. In 2024, based on the latest policies and actual work requirements, the Group formulated the *Audit Rectification Work Guidelines*, revised the *Internal Audit Management System, Internal Control Evaluation Management System, Internal Audit Work Guidelines, Internal Financial Review Work Guidelines,* and *Economic Responsibility Audit Management System.* A total of 26 audit projects were carried out, including financial internal control audits and internal control evaluations. Moreover, follow - up and rectification measures were taken for the problems identified during the audits, effectively enhancing the operational efficiency of the internal control system.

etc. These efforts led to the creation of risk and task lists, issuance of three risk advisory letters based on assessment outcomes, and successful achievement of the investigation goals of understanding the situation and implementing corrective actions.

To comprehensively enhance employees' risk prevention and control capabilities, the Group continuously strengthens legal compliance training. During the reporting period, we held four compliance training sessions covering all management and business personnel of the Group, with a total of over 300 participants and 28 training hours. This has laid a solid foundation for the improvement of compliance management levels.

#### Case

#### Promoting the Spirit of the Constitution and Strengthening Legal Awareness

To deepen the understanding and implementation of the spirit of the Third Plenary Session of the 20th Central Committee of the Communist Party of China, promote constitutional spirit, strengthen legal awareness, and enhance the understanding and application of the *Administrative Penalty Law of the People's Republic of China* within various project units of the Group, Tianjin Capital Environmental Protection Group Co., Ltd.organized lectures on constitutional studies and the *Administrative Penalty Law of the People's Republic of China* within various project units of the Group, Tianjin Capital Environmental Protection Group Co., Ltd.organized lectures on constitutional studies and the *Administrative Penalty Law of the People's Republic of China*. The focus was on analyzing typical environmental administrative penalty cases, revealing relevant legal risks, and conducting in-depth interpretations and discussions on how to respond to administrative penalties in a lawful and compliant manner.



## Clean construction

The Group strictly complies with relevant laws and regulations such as the *Anti-unfair Competition Law of the People's Republic* of *China* and the *Anti-money Laundering Law of the People's Republic of China*. The Group's Discipline Inspection Commission comprehensively promotes clean governance. We have established relevant systems such as the *Anti-fraud Management System*, *the Implementation Measures for Strengthening Supervision in Tianjin Capital Environmental Protection Group Co., Ltd.* and *the Working Methods for Responding to Opinions on Party Conduct and Clean Governance (Trial),* to regulate employees' professional behavior, resolutely eliminate bribery and other improper conduct, and foster a clean corporate environment. During the reporting period, the Group had no records of litigation or concluded cases related to corruption.

In order to vigorously promote the construction of a clean culture, we continuously strengthen the foundation of integrity through various forms such as setting up clean culture classrooms, publishing internal newsletters on clean culture, organizing exhibitions of works on the theme of clean culture, and implementing integrity risk prevention and control measures, creating a corporate environment of integrity and righteousness. In 2024, the Company issued 6 editions of the "Integrity Lecture Hall" and conducted 46 sessions of clean culture classrooms. Additionally, the Company dynamically updated the Integrity Risk Prevention and Control Manual for 2024, specifically formulating 4,972 targeted prevention and control measures, effectively weaving a tight integrity risk prevention and control network.

Case

#### Touring Exhibition of Clean Culture Works: "Advocate Integrity, Foster Cleanliness, Open New Frontiers"

In 2024, we organized the "Advocate Integrity, Foster Cleanliness, Open New Frontiers" exhibition on the theme of integrity culture. Through the mediums of painting and photography, we created over 130 diverse works on integrity culture. By promoting the

culture of integrity through various art forms, we have infused the spirit of integrity into various areas and processes of corporate management, thereby adding "integrity power" to the Company's high-quality development.



In order to strengthen anti-corruption and promote integrity, internally, the Group organizes comprehensive and strict governance of the Party warning education conferences, integrity education and learning activities, discipline and work style construction supervision and inspections. Externally, the Group signs integrity agreements with suppliers, advocates for a culture of clean cooperation, and clearly states that both parties are committed to creating a fair, just, and clean business environment. In 2024, the Group conducted anti-corruption training for Directors and employees, with an average training duration of 28 hours and 30 hours respectively.



blowers.

Conduct Enlarged Discipline Inspection Commission Meetings and Annual Discipline Inspection Work Meetings to thoroughly study the spirit of Xi Jinping's series of important speeches.

Organize discipline inspection cadres to visit the exhibition "Integrity in Tianjin" at the Tianjin Archives, strengthen their political capabilities and theoretical literacy, and promote the standardized construction of the discipline inspection

Organize the viewing of warning education films such as *Eliminating Moths in State-owned Enterprises* to enhance the awareness of discipline and rules and create a strong atmosphere of being honest and abiding by discipline.

Compile and issue warning education materials on typical cases of drunk driving and embezzlement of funds, and carry out special notifications to all subsidiary enterprises at all levels.

Formulate supervision plans at key festival nodes such as New Year's Day and Spring Festival, and carry out special pre-festival inspections. Our Discipline Inspection Office took multiple measures to firmly uphold the spirit of the Central Committee's eight-point decision. We sent 1,288 reminder text messages, conducted 116 supervision checks on on-duty work and related matters. Additionally, we randomly inspected the GPS driving tracks of 114 official vehicles both within the city and in other regions. Moreover, we organized 1,085 persontimes of cadres at and above the middle level, as well as full-time and part-time discipline inspection cadres, to carry out integrity self-examinations and make

The Group has established a sound whistleblowing management mechanism, actively ensuring unimpeded channels for reporting, and is committed to maintaining a fair and transparent corporate environment. We encourage reporting of any misconduct, violations, or other inappropriate behavior through various means such as email, hotline, and physical dropbox. Upon verification of the reported information, we will take corresponding measures based on the specific circumstances. Additionally, we have issued the *Implementation Measures for the Transfer of Problem Clues* to ensure standardized and procedural handling of reported cases, efficiently disposing of them in accordance with laws and regulations. The Group places great emphasis on whistle blower protection. It strictly keeps reported information confidential, prevents retaliation, and creates a secure reporting environment to fully safeguard the legitimate rights and interests of whistle

#### ESG Governance Framework

## Board statement

**FSG Governance** 

The Group has consistently placed a high premium on ESG initiatives. Actively embracing the new development concept featuring innovation, coordination, greenness, openness, and sharing, the Group incorporates the requirements of ecological and environmental protection as well as the concept of sustainable development into its development strategies and corporate governance procedures. By doing so, it effectively propels the high-quality development of the Company.

The Group's Board of Directors is responsible for comprehensive oversight of ESG matters and regularly reviews ESG-related objectives. In 2024, the Board convened four times on ESG- related issues, deliberating on the *2023 Environmental, Social, and Governance Report,* making decisions on establishing ESG management systems, and other related matters.

We continuously enhance and refine the ESG management mechanism to elevate the Company's overall ESG governance. In 2024, we strengthened ESG governance by enhancing the ESG governance framework. Moreover, considering the unique situation of the Company, we proactively interact with stakeholders to conduct a more in-depth assessment of our ESG risks. This entails re-identifying and reassessing the importance of ESG issues by distributing questionnaires to stakeholders.

## ESG governance framework

The Group regards ESG governance as a crucial pillar for enhancing core competitiveness and promoting highquality development. Actively integrating ESG principles into corporate management, the Group continuously enhances its ESG governance level. In 2024, the Group revised the *Rules of Procedure for the Strategic and ESG Committee* and established the *ESG Management System*, clarifying the ESG governance framework and responsibilities. A top-down ESG governance structure was implemented, with the Board of Directors serving as the highest decision-making body for ESG governance, fully responsible for the Company's ESG management. Under the Board of Directors, the Strategic and ESG Committee was established to conduct research and provide guidance on ESG management, reporting directly to the Board. Additionally, an ESG Working Leadership Group and Task Force were formed, consisting of senior management and relevant departments of the Group, responsible for overall coordination and organization of ESG-related matters.







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-making body for ESG managemer	nt work
ding ESG management work, be nd providing professional advice	ing accountable to the
prward suggestions related to the nance structure	e Company's ESG vision,
ne Company's annual ESG Report to s and opportunities related to susta	ainable development
ed decisions of the Board of Direct	ors
verall manner and organize the i	mplementation of ESG-
ny's medium- and long-term ESC	G development strategic
ance and risk assessment of ESG is:	sues
the preparation work of the Compa	ny's annual ESG Report
iG tasks	
SG issues	
mote work plans for specific ES	5G issues
e, review and analyze ESG-rela	ited data
nt of the Company's annual ES	G Report

## Stakeholder engagement

The Group has conducted a comprehensive and detailed analysis and identification of stakeholders based on the business characteristics and operational reality of the Company. The stakeholders of the Company are diverse and extensive, mainly including shareholders and investors, government and regulatory agencies, employees, peers, the public, and value chain partners. The Group is committed to establishing regular communication channels with all stakeholders, conducting effective communication, and maintaining close connections.

#### Major Shareholders and Communication Mechanisms

Stakeholders	Key Communication Channels	Concerned Issues
जिल्लाम् Government and Regulatory Authorities	Local projects Official document exchanges	Environmental management Pollutant emissions Addressing climate change Rural revitalization
Shareholders and Investors	Shareholders' meetings Annual reports and announcements Investor communication platforms The Group's official website	Economic performance Corporate governance Investor relations management ESG governance
Employees	Grievance channels Workers' congresses Performance evaluation meetings	Employment and labor standards Employee health and safety Compensation and benefits Employee training and development
Peers in the Industry	Industry forums Alliance meetings	Intellectual property protection Business ethics Innovation-driven
The Public	Participation in community activities User symposiums Visits and investigations on water safety	Community investment Customer service Ecosystem and biodiversity
Value Chain Partners	Meetings Negotiations of cooperation agreements	Supply chain management Clean technology opportunities Circular economy Product liability



and investors.

Furthermore, the Company has established the *Investor Relations Management System* to standardize investor relations management, maintain a good relationship between the Company and investors, and support the Company's high-quality development. In 2024, we further strengthened interaction and communication with investors by setting up an investor hotline to provide investors with convenient communication channels. Additionally, we regularly hold performance briefings to engage in direct dialogue with investors during on-site exchanges, leaving a positive impression on investors.

#### Case

In September 2024, the Group hosted the "Tianjin Area 2024 Community Grid Investor Education and 'Financial Education Promotion Month' - Enter Tianjin Capital Environmental Protection Activity". During the event, over 30 small and medium investors visited Tianjin Capital Environmental Protection's Dongjiao Wastewater Treatment Plant and the "Carbon Peaking and Carbon Neutrality" practice training base. During the interactive session, Niu Bo, the Secretary of the Board of Directors of the Company, stated that the Company is currently promoting the "Five-dimensional Integration "business model based on the "One Core and Two Wings" business layout and the "One Heavy, One Light, One Industry" business structure concept. This aims to provide inexhaustible power for green transformation and sustainable development. Simultaneously, the Company is actively developing new productive forces, leveraging the role of the "Dual Carbon" research and practice cooperation and results transformation platform. Efforts are being made to establish industry technological benchmarks for energy conservation, pollution reduction, and carbon reduction in the field of water treatment.

This event has established a sincere and effective communication bridge between investors and the Group, enabling investors to gain a more direct and comprehensive understanding of the Group.





The Group ensures transparency by promptly disclosing corporate governance, financial performance, and ESG-related information to investors and other stakeholders through means such as shareholder meetings, annual reports, announcements, and investor communication platforms. The Company has established and implemented an *Information* Disclosure System to provide institutional support for disclosure, ensuring the timeliness and accuracy of information dissemination and enhancing trust between the Company

#### Investors' Engagement with Capital Environmental Protection

## Analysis of Material Issues

The Group, based on its own circumstances, has identified 32 material ESG issues in accordance with the Environmental, Social and Governance Reporting Guide (the "ESG Guide" ) in Appendix C2 enclosed in the Rules Governing the Listing of Securities on the Main Board (the "Main Board Listing Rules" ) on The Stock Exchange of Hong Kong Limited (the "Stock Exchange") and by referencing domestic and international sustainable development standards and industry ESG topics. These issues have been assessed and ranked in terms of "financial importance" and "impact importance" across two dimensions.



#### Analysis of Key Issues







Governance

#### Anti-corruption

Economic Performance

#### **Business Ethics**

Corporate Governance

Internal Control and Risk Management

#### ESG Governance

Investor Relations Management



## **Drive Capital Development** through Green and Low-Carbon

As a significant participant in the environmental protection sector, the Group relies on a "One Core and Two Wings" business layout to gradually transform into a comprehensive environmental service provider through five major business development platforms, expanding the service scope. Simultaneously, the Company strengthens the own environmental and resource management, promotes resource conservation, advocates for green office practices, proactively addresses climate change, actively engages in biodiversity conservation, and contributes Capital efforts to ecological civilization construction.

Advancing Environmental Protection Business 26 28 Addressing Climate Change Implementing Green Operations 31

Benchmarking the United Nations Sustainable Development Goals (SDGs)



#### **Material issues**

## Advancing Environmental Protection Business

Based on the "One Core and Two Wings" business layout, the Group has established five major business development platforms, including the wastewater treatment and water resources business development platform, the Carbon Peaking and Carbon Neutrality and new energy business development platform, the solid waste resource utilization business development platform such as sludge treatment, the light asset business development platform, and the technology research and product incubation business development platform. The business covers various professional fields such as wastewater treatment, tap water supply, recycled water production and sales, new energy supply, sludge treatment, hazardous waste treatment, industrial wastewater treatment, environmental technology services, and sponge cities.

The Company strictly complies with environmental protection laws and regulations in China, such as the *Environmental Protection Law of the People's Republic of China,* the *Law of the People's Republic of China on the Prevention and Control of Environment Pollution Caused by Solid Waste,* the *Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution,* the *Water Pollution Prevention and Control Law of the People's Republic of China,* the *Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution,* and the *Law of the People's Republic of China on the Prevention and Control of Environmental Noise Pollution,* and the *Law of the People's Republic of China on the Prevention and Control of Soil Contamination.* The Group strictly adheres to national and local industry standards and provides environmental protection services to sixteen provinces, municipalities, and autonomous regions nationwide. We have obtained qualifications for second-level general contracting of electromechanical engineering construction, secondlevel general contracting of municipal public works, and second-level specialized contracting of building electromechanical installation engineering. We continue to enhance the construction of our own capabilities for the integrated services of "investment + construction + operation".

#### Consolidate "one core"

In the wastewater treatment business segment, the Group continuously expands the Wastewater Treatment capacity by leveraging advanced technology and extensive operational experience. In 2024, the Company focused on the main business of "one core " and actively expanded the Wastewater Treatment capacity by 155,000 tons per day. We continuously consolidate the markets outside our local area, injecting a continuous stream of impetus into the development of the enterprise with high-quality business growth.

During the reporting period, the Group successfully invested in and secured the transfer of the franchise rights for Phases II and III of the Wengan County Wastewater Treatment Plant, adding a capacity of 50,000 tons per day. This move further enhanced the strategic positioning in the Southwest market. Meanwhile, relying on our remarkable strength and professional solutions, we have successfully won the bids for several wastewater treatment projects, further contributing to the expansion of our Company's wastewater treatment capacity.

During the reporting period, the Group cumulatively treated 1,706,278,299 cubic meters of sewage, achieving a reduction of 52,700 tons of ammonia nitrogen pollutants, 376,000 tons of COD pollutants, 53,600 tons of total nitrogen pollutants, and 5,800 tons of total phosphorus pollutants. In the water resources utilization business, approximately 91.13 million cubic meters of reclaimed water and about 58.46 million cubic meters of tap water were sold externally. The quality of the effluent water meets the relevant standard requirements. These fully demonstrating our active efforts and remarkable achievements in the field of comprehensive water resources utilization.



## Strengthen the "Two Wings"

The Group continues to focus on the energy conservation and low-carbon field, deeply exploring high-quality projects with resource utilization as the core driving force, actively expanding the project layout of the "two wings". In 2024, we won bids for multiple projects including the entrusted operation of the Junliangcheng in Dongli District, Tianjin, and national clean energy projects, continuously expanding the new energy business map. We meticulously completed multiple single-dimensional and multi-dimensional technical solutions and steadily promoted project implementation in Tianjin and outside our local area. In the "water-light" linkage projects, significant breakthroughs were achieved: distributed photovoltaic power generation projects at the Beicang, Xianyang Road, Jinggu, and Dongjiao Wastewater Treatment Plants were fully connected to the grid, adding **6.9**MWp of photovoltaic power generation capacity; the self-owned water plant energy storage project - the Xi'an Beishi Bridge Wastewater Treatment Plant energy storage project was officially put into operation, successfully creating the first user-side energy storage benchmark project in Xi'an, setting a new industry standard.

In 2024, we cumulatively sold approximately **185,452** MWh of heat and **59,976** MWh of cooling capacity. At the same time, we focused on the disposal of organic solid waste such as sludge disposal and food waste, as well as livestock and poultry manure. We established a business development platform for sludge treatment and resource utilization. In 2024, we cumulatively disposed of **138,900** tons of hazardous waste and carried out harmless treatment of **762,000** tons of sludge. As a representative entity in the solid waste disposal segment, the Caring Company was awarded the honor of being a specialized, sophisticated, distinctive and innovative small and medium-sized enterprise in Tianjin, during the reporting period.

### Case

## Green Energy Company Successfully Completes Construction and Commissioning of Energy Storage Project

In 2024, the Xi'an Beishi Bridge Wastewater Treatment Plant, with a storage capacity of 1,725 kW/5,505 kWh, invested and constructed by a Green Energy Company, was successfully put into operation. This project represents the first benchmark project for customer-side energy storage in Xi'an City.

The project actively responds to the national *implementation opinions on promoting the coordinated enhancement of wastewater treatment, pollution reduction, and carbon reduction.* By installing a lithium iron phosphate battery energy storage system in the sewage treatment plant and taking advantage of the peak-valley electricity price difference in Xi'an to charge and discharge, the pressure on the

electricity load during peak hours of the power grid can be alleviated. This also improves the reliability of the power supply system of the sewage treatment plant and reduces system losses. Ultimately, it can lower the electricity costs in the sewage treatment process and reduce carbon emissions.

The project adopts a "self-use only" gridconnected mode, implementing a charging and discharging strategy twice daily. The energy storage system is connected to the 10kV distribution room of Xi'an Chuangye Water Co., Ltd., ensuring a reliable connection to the grid. The total capacity of the energy storage system is 5,505.024kWh, consisting of two energy storage battery container systems, with each container having an energy capacity of 2,752.512kWh.





## Addressing Climate Change

### Governance

In the face of the challenges posed by climate change, the fate of humanity is interconnected. The Group pays close attention to climate change and continuously strengthens its climate change management efforts. In 2024, we have responded to climate change-related issues in accordance with Part D: Climate-related Disclosures of the "Environmental, Social, and Governance Reporting Code" of the Exchange.

To address climate change, we have established a comprehensive management mechanism. The Board is fully responsible for integrating climate change into the Company's overall strategic layout. The Strategic and ESG Committee supervises and manages climate changerelated matters, including annually reviewing environmental, social, and governance reports that include the topic of "addressing climate change", identifying and assessing climate change-related opportunities and risks. The ESG Working Leadership Group and Task Force are responsible for implementing climate change-related work.

# Strategic and risk management

We actively respond to the strategic goal of "carbon peak and carbon neutrality", actively examining the climate-related risks and opportunities faced in our operational processes, incorporating climate-related risks into the Company's risk management system, and systematically analyzing the risks that climate change poses to the Group's project operations. In 2024, we have preliminarily identified the climate-related risks facing the Company and anticipate conducting a more comprehensive assessment of climate-related risks and opportunities that may impact the Group's business in the future.

In order to effectively address the various risks and challenges brought about by climate change, and to significantly reduce their potential impact on the Company's operations and development, the Group proactively explores the abundant opportunities in the green finance sector. By introducing green financial resources, the Group aims to enhance the operational efficiency of its equipment, actively engage in the research and development as well as expansion of new energy technology projects, and strengthen the monitoring and management of carbon emissions.

Risk Types	Risk Classification	Risk Example Description	Potential Financial Impact
	Extreme Weather	Climate change will lead to an increase in the frequency of extreme weather events such as typhoons, heatwaves, and floods, which will affect the operation of machinery and equipment and the work efficiency of employees.	The normal operation is affected, resulting in a decrease in operating revenue.
Physical Risk	Sea Level Rise	Sea level rise may trigger disasters such as storm surges and floods, directly impacting the infrastructure in coastal areas, causing equipment damage and factory buildings to be flooded, and leading to the interruption of Wastewater Treatment business.	Infrastructure damage will reduce operating income and increase maintenance and reconstruction costs.

	Policy and Legal Risk	China has committed to the "3060 Carbon Peaking and Carbon Neutrality" goals. The government introduces new policies to support low-carbon transformation, and our Group may be subject to restrictions on carbon emissions.	Due to the need to invest mo funds and technology for equipme upgrades and process improvemen compliance costs and operating cos will increase.
Transition Risk	Technological Risk	With the rise of emerging technologies such as big data, artificial intelligence, and the Internet of Things, the Group needs to invest more funds and manpower in technological research and development to enhance its competitiveness. In addition, due to the government's introduction of more stringent emission reduction policies, the Group needs to replace existing high-emission energy sources with lower-emission green energy sources.	Due to the need to invest more fun and manpower in technologic research and development, and the same time replace existing hig emission energy sources with lowe emission green energy source transformation costs and research a development costs will increase.
	Market Risk	During the operation of the Company's businesses such as wastewater treatment and new energy, a large amount of raw materials and energy, such as chemical agents and electricity, are consumed. Fluctuations in the prices of raw materials and energy will have a direct impact on the company's operations.	An increase in the prices of ra materials and energy will direc increase the Company's operati costs.
	Reputational Risk	Stakeholders are paying increasing attention to sustainable development information. If the Company cannot disclose relevant information in a timely, accurate, and complete manner, it may trigger speculation and doubts, thereby damaging the Company's reputation.	A damaged Company reputati will lead to a decrease in operati income.



### Indicators and targets

The Group responds proactively to China's government initiatives for Carbon Peaking and Carbon Neutrality by continuously reviewing the greenhouse gas emissions. In 2024, the Group calculated the greenhouse gas emissions: Scope 1 emissions were 7,019 tons of CO<sub>2</sub> equivalent, Scope 2 emissions were 401,831 tons of CO<sub>2</sub> equivalent, and Scope 3 emissions were 116 tons of CO<sub>2</sub> equivalent. To reduce emissions, the Group continuously explores "distributed photovoltaic projects + energy storage projects" in wastewater plants which are outside our local area. In 2024, the Group reduced emissions by approximately 14,895 tons of CO<sub>2</sub> equivalent through photovoltaic power generation. The Group is committed to reducing greenhouse gas emissions, will continue to monitor and record emissions, and plans to set specific targets in the future.

Scope 1 emissions were 7,019 tons of CO<sub>2</sub> equivalent

Scope 2 emissions were 401,831 tons of CO<sub>2</sub> equivalent

Scope 3 emissions were 116 tons of CO<sub>2</sub> equivalent

The Group reduced emissions by approximately 14,895 tons of CO<sub>2</sub> equivalent through photovoltaic power generation

### Case

Distributed Photovoltaic Power Generation Project at the Dongjiao Wastewater Treatment Plant Successfully Connected to the Grid

In December 2024, the distributed photovoltaic power generation project at the Dongjiao Wastewater Treatment Plant successfully achieved full capacity grid connection, adding another benchmark plant to the Group's " Five-dimensional Integration" model. The wastewater treatment scale of the Dongjiao Wastewater Treatment Plant is 600,000 tons per day, with a high-quality recycled water supply capacity of 50,000 tons per day, new energy cooling and heating service area of 58,000 square meters, photovoltaic installed capacity of 6.13 MWp, designed annual power generation of 6.5 million kWh, reducing carbon emissions by approximately 5,736 tons.



## **Implementing Green Operations**

## Environmental management

## Environmental management system

As an environmental service enterprise, we are well aware of the importance of environmental protection. We consistently uphold the concept of sustainable development, strictly adhere to environmental protection laws and regulations. And we follow the ISO 14001 environmental management system standard, enhancing our operational management and establishing a sound environmental management system, so as to reduce the adverse impact of our operations on the environment. The Company has developed management systems such as the "Quality, Environmental, and Occupational Health and Safety Management Manual of Tianjin Capital Environmental Protection Group Co., Ltd." "Environmental Protection Work Responsibility System", "Guidelines for Supervision and Assessment of Sludge Treatment and Disposal" and "Operational Management Standard" to oversee the environmental business operations and strengthen environmental management. In 2024, some of our Wastewater Treatment Plants have already passed the recertification of the ISO 14001 environmental management system.

In order to effectively address environmental risks, each of our project units has formulated emergency plans for sudden environmental incidents, which have been submitted to the local ecological and environmental management department for record-filing. We have established a management system for environmental emergency response, including organizational leadership, response and handling procedures, as well as personnel and material support. We have established a management system covering organizational leadership, handling and response, as well as personnel and material support for environmental protection emergency management. Each project unit conducts training and drills annually based on their respective emergency plans for sudden environmental incidents. In 2024, our project units conducted emergency drills or training activities for sudden environmental incidents, including:



Environmental education and training

Huoqiu Chuangye Water Co., Ltd. conducted a total of four emergency drills for sudden environmental incidents, namely emergency drills for abnormal inflow of ammonia nitrogen, desktop simulation for ferric chloride leakage, emergency drill for hazardous chemical leakage, and emergency drill for pressure vessel explosion.

Enshi Chuanghuan Water Co., Ltd. conducted training on hazardous waste leakage and emergency response plan drills, training and drills on emergency response for abnormal water quality in inflow and outflow water, as well as training on emergency response plans for wastewater pipeline accidents and tabletop exercises.

To effectively enhance employees' environmental awareness, environmental management has been incorporated into relevant projects and employees' performance evaluations, encouraging them to proactively focus on and actively practice environmental responsibilities in their daily work. Additionally, to further strengthen employees' environmental awareness, we regularly organize various environmental-themed training activities. The training content covers the interpretation of environmental-related laws and regulations, environmental protection technologies, products, and other aspects, helping employees implement environmental protection actions in practice.

The Changsha Tianchuang Water Co., Ltd. conducted flood prevention, confined space, and hazardous chemicals emergency drills.

#### Case Environmental Protection Training

In 2024, Yangtze River Delta Regional Company - Hefei Chuangye Water Co., Ltd., conducted environmental training for employees on topics including the status of water resources, wastewater treatment technologies, and water resource protection.



▲ Yangtze River Delta Regional Company - Hefei Chuangye Water Co., Ltd. Environmental Protection Training Activity

### **Emission management**

The Group has always upheld a strong sense of responsibility and mission, taking the protection of the ecological environment as the own duty. We strictly comply with environmental laws, regulations, and industry standards, control pollutant emissions in accordance with the requirements of the "Pollutant Discharge Permit", conduct online monitoring of various emissions, rigorously manage wastewater, waste, and exhaust gas emission, achieve emission compliance, and aim for zero major environmental pollution incidents. We are committed to reducing pollutant emissions and establish specific targets for reducing air pollutants and waste.

In terms of wastewater management, the biogas slurry and the water generated from the reduction of the Group's solid waste disposal project are all treated in the wastewater treatment plant and discharged after reaching the standard. Some of the treated wastewater from the wastewater treatment plant is reused to reduce wastewater discharge. For waste management, hazardous waste generated in various business processes is disposed of by qualified third-party units. The sludge generated by the wastewater treatment plant is transported by qualified third-party units following the principles of reduction, stabilization, harmlessness, and resource utilization to designated disposal sites for treatment. The domestic waste is handled by the local sanitation department. In 2024, the Company generated 29,888 tons of hazardous waste and 1,148,215 tons of non-hazardous waste.

During the operation of the Group, exhaust gas generated from the solid waste incineration business, the fixed equipment of sewage treatment plants, and the fuel consumption of vehicles. The emissions from solid waste incineration business mainly originate from the sludge treatment process and boiler flue gas emissions. Among them, the exhaust gas generated during the sludge treatment process is collected and sent to the biological filter deodorization device for treatment. After meeting the standards, it is discharged. All the boilers in the plant are retrofitted with low - nitrogen technology and then use low nitrogen burners. The flue gas generated meets the relevant emission standards before being discharged. The exhaust gas generated by the wastewater treatment plant is mainly treated by the biological deodorization process and then discharged after meeting the standards. Regarding the management of exhaust gas emissions from vehicle fuel consumption, we have formulated the "Administrative Regulations for Official Vehicles" and the "Operational Guidelines for Office Vehicle Management" to standardize vehicle use and reduce waste gas emissions.

### **Resource management**

### Water resources and material management

The Group primarily relies on two channels for water resources, municipal water supply, and self-supply. There have been no obstacles encountered in obtaining suitable water resources. Even so, we still regard the rational utilization of water resources as an important task and adopt various measures to advocate the concept of water conservation and reduce water resource consumption. The Group consistently monitors and records water consumption and plans to establish specific targets related to water resources. In 2024, our total water consumption was 9,837,907 tons.

#### Water conservation measures

- Introduce water-saving faucets and water-saving toilet systems;
- Post slogans promoting water conservation;
- Conduct water conservation publicity campaigns;
- Monitor water usage to detect any abnormal situations;
- Strengthen the recycling of water resources. For example, use

#### Case

#### Conducting Water Conservation Awareness Campaign

In 2024, the Yangtze River Delta Regional Company- Fuyang Chuangye Water Co., Ltd. utilized educational display boards on World Environment Day to promote water conservation knowledge, educating employees on water conservation and the importance of cherishing water resources. The Yellow River Regional Company conducts public outreach activities during environmental holidays such as China Water Week and World Water Day. This is achieved through methods such as printing promotional color pages and posters related to water conservation, loving water, and cherishing water, setting up consultation points, distributing proposals for water conservation, and giving on-site explanations, we not only promote self-learning among employees but also conduct publicity among the public, working together to save water resources.





 Yangtze River Delta Regional Company-Fuyang Chuangye Water Co., Ltd. Water Conservation Campaign

The materials used in our operation mainly include production chemicals such as raw materials like coagulants and disinfectants, as well as office paper. In order to reduce material losses, we continuously optimize the process, improve material management, and implement the 5R principles of replacement, reduction, reuse, recycling, and circulation. We monitor material losses to reduce waste. To lower the consumption of chemicals, each project unit regularly organizes tenders according to actual needs to screen out more efficient chemicals. We encourage double-sided printing to save the consumption of office paper. In 2024, we consumed approximately 16.06 tons of paper.

the high - standard tail water from the plant as industrial water or water for landscape and entertainment purposes. Or, after re - treatment, use it for municipal irrigation and cleaning. Also, use recycled water for preparing flocculants in the workshop and rinsing filter cloths;

• Regularly conduct detailed inspections of faucets and pipelines to promptly identify and repair potential water leakage issues.

Water-saving Promotion Campaign of Yellow River Regional Company - Inner Mongolia Bayannao'er Chuangye Water Co., Ltd.



### Energy management



Energy management has become a crucial element for enterprises and society to achieve green transformation. Our energy consumption mainly includes natural gas, gasoline, petroleum, liquefied petroleum gas, acetylene, as well as purchased electricity and purchased heat. To implement energy management, we actively establish a sound energy management system, formulate the "Energy Management System", implement a three-level energy management system consisting of the Company's energy-saving work leading Group, factory-level energy-saving Group, and team-level energy-saving members. We require all project units to strengthen energy-saving publicity and education, actively promote new energy-saving technologies and facilities. The energy-saving work leading Group is fully responsible for the Company's energy-saving work, with the Group leader appointed by the Company's general manager. We adhere to national energy laws, policies, technical standards, and Company regulations, implement annual energy-saving and emission reduction work plans, achieve annual energy-saving targets, and conduct selfinspections on the completion of the previous year's energy-saving targets and the implementation of energy-saving measures by the end of March each year, forming a self-inspection report to be submitted to the local energy conservation authority. We continue to strengthen energy management and plan to establish specific energyrelated targets. In 2024, the energy-saving measures are as follows:

#### **Energy-saving measures:**

- Implement zoning lighting arrangements and adopt LED lighting systems;
- Turn off the evening lighting in public areas;
- On the premise of meeting the requirements for wastewater
- treatment quality, environmental protection, and safety, reasonably adjust the equipment to reduce power consumption;
- Optimize energy-efficient equipment;
- Enhance energy recycling.

### Case Energy Recycling

The process at the Jinnan Sludge Plant of Caring Company consists of "high-concentration anaerobic digestion + plate and frame dewatering + thermal drying". The high-concentration anaerobic digestion stage can generate biogas. The thermal energy for all sections within the plant is met by self-produced biogas. Additionally, the waste heat recovery system in the drying workshop can utilize the recovered waste heat for heating sludge, maintaining the temperature of anaerobic digestion tanks, and heating the biological tanks. In cases of insufficient heat from the waste heat recovery system, biogas can be directly used for sludge heating and anaerobic digestion tank insulation through a steam boiler.

## Biodiversity conservation

Protecting biodiversity is of paramount importance for maintaining ecological balance, ensuring human well-being, and promoting sustainable economic development. We strictly adhere to ecological protection boundaries, focusing on and actively participating in biodiversity conservation efforts. Prior to project development and construction, we conduct comprehensive environmental impact assessments. During the construction phase, we strictly adhere to environmental protection requirements in the operating area and implement reasonable environmental protection measures. Upon completion of construction, we truthfully inspect, monitor, and record the construction and commissioning of environmental protection facilities for the project, promptly obtain discharge permits, conduct completion environmental protect the ecological environment.

#### Case

#### Construction of Ecological Wetland Park

The Tao Chong Wastewater Treatment plant of Hefei Chuangye Water Co., Ltd. builds a supporting ecological wetland park around the two stage and two sedimentation ponds, planting four seasons vegetation in the park and attracting wild animals to inhabit, forming an ecological protection park. The beautiful ecological environment in the factory and the characteristic water system around the factory attract all kinds of birds to roost and forage.

#### Case

### Turning "Pollution" into Treasure, Quenching Ecological Thirst

The Jiuquan Chuangye Water Co., Ltd. reclaimed water project can effectively utilize wastewater resources to control the worsening trend of environmental pollution and ecological degradation in Jiuquan City, while also creating a favorable water quality environment along the "Beidahe Ecological Water Supplement Project".

From late April to November each year, the effluent from the Second Wastewater Treatment Plant of Karamay Tianchuang Water Co., Ltd.is reused in the Guhai Ecological Park, effectively supporting the stability of the park's aquatic ecosystem and water circulation. During the construction of the ecological park and the reclaimed water storage and reuse project, the diversion of reclaimed water was carried out. As a result, this low-lying area that was once covered with bricks and tiles and had a whitish appearance due to saline-alkali soil has now become a paradise for birds and a haven for animals to inhabit.





## Value People and Jointly Build the Future of Capita

We are well aware that talent is the core driving force behind business development and the most valuable asset. We have established a compliant and transparent employment system, as well as a diverse talent structure. We focus on the health and development of employees, striving to create a comfortable working environment for them, enabling mutual growth between the Company and its employees, and jointly creating a better future.

Benchmarking the United Nations Sustainable Development Goals (SDGs)

M



## Material issues

Compensation and Benefits

## Ensuring Compliance in Employment Fulfilling Employee Dreams Creating the Happy Workplace Establishing a Solid Safety Baseline

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## **Ensuring Compliance in Employment**

## Employee employment

The Group strictly adheres to the laws and regulations of the respective countries and regions, including the Labor Law of the People's Republic of China, the Labor Contract Law of the People's Republic of China, the Social Insurance Law of the People's Republic of China, the Protection of Minors Law of the People's Republic of China, and the Regulations on the Prohibition of Child Labor, among others. We have established a comprehensive system and are committed to creating a compliant, transparent, and diverse employment system.

We fully respect and protect human rights, making every effort to safeguard the rights of employees. We eliminate all forms of employment discrimination, strictly implement antidiscrimination policies, explicitly prohibit the dissemination of discriminatory information based on gender, race, ethnicity, or household registration in the *Employee Recruitment Management System,* ensuring equal treatment regardless of age, ethnicity, race, family status, gender, religious beliefs, or nationality. We prohibit the employment of child labor and strongly oppose forced labor. We have established a rigorous gualification review mechanism to prevent the employment of child labor. Additionally, to effectively protect the legitimate

rights of employees, the Group relies primarily on feedback from the petition department in labor dispute resolution, with the Party Committee's Organization Department responsible for investigation, communication, mediation, and feedback on outcomes. During the reporting period, no labor disputes occurred, and there were no instances of child labor, forced labor, harassment, or discrimination.

In 2024, the Group revised and improved relevant management systems such as the Group Employee Recruitment Management System and the Group Employment Management System, further clarifying and strengthening employment management requirements. By optimizing the recruitment process and enhancing employment management requirements, we have improved the efficiency of personnel recruitment management. During the reporting period, we primarily utilized online recruitment channels to conduct social recruitment and campus recruitment, attracting a diverse talent pool. We have compiled statistics on the number of employees based on gender, age, region, education level, and job level, as shown in the following fiaure:

**Employee Distribution** 

by Age

ŕŕŕ

30-39years

50 years old or older

41.3%

14.0%

31.5%

20-29years

40-49vears



## Employee retention

The Group values talent and actively carries out talent retention efforts from various aspects such as compensation and benefits, and employee development to reduce employee turnover. We will continue to implement employee care measures, improve career development paths, and strive to create a positive work environment, providing strong support for the mutual development of the Company and employees. During the reporting period, the Group's employee turnover rate was 4.5%. We have statistically analyzed the turnover rates by gender, age, and region, as shown in the following chart:









## Fulfilling Employee Dreams

positions.

## Talent development

The Group is committed to enhancing employees' overall quality and professional capabilities through a comprehensive employee training system to support their growth. In accordance with the "Group Training Management System", we have established a multi-level and systematic training system covering job-specific, mandatory, enhancement, and developmental training to ensure that employees continuously improve their skills in their respective positions and meet the strategic development needs of the Group. The Group's Human Resources Center collaborates with the training hosting departments to monitor and evaluate the training effectiveness, as well as collect suggestions for training optimization. In 2024, our total employee training hours amounted to 144,816.7 hours.

#### Introduction to the Training System



For employees in different positions, our Group provides basic capability training required for their positions, including training for Directors, supervisors and senior executives on duty performance, and training for Party branch secretaries, etc., to ensure that employees have sufficient professional qualities and management capabilities when performing their duties.

According to the employment requirements and job attributes, our Group arranges compulsory

training for employees, such as induction training for employment and safety production training, etc., to ensure that employees have the basic knowledge and operation skills required for their



Enhancement Training In order to improve employees' business capabilities and professional qualities, our Group regularly conducts business training such as management practice and technical exchanges to meet the construction needs of various lines.



To support the strategic development requirements of the Group, our Group provides enabling courses such as control mode training and digital and intelligent transformation training, etc., to help employees acquire new knowledge in the aspects of digitalization and management mode, and promote the sustainable development of the enterprise.

The Group issues annual continuing education learning cards to employees, providing internal specialized and general training opportunities to support employees' career development and assist in professional title evaluations. Additionally, a series of "Five-dimensional Integration" business quality courses have been developed, uncovering a Group of middle-level cadre internal trainers and lecturers. By 2024, the Group has conducted 8 sessions of internal training courses, receiving positive feedback. Through these systematic training practices, we continuously enhance employees' core competencies.

## Employee promotion

The Group has established a clear employee promotion path through various hierarchical management systems, ensuring fairness and impartiality in the promotion process. In line with the actual development needs and management requirements of the Group, we have formulated the Group's "Management Measures for Cadre Talent Exchange and Rotation", considering factors such as individual basic qualities, growth and development, and work performance to ensure that each employee can maximize their potential in suitable positions. Through this system, the Company provides employees with a clear career development direction, motivating them to continuously improve themselves and achieve their professional goals.



## Creating the Happy Workplace

## Employee communication

The Group values employee communication and interaction, actively establishes diverse communication channels, provides unimpeded channels for employees to voice their grievances, and fully leverages the important role of the labor union to comprehensively safeguard employees' legitimate rights and expression of demands.

We have established a comprehensive performance appeal mechanism where employees can submit written appeals if they have objections to the assessment results, ensuring that every employee's voice is fully heard and their legitimate demands are properly addressed. Additionally, we have a trade union with a 100% membership rate. The union actively responds to employee needs and promotes harmony and stability between the Company and employees through various forms such as collecting proposals from worker representatives, open factory affairs, heart-to-heart talks, grassroots surveys, etc. In 2024, we held a total of 9 workers' congresses, where we listened to employee suggestions on issues such as enterprise pensions and revisions to the employee recruitment and labor management system, enhancing employees' sense of participation and identification.

The Company conducts an annual employee satisfaction survey to ensure that employee feedback and suggestions are promptly addressed and implemented, thereby enhancing overall employee satisfaction and sense of belonging. In 2024, the Group achieved a 100% employee satisfaction rate.

We have a trade union with a **100%** membership rate In 2024, we held a total of **9** workers' congresses In 2024, the Group achieved a **100%** employee satisfaction rate

### Employee care

### Emplovee compensation and benefits

The Group has established a comprehensive compensation system and formulated various levels of employee compensation management regulations. Considering the needs of corporate development and employee requirements, the Company provides employees with a compensation structure including fixed wages, performance-based pay, other compensation, and benefits, aiming to fully motivate employee engagement.

The Group implements a strict performance evaluation mechanism and formulates performance-related management systems for employees at all levels. Department heads are required to conduct detailed reviews and feedback sessions with employees, assess their performance during the evaluation period, jointly analyze shortcomings in performance, and develop corresponding improvement and enhancement plans. Evaluations are conducted periodically according to the system requirements, covering key aspects such as performance indicators and competency indicators, with a primary focus on key performance indicators. Employees have the right to appeal the evaluation results to ensure fairness and transparency in the assessment process.

In terms of employee benefits, in addition to statutory benefits, we regularly provide employees with gifts for the Spring Festival, Dragon Boat Festival, and Mid-Autumn Festival, organize movie-watching activities, and offer condolence benefits for birthdays, hospitalization, retirement, marriage, childbirth, among others. In 2024, the Company conducted a total of 3,202 holiday and birthday condolences, 890 frontline staff condolences, and 133 hospitalization and retirement condolences. The Company also provides employees with lactation rooms to support their family and lifestyle needs.



2024

The Company conducted a total of 3,202 holiday and birthday condolences

**890** frontline staff condolences

and **133** hospitalization and retirement condolence



Dragon Boat Festival Visitation to Frontline Employees

In order to inherit the outstanding traditional Chinese culture, enhance employees' sense of happiness and achievement, further strengthen the Company's cohesion, and consolidate the achievements of cultural construction, Yellow River Regional Company - Inner Mongolia Bayannao'er Chuangye Water Co., Ltd. conducted a Dragon Boat Festival visiting activity on June 5th to 6th, 2024. General Manager Li Zhong personally led the team to visit front-line employees, bringing them holiday care and blessings, and distributing gifts.



### Enriching employees' lives

To enrich the spiritual and cultural life of employees, the Group's labor union organizes a variety of recreational activities annually, including regular bowling and darts competitions, as well as activities such as dumpling making, flag-raising ceremonies, and singing revolutionary songs. These activities create a relaxed atmosphere for employees to feel the care of the Company and the warmth of the collective. Additionally, we focus on the psychological wellbeing of employees by providing relevant training activities. Through diverse recreational activities, we continuously enhance employees' sense of belonging and happiness, while also stimulating team cohesion and centripetal force, injecting a constant stream of vitality into the development of the enterprise.





▲ Bowling competition

▲ Darts competition





▲ Activity of "I Love My Motherland"

▲ The activity of "Marbles Moving Thousands of Miles"

#### Case Specialized Training on "Emotional Stress Management"

The Beijing-Tianjin-Hebei Regional Company organized a training session on emotional stress management for all employees. Experts were invited to lecture on the sources and manifestations of stress, emotional awareness, regulation methods, etc., guiding employees to understand and manage work stress rationally, practice emotional management, and help employees better cope with challenges and maintain a positive psychological state.





▲ Activity of Singing Revolutionary Red Songs



▲ Activity for the Outstanding Ones



(P)

safety production

objectives

## Establishing a Solid Safety Baseline

## Safety production management

Safetv production management system

The Group strictly complies with laws and regulations such as the Work Safety Law of the People's Republic of China and the Tianjin Municipality Work Safety Regulations, and has established and implemented relevant management systems such as the Work Safety Management System and the Work Safety Responsibility System. The Company has established a Safety Committee, with the Chairman/Party Secretary serving as the director of the Safety Committee, assuming overall responsibility for decision-making and leadership in work safety; the Safety Committee has an office located in the Construction Management Center, responsible for daily safety management affairs. Additionally, we link the safety assessment mechanism to executive compensation, promoting the implementation of safety management responsibilities at all levels to ensure comprehensive safety accountability. In 2024, all employees of the Company signed a safety production target responsibility letter, engaging all employees in safety management work.

To address safety risks, the Group revised the Safety Risk Grading and Control Management *System,* which clarifies risk classification criteria through static and dynamic risk identification. Additionally, the Company formulated the Three-Year Action Plan for Fundamental Improvement in Safety Production, focusing on special rectification work such as fire prevention and control, and accidents involving gas poisoning. The plan includes the introduction of a dual prevention mechanism effectiveness assessment. Furthermore, the Company engaged a third-party professional organization to thoroughly investigate major hidden dangers, achieving closed-loop rectification of hazards and continuous optimization.

To enhance management efficiency, the Company is driving the digital transformation of its safety production management system. The optimized system integrates functions such as organizational structure display, basic data collection, specialized task reminders, and online assessments, achieving transparency, intelligence, and efficiency in safety production management at all levels of the Group. Through real-time monitoring and data display, the Group has enhanced its ability to respond to emergencies and safety risks, providing strong support for the comprehensive achievement of safety production goals.

In the fiscal year 2024, the Group achieved the following safety production objectives:

The Company had () occurrences of accidents related to safety production responsibility, with 0 occurrences of major and significant accidents;

The annual fatality rate is ();

Complete the work of safety production inspections to ensure full coverage with a completion rate of **100%**;

The accident hazard reporting rate is 100%, and the rectification rate of accident hazards within the scope of responsibility is also 100%.

### Emergency management

In accordance with the revised Comprehensive Emergency Plan for Production Safety Accidents, the Group has established a comprehensive emergency management system. It actively conducts emergency drills and special activities to enhance employees' emergency response capabilities and awareness. In 2024, the Group conducted a total of 708 drills, including special drills for confined space operations, fire incidents, and gas poisoning incidents, covering key positions within the Group and relevant external units. The total number of participants in the emergency drills reached 13,429.

#### 2024

## Case

Suburb Wastewater Treatment Plant

On June 27, 2024, Tianjin Capital Environmental Protection Group Co., Ltd.conducted a special emergency drill for confined space accidents at the Dongjiao Wastewater Treatment Plant to enhance emergency response capabilities, strengthen coordination among emergency organizational units, and improve the ability to handle accidents in confined spaces.

The scenario of this drill is set at the Dongjiao Wastewater Treatment Plant, where two operators encountered an over-limit alarm of hydrogen sulfide from the toxic and harmful gas detector while inspecting the No. 5 gallery. During the evacuation process, one person fell unconscious due to hydrogen sulfide poisoning. The drill comprises three scenes: demonstrating the emergency response and reporting process of the accident, illustrating the on-site alert and rescue process, and presenting the rapid rescue operation at the accident site.

This drill not only enhanced employees' safety awareness and emergency response skills but also further improved emergency plans, accumulating valuable experience in dealing with sudden accidents. It provided a solid guarantee for the safe production and stable operation of the Dongjiao Wastewater Treatment Plant.





#### The Group conducted a total of **708** emergency drills

The total number of participants in the emergency drills reached 13,429

## Enhancing Efficiency through Collaborative Drills - Dongjiao Wastewater Treatment Plant Conducts Special Emergency Drills for Limited Space Incidents at the East

### Safety production training

The Group places great emphasis on safety production education and training, continuously promotes the standardization of safety production, and conducts various forms of safety culture activities. In 2024, a total of 1,106 safety education and training sessions were conducted with an investment of 415,500 RMB, covering all employees and relevant personnel of partner units. The training content included safety production laws and regulations, safety operation procedures, and hazardous operation safety knowledge, aiming to help employees strengthen their safety defenses comprehensively. Furthermore, through various forms such as online assessments, on-site training, and case studies, the safety awareness and professional capabilities of employees and management personnel have been comprehensively enhanced.

#### 2024

A total of 1,106 safety education and training sessions were conducted with an investment of **415,500** RMB

Case

Conducting Training on the 2024 Edition of the Tianjin Safety Production Regulations

To effectively carry out the study, promotion, and implementation of the newly revised "Tianjin Safety Production Regulations," and comprehensively understand the safety production duties and tasks of the Group, on the afternoon of November 29, 2024, we organized a training session to promote the 2024 edition of the *Tianjin Safety* Production Regulations for the principal leaders of various levels of units in Tianjin, safety work supervisors, and safety management personnel.



This training session aims to provide participants with a comprehensive understanding and mastery of the revisions to the Tianjin Safety Production Regulations, focusing on the background and necessity of the revision, legislative ideas and characteristics, as well as the highlights of the new version of the Tianjin Safety Production Regulations.

This training has provided us with clear and highly valuable insights to enhance our occupational health and safety management system.

#### Case Conducting Special Training for Fire Safety Awareness Month

To further enhance the fire safety awareness and emergency response capabilities of all employees, and strictly implement the primary responsibility, on November 8, 2024, the Company organized a fire safety education and training activity. The training was attended by the main leaders of various levels, fire safety supervisors, and fire safety management personnel.



The training session covered fundamental knowledge of combustion, fire, and prevention, emphasizing the emergency response procedures and safety precautions for evacuation and escape after a fire, with practical examples.

This training has further enhanced the fire safety management awareness of various levels of units, improved employees' awareness of fire safety and theoretical knowledge of self-protection and self-rescue abilities. In the event of a fire accident, units at all levels can respond quickly and carry out rescue work correctly, promptly, and in an orderly manner, ensuring the personal and property safety of the Company and its employees.

## Occupational health



Management System Certification

The Group strictly adheres to relevant laws and regulations such as the Occupational Disease Prevention and Control Law of the People's Republic of China, Management Measures for Occupational Health Examinations, and Requirements and Guidelines for Occupational Health and Safety Management Systems, establishing a comprehensive occupational health and safety management system. By 2024, some project units of the Group have obtained certification for their occupational health and safety management systems, ensuring comprehensive coverage and efficient operation of the management systems.

To ensure the occupational health of employees, the Company strictly enforces the "Labor Protection Articles Management System", providing employees with standard labor protection equipment and regularly conducting occupational disease hazard factor testing. In 2024, the Group achieved a 100% detection rate and monitoring qualification rate for occupational disease hazard factors.

Furthermore, the Company places high importance on employees' health check-ups. Annually, it organizes comprehensive health examinations covering all staff to thoroughly screen for occupational diseases and other health risks. Professional health assessment reports are provided to employees. In cases where occupational disease risks or health issues are identified during the examinations, the Company promptly implements measures such as job transfers to ensure the physical and mental well-being as well as occupational safety of the employees.

#### Highlights of Occupational Health and Safety Performance in 2024

The rate of special operation personnel working with valid certificates is 100%

The coverage rate of occupational injury insurance for employees is 100%

The coverage rate of employee physical examinations is 100%

The number of newly added occupational disease cases is **Zero** 

## Case

## Defense Line

To further promote the implementation of occupational health work, enhance the level of occupational disease prevention and control management, and strengthen the awareness of health protection among all employees, on the afternoon of April 2, 2024, Xianyang Road Wastewater Treatment Plant conducted a training seminar on occupational health knowledge, with more than 30 people in attendance.

The lecture focused on in-depth discussions on emergency response to sudden public safety incidents, prevention and management of major diseases and respiratory diseases. The teaching method combined theoretical explanations with practical operations, providing rich and practical content. Throughout the session, the trainees were fully engaged, demonstrating a high level of enthusiasm for learning. Particularly during the demonstration segment, they actively participated and eagerly tried out the operations.

By conducting this seminar, the participants have gained a solid understanding of practical first aid skills and methods, effectively enhancing their occupational disease prevention and control literacy and awareness.

#### Conducting Occupational Health Training to Strengthen the Occupational Health





## Led by Technology to **Forge Capital Quality**

We prioritize technological innovation efforts, actively engaging in practices to drive technological innovation and enhance data intelligence capabilities, promoting our own digital transformation.

Benchmarking the United Nations Sustainable Development Goals (SDGs)



### Material issues

• Digital Transformation

50 53

Led by Technology to Forge Capital Quality Enhancing Data-driven Empowerment

#### Case

In February 2024, to strengthen the operational service capabilities in wastewater treatment and enhance technical expertise, a technical exchange conference on new processes, technologies, and ideas in wastewater treatment was held. The General Manager Wang Bing, Deputy General Manager Wang Jingnan, and Chief Engineer Liu Guoqiang of Huadu Huber Company, along with Dr. Gao Ying from DEW Germany, were invited to attend and share guidance on new processes, technologies, and ideas in the field of wastewater treatment. Several technical personnel from various departments of the Group participated in this exchange. During the conference, Dr. Gao Ying delivered a specialized technical presentation on topics such as dense sludge processes, sludge interface settling velocity testing methods, test results, and related technologies and products. General Manager Wang Bing of Huadu Huber Company provided a detailed overview of the research progress and market applications of dense sludge processes. Attendees engaged in in-depth discussions combining the technology products with market demands and other related topics.

In 2024, the Group initiated 105 Group-level technological projects, applying a combination of methods such as precision control of chemicals, accurate aeration, equipment upgrades, process optimization, and intelligent transformation to promote the application of over 60 technological achievements. The cost reduction effect in production was significant throughout the year. Alongside numerous technological achievements, our research and development innovation capabilities received recognition from various sources, earning multiple honors. In 2024, Caring Company and Jia Yuan Xing Chuang Company were listed as enterprises in the "Nurturing Excellence and Cultivating Strength" special action plan for innovative state-owned enterprises.

## Case

**Coagulation and Flocculation** 

The Group has successfully developed online toxicity monitoring equipment for influent of wastewater treatment plants and intelligent recognition equipment for alum floc, both of which have been industrially mass-produced. The influent toxicity online monitoring equipment for wastewater treatment plants can detect the impact of influent toxicity on the microbial activity in local sludge in situ, directly assess wastewater toxicity, provide precise risk warnings to operators, and offer feasible process adjustment suggestions. This equipment is easy to operate, requires minimal maintenance, operates safely and efficiently, effectively assists in process operations, and provides strong support for the safe and stable operation of wastewater treatment plants. The intelligent recognition equipment for alum floc accurately identifies the morphology of alum floc in the coagulation process, intelligently controls the dosage of phosphorus removal agents, and achieves intelligent control of coagulants and flocculants. This not only reduces labor and chemical costs but also significantly improves the stability of effluent water quality in the coagulation and sedimentation process.

The research and application of these two devices have provided solid product support for the inflow early warning and accurate dosing of phosphorus removal agents in smart wastewater treatment plants, effectively driving the intelligent development process of the wastewater treatment industry.



## **Driving Technological Innovation**

## Research and Development innovation

The Group has always adhered to an innovation-driven development strategy, continuously improving the "1+3+N" technology research and development platform system (consisting of one technology innovation base, three platforms for research, exchange, and transformation, and N specialized research centers such as research centers and engineering centers). Relying on a strict management system and a sound innovation mechanism, the Group promotes technology research and development and technological innovation, contributing to the advancement of industry innovation and development. To ensure the efficiency, standardization, and sustainability of technological innovation work, the Group has established relevant systems such as the "Technology Management System", "Guidelines for Technology Project Approval Management", and "Comprehensive Management Workflow for Technology Projects". These systems manage technological innovation from multiple aspects and dimensions. Additionally, we have a Technology Innovation Center responsible for the unified management of the Group's technology management and research and development work. By clarifying division of responsibilities, management policy principles, and assessment and evaluation systems, we have effectively promoted the efficient implementation of technological innovation work.

Meanwhile, in order to effectively promote scientific and technological innovation, we have established the Technology and Product Center (Carbon Peaking and Neutrality Research Center), which has gathered a large number of scientific research and technical talents. As the core scientific research unit of our Group, the Technology and Product Center currently has a highquality team composed of 23 technical R&D personnel, more than 70% of whom are technical experts with senior professional titles. This high proportion of senior technical talents provides strong scientific research support for the Group and ensures the depth and breadth of technological innovation. The laboratory of the Technology and Product Center is equipped with advanced instruments and equipment such as GC-MS, ion chromatography, TOC, and ICP, covering the detection of water, gas, and solid phases. The testing capability of the laboratory has reached the level of a first-class laboratory, further providing a scientific research foundation for our Group in the fields of environmental governance and resource utilization. In addition, the pilot-scale test base has built various scales of pilot-scale test devices and equipment, which can meet the needs of various scientific research experiments and provide a solid guarantee for the transformation of scientific research achievements.

In the process of promoting technological innovation, we also emphasize motivating employees through incentive measures. We have established an internal management system for the Technology Work Reward System, which provides multiple reward measures to promote technological innovation and the creation of intellectual property. Employees can receive corresponding material rewards and spiritual incentives based on their contributions when applying for patents, conducting research work, and achieving technological innovation results. These incentive measures not only deepen employees' identification with the Company's culture of innovation but also create a positive atmosphere encouraging innovation and respecting intellectual property rights throughout the entire Company.

#### Enhancing Technological Exchange to Improve Innovation Capability



#### Successfully Developed Online Toxicity Monitoring Equipment for Influent of Wastewater Treatment Plants and Intelligent Identification Equipment for



#### List of Technology Awards Received in 2024

Project Name	Award Name	Award Level
Development and Application of Physical Property Monitoring Equipment for Activated Sludge in Wastewater Treatment Plants Based on TRIZ Thinking	2024 China Innovation Method Competition and the 9th Tianjin Innovation Method Competition	Second Prize
Process Design of Anaerobic Ammonium Oxidation Reactor Based on TRIZ Theory	2024 China Innovation Method Competition and the 9th Tianjin Innovation Method Competition	Third Prize
Development and Application of Physical Property Monitoring Equipment for Activated Sludge in Wastewater Treatment Plants Based on TRIZ Thinking	Innovation Method Application Competition of 2024 "the Belt and Road" and BRICS Skills Development and Technological Innovation Competition	Excellence Award
Process Design of Anaerobic Ammonium Oxidation Reactor Based on TRIZ Theory	Innovation Method Application Competition of 2024 "the Belt and Road" and BRICS Skills Development and Technological Innovation Competition	Excellence Award

## Intellectual property protection

The Group attaches great importance to the protection and management of intellectual property rights and strictly follows the Patent Law of the People's Republic of China and other relevant laws and regulations have established a sound intellectual property management system, and through strict systems and scientific management measures, ensure the effective protection and rational use of intellectual property. Based on the actual needs of our own business and technological innovation, we have formulated and implemented the "Intellectual Property Management System for Science and Technology". This system provides a basic framework for the comprehensive management of intellectual property rights, clarifies specific regulations regarding the ownership, protection, application, maintenance, and transfer of intellectual property rights, and ensures that all research and development achievements can be effectively protected by intellectual property rights.

In 2024, we have accumulated a total of 24 authorized patents and 5 computer software copyrights. As of the end of the reporting period, the Group's status of valid patents and software copyrights obtained is as follows:

	ē
Туре	Total Number of Valid Patents/Software Copyrights
Invention Patent	50
Utility Model Patent	161
Design Patent	2
Software Copyright	34

## **Enhancing Data-driven Empowerment**

## **Digital transformation**

In the process of promoting green and sustainable development, the Group has identified digital transformation as one of the core strategies to enhance management efficiency, optimize operational models, and strengthen technological innovation. With the increasing demand in the environmental protection industry for the application of intelligent and digital technologies, we have initiated a comprehensive digital transformation process in line with the trend of the times, achieving certain results. We are committed to building a high-end operational service brand with "smart water management" and "smart operations" at the core.

In the field of smart water management, Zhongshui Company actively promotes the integration of recycled water systems and the establishment of a data sharing center. The Company has completed the construction of the data center machine room, migrated software and hardware from the old machine room, and successfully established a core database, enabling dynamic data access and efficient integration of equipment such as the Five Plants and One Station. Project companies in the Yellow River Basin and Guangdong-Hong Kong-Macao Greater Bay Area regions have achieved real-time monitoring and management of key indicators such as wastewater levels, water guality, and equipment by building a unified smart water management platform, ensuring the efficient operation and intelligent scheduling of wastewater systems. In the field of new energy business, the Green Energy Company relies on Tianjin Capital Environmental Protection's smart "Energy + Carbon Peaking and Carbon Neutrality" comprehensive control platform. Through cloud computing architecture and IoT technology, data silos between various business systems have been eliminated, enabling load forecasting and the automatic operation of intelligent production. This has further enhanced the Green Energy Company's capabilities in fine management of energy and carbon emission control.



▲ Wastewater Reuse Operation Scheduling Information Management Platform

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▲ Intelligent Water Management Platform





▲ Intelligent "Energy + Carbon Peaking and Carbon Neutrality" Integrated Management Platform

In 2024, we advanced the Phase I of our digital transformation and achieved interim goals. Significant progress was made in three key areas: the construction of an Internet of Things platform, the redesign of financial data visualization dashboards, and the launch of a flood control visualization dashboard.



#### Financial Data Visualization Dashboard Redesign

Creating a financial data visualization dashboard that integrates multidimensional data to present financial statements and key metrics through intuitive charts and graphs, enhancing the transparency and comparability of financial information, and providing robust data support for strategic decision-making.



#### Launch Flood Control Visualization Dashboard

Establish a flood control system to leverage digital advantages for round-the-clock monitoring and real-time response in key areas, significantly enhancing emergency response capabilities. This initiative also demonstrates the Group's commitment to sustainable development in green environmental protection and social responsibility.



## Information security and privacy protection

The Group strictly adheres to industry norms and laws and regulations, continuously conducts comprehensive monitoring and protection of network security and data security, establishes a comprehensive and scientific information security management system, effectively strengthens the Company's network security defenses, and safeguards the boundaries of network security and data security. Through the "Implementation Rules for the Responsibility System of the Party Committee of Tianjin Capital Environmental Protection Group for Network Security Work," we have clearly defined the specific responsibilities of the Group's party committee, members of the leadership team, and relevant personnel. The leadership team is required to implement network security work, with the principal leader serving as the first person in charge, the person in charge of specific areas directly leading the work, and other members fulfilling a "dual responsibility" role.

Working Policy of Data Security	
Clear Responsibilities	
Reasonable Authorization	
Standardized Processes	
Combination of Technology	
and Management	



At the institutional level, we have established core regulations such as the "Data Security Management System (Trial)", "Information Security Work Guidelines ", "Information Confidentiality System", and "Software Genuine Management System", providing strong support and assurance for the network security construction of the Company. Simultaneously, emphasis is placed on privacy protection, with cautious handling of partner and client information. The Group has implemented the "Information Confidentiality System", clearly defining management requirements for confidential documents, personnel, facilities, and information transmission. Each department is responsible for implementing relevant management measures for different categories of information. The Group's Confidentiality Leadership Team regularly inspects departments to assess the status of data protection efforts. Externally, the Company has formulated the "IT Service Outsourcing Management Guidelines", which standardize security management for IT service providers, specifying key aspects such as vendor qualification certification, service quality monitoring, and contract evaluation to ensure the security and compliance of outsourced services.

On a practical level, we implement detailed security control measures for various data through classification, grading, and full lifecycle management to ensure clear security safeguards at every stage. Data classification includes internal data and user data. The Group requires its subsidiaries to establish corresponding security control measures based on data categories and security levels. The Data Security Management System (Trial) stipulates mechanisms such as risk assessment, monitoring and early warning, emergency response, as well as strict assessment and accountability systems. We conduct regular performance

evaluations and security checks, continuously optimize network security strategies, and ensure effective implementation of information security management.

Furthermore, based on the PDCA management model of international standard ISO 27001 and tailored to the Group's specific circumstances, the Company has formulated comprehensive information security management regulations in the Information Security Work Guidelines. This document covers security requirements in various aspects including physical security, office environment, data storage, transmission, etc. It stipulates regular inspections and assessments of information security status through methods such as risk analysis and internal audits to promptly identify and address potential risks. The Company has established a "Network Security Incident Response Plan" to effectively respond to cybersecurity incidents.

At the technical level, we emphasize information security technology protection and data recovery capabilities. The "Guidelines for Information Project Development" and "Information Project Development Process" and "Information Project Development Process" provide a standardized operational framework for the Group's information system development and implementation, ensuring that every aspect from development to deployment strictly complies with information security requirements. Regarding information data backup, the Capital Environmental Protection Information Data Backup Strategy clearly outlines the backup processes for various Company information systems, ensuring that critical data can be guickly recovered in emergency situations, safeguarding the stability of the enterprise's operations.

To enhance employees' awareness of information security, we conduct activities such as Cybersecurity Week and regularly organize internal cybersecurity training. These initiatives aim to strengthen employees' understanding of data protection, information security incident response procedures, and assess their emergency response capabilities through drills. This approach helps instill a culture of collective responsibility for information security among employees, laying a solid foundation for safeguarding information security within the organization.

#### Case

#### Cybersecurity Emergency Response Drill

In 2024, our organization conducted an emergency drill focusing on simulating cyber-attacks and practicing emergency response procedures. During the drill, various technical operations and maintenance units closely collaborated, responded promptly, simulated multiple cyber-attack scenarios, and effectively carried out defense and mitigation measures. Through the drill, employees of the Company accumulated valuable practical experience.

#### Case

#### **Confidentiality Training**

On September 18, 2024, the Group organized a special training on the People's Republic of China Law on Guarding State Secrets, covering senior leaders at the headquarters, leaders of various subsidiary companies, and all personnel involved in classified work. The training aimed to enhance employees' awareness of national security and confidentiality, improve prevention capabilities, and elevate their level of knowledge on confidentiality.







## Join Hands and Contribute Capital Efforts

The Group upholds the concept of sustainable development, actively engaging in supply chain management, service quality enhancement, industry exchanges, public welfare, and other aspects. Through practical actions, it aims to balance corporate development with social responsibility, seeking a win-win situation for both economic and social benefits.

Benchmarking the United Nations Sustainable Development Goals (SDGs)



### Material issues

Supply Chain Management
 Community Investment

mer Service · Product Revitalization 60 63 64 Building the Responsible Value Chain Facilitating Industry Development Demonstrating Social Responsibility

## Building the Responsible Value Chain

# Supply chain management

The Group considers supply chain management as a crucial component for the Company's sustainable development. By implementing systematic, standardized, and efficient measures, the Group ensures that supply chain management not only achieves business objectives but also fully integrates environmental and social responsibilities. We are committed to enhancing sustainable development capabilities collectively with partners through rigorous management and transparent collaboration.

To ensure the fair and just selection of suppliers, the Group has established the "Non-Mandatory Tender Project Procurement Management System". Procurement methods are standardized based on contract amounts, including internal procurement, multi-party comparison, competitive negotiation, and open tendering, to safeguard the fairness and efficiency of supplier selection. Additionally, for external agencies providing specialized services such as information technology, financing, and financial auditing, the Group has established targeted recruitment and management systems to ensure that the relevant services are delivered at a high quality while meeting compliance requirements.

The Group emphasizes environmental and social responsibility when selecting suppliers. Regarding environmental responsibility, suppliers are required to strictly comply with local environmental laws and regulations, reduce greenhouse gas emissions and waste discharge in their operations. Additionally, suppliers are encouraged to use environmentally friendly materials and services where feasible to minimize their overall environmental impact. In terms of social responsibility, the Group strictly requires suppliers to ensure the safety and health of employees, prohibit the use of child labor and forced labor, and actively promote awareness of social responsibility among upstream and downstream enterprises.

To comprehensively evaluate suppliers, we have established the "Service Provider Evaluation Management Guidelines", under which various departments regularly assess suppliers' performance. The evaluation criteria cover multiple dimensions such as service quality, delivery efficiency, environmental and social responsibility fulfillment. The evaluation results are reviewed by the Procurement Committee and submitted to the General Manager's Office for approval, leading to the final updated list of approved suppliers. In the current year, some suppliers have made significant achievements in environmental, quality, and occupational health and safety management, obtaining ISO 9001:2015 certification, ISO 14001:2015 certification, and ISO 45001:2018 certification. As of the end of the reporting period, we have a total of 26,620 suppliers, with 6 from Hong Kong, China, and 26,614 from mainland China.



### High-quality service

## Quality management

The Group consistently regards quality management as a core pillar of corporate development. It has established strict system norms and a scientific management system guided by the ISO 9001 standard, continuously improving and enhancing the level of quality management. As of the end of the reporting period, certain businesses in the wastewater treatment sector and the production of hazardous waste treatment and polyaluminum chloride clean water agents in Tancheng, Shandong have obtained ISO 9001 certification.





The Group places great emphasis on project quality control, employing rigorous and comprehensive management strategies to simultaneously focus on the two key stages of project construction and operation. This ensures high-quality progress throughout the entire project life-cycle. Core guiding documents such as the "Operation Quality Management System" and "Engineering Quality Management System" have been established to provide clear quality management direction for various projects. Each project unit is required to develop annual quality-related work plans and objectives, conducting monthly reviews and analyses during actual operations to identify areas for improvement and continuously optimize processes.

During the project construction phase, we strictly adhere to the "Engineering Quality Management System", establish the Construction Management Center to regularly inspect the construction progress, and continuously enhance the quality awareness of management and construction personnel through meetings and training activities to ensure the effective implementation of the quality management responsibility system.

During the project operation, we actively conduct daily on-site inspections and promptly address potential issues in accordance with the "Operation Quality Management System". We also organize operational training extensively to enhance employees' professional skills and quality awareness. Following the principle of "hierarchical management and layered responsibility", we systematically carry out quality inspection work. Quality Management Departments at all levels effectively fulfill their duties by providing comprehensive education and training to management personnel, strictly implementing assessments to enhance the professionalism and sense of responsibility of the management team. Grassroots unit leaders focus on supervising facilities, process flows, factory construction, work environment, and industry data management to ensure that every detail meets high-quality standards. Close cooperation among various business units and departments allows for flexible adjustment of inspection frequencies based on actual operational conditions, monitoring the entire process of business operations comprehensively and thoroughly to ensure service quality reaches optimal levels. Additionally, we conduct regular testing and maintenance of production equipment to ensure the stability of production quality. By 2024, no products sold or transported needed to be recalled due to safety and health reasons.

### Customer service management

The Group is committed to enhancing customer satisfaction, responding promptly to customer needs, and providing thoughtful and convenient service experiences to the public. The 12345 public service hotline serves as a crucial communication channel between the Group and its customers, improving the efficiency and quality of handling work orders, with addressing public concerns as a top priority. Upon receiving work orders, customer service personnel swiftly analyze and verify the information, confirming the relevant matters within the scope of business. After understanding the customer's needs, we provide professional technical support and solutions until the issue is satisfactorily resolved, obtaining positive feedback from customers. To better listen to customer feedback, the Group completed the establishment and revision of over 10 systems, including the "Petition Work Management System", "Guidelines for Handling 12345 Government Affairs Public Service Hotline Services", and "Petition Stability Plan" in 2024 to regulate the order of petition work. In response to complaints about products or services, the customer service departments of the Group's subsidiaries initiate standardized complaint handling procedures to ensure complaints are resolved quickly and efficiently. Any neglect of customer complaints, unjustified

delays, information concealment, or mishandling of significant events will result in disciplinary action against the responsible parties to safeguard customer rights and service guality. In 2024, there were no complaints regarding products and services.

In order to better meet customer needs, various project units have actively taken various measures to provide comprehensive service support. Caring Company formulates customer maintenance records based on the uniqueness of each project, detailing waste production information, assay data, after-sales service situations, etc. Through analysis of customer feedback and market competition, the service strategy is continuously adjusted to flexibly respond to customer needs and market changes. Green Energy Company and Zhongshui Company, as windows for energy supply, heating supply, and recycled water supply services, are dedicated to serving the people, ensuring timely resolution of people's worries, and making great efforts to handle practical livelihood matters. Zhongshui Company actively participates in the "Listening to the People, Brightening the Window" service work within the Tianjin state-owned assets system, using the 12345 government service hotline and the Zhongshui Company hotline as channels for timely handling and feedback.

#### Case

### Ensuring Heating Supply with Temperature Control for Livelihood Protection

Winter heating is crucial for the well-being of the public. The Green Energy Company has taken multiple measures to ensure a "warm winter" for users. They make advance plans, and each operation center formulates flexible regulation strategies according to its own characteristics and those of users, and strengthens the intensity of equipment inspections. The Tianjin Cultural and Binhai Operating Center configures operating conditions and equipment parameters according to the needs of various venues. The Heiniuchengdao Operating Center in Tianjin is equipped with peak-shifting heating devices. The Junliangcheng Heating Station in Dongli District, Tianjin, has established a communication mechanism with the power plant. In case of a sudden drop in temperature, the first-side heating output ratio is promptly increased to ensure the overall heating quality in the area. Additionally, to serve over 40,000 residents effectively, technical personnel conduct household temperature inspections, strengthen



the "heating steward" service, and address heating anomalies, earning recognition and approval from the district.

To further enhance the quality and efficiency of its customer service, Green Energy Company's Customer Service Center operates 24 hours a day to centrally handle work orders, promptly address heating issues, and summarize solutions.

The Group continuously enhances its customer service levels through comprehensive optimizations. The Company provides all customer service personnel with extensive training in professional ethics, business knowledge, and communication skills to enhance their professional capabilities and service awareness. Simultaneously, the Company has established a sound management system and performance evaluation system to ensure that each customer service personnel fulfills their duties diligently. In daily operations, we strengthen supervision and inspection of customer service work to ensure effective implementation at every stage of the customer service process, thereby enhancing the quality and efficiency of customer service comprehensively.

## Facilitating Industry Development

Adhering to the concept of synergistic progress and co-creating the future, the Group actively engages in industry exchanges and collaborations, committed to advancing technological improvements and standardization in the field of environmental protection. Through close cooperation with peer companies, research institutions, and industry organizations, the Group enhances its own capabilities while providing crucial support for the development of the environmental protection industry.

In 2024, the Company actively engaged in various industry exchange activities such as the Tianjin Sustainable Development Research Association, the Shanghai Environmental Expo, the China Urban Water Development International Symposium, and the New Technology Equipment Expo, fostering extensive and in-depth dialogues with domestic and international environmental enterprises, as well as experts and scholars.



Environmental Protection Exhibition

## Case

China and New Technology Equipment Expo

From November 20th to 22nd, 2024, the Group, as a representative enterprise in the industry, was invited to participate in the China Urban Water Development International Symposium and New Technology Equipment Expo, where it delivered a professional presentation. The conference focused on cutting-edge issues in urban water development and the application of new technologies. Zhao Kai, Assistant General Manager of the Group, delivered a speech titled "Focusing on Resource and Energy Utilization to Support Green Low-Carbon Development" at the sub-forum on "Wastewater Energy Development and Resource Recovery." Zhao shared the Group's practical experience in areas such as recycled water reuse and wastewater latent heat resource utilization. He also introduced the Company's unique "Five-dimensional Integration" business model, providing innovative cases and development strategies for the green and low-carbon transformation of the wastewater treatment industry.

Standardization construction is a crucial pathway to promote the standardized development of the industry and is one of the core areas we have long been focusing on. In 2024, we organized a municipal-level research project, leading and participating in the formulation of 13 in-process standards, covering various professional fields such as wastewater reclaimed water reuse, energy conservation and carbon reduction in wastewater treatment plants, and building carbon neutrality. These standards serve as important guiding references for the industry's technological development. In terms of national standards, we participated in the formulation of key national standards such as Urban Wastewater Reuse for Industrial Water Quality, playing a significant role in promoting the standardization of wastewater treatment and reuse technologies. Simultaneously, addressing local needs and practical issues, we contributed professional expertise by participating in the formulation of multiple local standards to support the enhancement of regional environmental governance capabilities, thereby contributing to the unification and improvement of industry standards.

▲ Participating in the Shanghai International

▲ The Tianiin Sustainable Development Research Association

## Participation in the International Symposium on Urban Water Development in



## **Demonstrating Social Responsibility**

Adhering to the concept of corporate social responsibility, Tianjin Capital Environmental Protection Group Co., Ltd.strives to create more positive value for society. The Company has formulated the *External Donation Management Measures* to regulate its donation activities. Within this framework, the Company remains committed to addressing social pain points and needs by leveraging its core strengths and professional expertise to implement targeted charitable initiatives. In 2024, the Company supported the rural revitalization strategy through various means such as issuing "Green + Rural Revitalization" dual-label bills, supporting rural development, and assisting in poverty alleviation for farmers. The Company actively practices social responsibility through social donations, volunteer services, and environmental public welfare education activities, demonstrating a deep concern for society and a sense of responsibility. During the reporting period, the Company completed the issuance of 500 million yuan worth of "Green + Rural Revitalization" dual-label bills, purchased 160,200 yuan worth of poverty alleviation goods, and provided financial support for rural revitalization projects. Additionally, Capital Environmental Protection conducted approximately 876 hours of volunteer services.

#### During the reporting period

The Company completed the issuance of **500** million yuan worth of "Green + Rural Revitalization" dual-label bills

Purchased 160,200 yuan worth of poverty alleviation goods

Capital Environmental Protection conducted approximately 876 hours of volunteer services

#### Case

#### Supporting Rural Development

In order to strengthen the grassroots fortress construction of rural party branches, fully leverage the core leadership role of party branches, and support rural revitalization, Qujing Chuangye Water Co., Ltd. actively responded to the poverty alleviation achievements and rural revitalization tasks of Qujing City Rural Revitalization Bureau and Qujing City Housing and Urban-Rural Development Bureau. The Company dispatched employees to serve as the first secretaries in Beigu Village, Tangtang Town, Xuanwei City, taking proactive actions to drive the implementation of key tasks in the stationed village, contributing to poverty alleviation and rural revitalization efforts.

#### Case

#### Poverty Alleviation through Agricultural Assistance

Enshi Chuanghuan Water Co., Ltd. actively responded to the consumption-based poverty alleviation policy by organizing a "Help Farmers Sell Oranges" campaign. Employees transformed into "compassionate salespersons" and actively promoted and sold oranges through social media, friends circles, and other channels.

#### Case Soci

#### Social Donation

The Hangzhou Tianchuang Water Co., Ltd., in-depth studying and implementing the important speech and instructions of General Secretary Xi Jinping during his inspection in Zhejiang, adheres to the general principle of "seeking progress while maintaining stability, promoting stability through progress, establishing priorities and breaking through afterwards". The Company further deepened and improved the leadership mechanism and working mechanism of the "Spring Breeze Action" with party and government leadership, departmental collaboration, and top-down coordination. Actively responding to the call of the local party committee, the Company organized the 2024 "Spring Breeze Action" donation activity, with a total of 60 employees participating in donations, totaling 4,453 yuan.

#### Case

#### Conducting River Patrol and Protection Volunteer Services

Hangzhou Tianchuang Water Co., Ltd., with Party building as its core, fully leverages the exemplary role of Party members and Youth League members, expanding the Company's cultural influence through the "volunteer service+" model. Since 2023, the Hangzhou Tianchuang Water Co., Ltd.'s Youth League branch, in conjunction with neighboring brother organizations, has actively carried out river patrol and protection volunteer service activities. Volunteers have actively engaged in comprehensive river environmental remediation and cleaning efforts, dedicating themselves to safeguarding urban water ecology. As of the end of the reporting period, this volunteer service has been conducted a total of 19 times.





Case

#### Case

#### Building a Better Community

On the morning of Lei Feng Day in 2024, the Beicang Wastewater Treatment Plant organized Party members, young members of the Communist Youth League, and intellectuals outside the Party to carry out the voluntary service activity "Lei Feng Day and Civilized Practice - I am an Actor." Around Beichen Hospital, volunteers warmly offered hot water to the busy sanitation workers, sincerely thanking them for their hard work and extending warm greetings. Simultaneously, volunteers actively distributed pamphlets of the Tianjin Municipal Civilization Behavior Promotion Regulations to passersby, taxi drivers, and delivery personnel, patiently explaining the norms of civilized behavior, striving to unite the upward forces of society, and contribute to the construction of a civilized city.





On the morning of May 8, 2024, the Party branch of the Xianyang Road Wastewater Treatment Plant took proactive action by organizing Party members, young Communist Youth League members, and employees to visit the Lijingyuan Community in Zhongbei Town to carry out a water environmental protection themed popular science activity titled "Save Water, Low Carbon Around Us." The activity focused on the Company's mission and core business of wastewater treatment, explaining to residents the current water shortage situation in Tianjin, ways to alleviate water resource conflicts, and also provided information on wastewater and the internal situation of the plant in conjunction with daily life. The water-saving initiative was well received and garnered widespread praise.



### Environmental Public Welfare Education and Promotion

On the morning of June 5, 2024, World Environment Day, the Group's Jin-Gu Wastewater Treatment Plant's ecological and environmental protection publicity team actively participated in the publicity event organized jointly by the Ecological Environment Bureau of Jinnan District, Jinnan District Culture and Tourism Bureau, and Haitang Street in Tianjin, commemorating the World Environment Day and Ecological Civilization Education and Propaganda Week in Jinnan District in 2024. The team focused on disseminating ecological environmental protection policies to residents, providing detailed explanations of the process of treating wastewater from "turbid" to "clear," and widely promoting residents' participation in ecological environmental protection and the practice of green production and living through distributing thematic promotional materials and displaying green low-carbon posters.

To further deepen the understanding of the importance of ecological environmental protection and the necessity of water resources conservation among the "children," on the afternoon of June 5, Jin-Gu Wastewater Treatment Plant actively hosted a visit and study activity for 35 teachers and students from Shuanggang Primary School in Jinnan District, Tianjin. They visited key points such as the central control room and the advanced treatment area of the Wastewater Treatment Plant, getting a close look at the wastewater treatment process onsite. The Plant's guide, considering the cognitive characteristics of young people, used the theme "I am a drop of water" to vividly present a fun and interactive "journey of wastewater transformation" to the young friends through a combination of PowerPoint, animations, and auxiliary teaching tools. This engaging process enabled the children to deeply understand the significance of ecological environmental protection and water resources conservation.







## Appendix of the Report

## ESG Key Performance

### Environmental Key Performance Indicators

Indicators	2024	2023	2022
Emission of Pollutants <sup>1</sup>			
Nitrogen Oxides (Tons)	29.061	22.675	29.441
Sulfur Oxides <sup>2</sup>	0.406	3.132	2.341
Respirable Suspended Particulates (Tons)	1.944	1.573	1.319
Carbon Monoxide (Tons)	3.651	2.608	2.242
Hydrogen Chloride (Tons)	1.309	0.954	0.699
Greenhouse Gas Emission <sup>3</sup>			
Scope 1 <sup>4</sup> (Tons of Carbon Dioxide Equivalent)	7,019	4,430	3,553
Scope 2 <sup>5</sup> (Tons of Carbon Dioxide Equivalent)	401,831	386,671	382,852
Scope 3 <sup>6</sup> (Tons of Carbon Dioxide Equivalent)	116	116	45
Total Greenhouse Gas Emissions (Tons of Carbon Dioxide Equivalent)	408,966	391,217	386,450
Greenhouse Gas Intensity(Tons of Carbon Dioxide Equivalent Per 10,000 Yuan of Revenue)	0.85	0.84	0.85
Waste			
Total Amount of Non - hazardous Waste(Tons)	1,148,215	1,072,238	1,011,165

<sup>1</sup>It includes the emissions from solid waste incineration projects, as well as the emissions generated by using of fossil fuels in other fixed equipment and during vehicle operation. The emissions from solid waste incineration projects are calculated based on the records of the pollutant monitoring system; for other emissions, the calculation refers to the emission factors in "How to Prepare Environmental, Social and Governance Reports - Appendix II: Reporting Guidelines for Environmental Key Performance Indicators" of the Exchange and the "Emission and Pollutant Generation Coefficient Manual for Domestic Pollution Sources".

<sup>2</sup>In 2024, we reduced the quantity of high-sulfur hazardous waste received, controlled the input of sulfides into the furnace, and strengthened the control over sulfur dioxide emissions. As a result, the amount of sulfur oxides generated significantly decreased compared to that in 2023.

<sup>3</sup>The calculation method refers to "How to Prepare Environmental, Social and Governance Reports - Appendix II: Reporting Guidelines for Environmental Key Performance Indicators" of the Exchange and "2006 IPCC Guidelines for National Greenhouse Gas Inventories".

<sup>4</sup>It includes emissions from the combustion of fossil fuels in fixed equipment, non-road mobile sources, and vehicle operation, as well as emissions from welding processes, and subtracts the carbon absorption of planted trees.

<sup>5</sup>It includes the indirect emissions from the purchased electricity and purchased heat. The electricity emission factor is selected from the average emission factor of the national power grid in 2022 released by the Ministry of Ecology and Environment of China; the heat emission coefficient is 0.11 tons of carbon dioxide per gigajoule.

<sup>6</sup>It includes the indirect emissions from employees' business flights during business trips.

Indicators	2024	2023	2022
Non - hazardous Waste Intensity(Tons Per 10,000 Yuan of Revenue)	2.38	2.30	2.24
Total Amount of Hazardous Waste(Tons)	29,888	29,632	29,300
Hazardous Waste Intensity (Tons Per 10,000 Yuan of Revenue)	0.06	0.06	0.06
Energy Use			
Natural Gas(Mwh)	25,503	13,930	5,922
Gasoline (Mwh)	1,525	1,738	1,670
Diesel (Mwh)	4,077	1,105	601
Liquefied Petroleum Gas(Mwh)	103	160	0
Acetylene (Mwh)	15	14	0
Purchased Electricity (Mwh)	614,062	670,526	648,246
Purchased Heat <sup>7</sup> (Mwh)	130,310	10,783	15,711
Heat Sold(Mwh)	185, 452	63,374	66,981
Cooling Capacity Sold (Mwh)	59,976	55,011	51,060
Total Energy Consumption <sup>8</sup> (Mwh)	652,514	579,871	554,109
Energy Intensity(Megawatt-Hours Per 10,000 Yuan of Revenue)	1.35	1.24	1.23
Water Consumption			
Total Water Consumption (m <sup>3</sup> )	9,837,907	9,772,933	2,102,488
Water Consumption Intensity(Cubic Meters Per 10,000 Yuan of Revenue)	20.38	20.95	4.65
Paper Consumption			
Paper Consumption (Tons)	16.06		
Paper Consumption Intensity(Tons Per 10,000 Yuan of Revenue)	0.00003	-	-

<sup>7</sup>In 2024, we newly won the bid for the entrusted operation project of the Junliangcheng Heating Station in Dongli District, Tianjin. Therefore, the consumption of purchased heat has significantly increased compared with that in 2023. <sup>8</sup>The calculation formula is: total energy consumption = total usage of direct energy (natural gas, gasoline, diesel, liquefied petroleum gas and acetylene) and indirect energy

(purchased electricity and purchased heat) - Total amount of energy sold externally.

## Social Key Performance Indicators

Indicators		2024	2023	2022
Staff Number <sup>9</sup>				
Conder	Male	1,574	1,532	1,553
Gender	Female	747	718	712
	19 Years Old or Younger	0	0	0
	20 - 29 Years Old	326	342	399
Age	30-39 Years Old	958	903	893
	40-49 Years Old	731	723	704
	50 Years Old or Older	306	282	269
	Doctor's Degree	5	-	-
	Master's Degree	229	-	-
Education	Bachelor's Degree	1,332	-	-
	Junior College Degree or Below	755	-	-
	Other Managers and Employees	2,172	-	-
Job Level	Middle Management	140	-	-
	Senior Management	9	-	-
	Headquarters	163	164	-
	Beijing-Tianjin-Hebei Region	430	439	-
	Yangtze River Delta Region	418	393	-
	Yellow River Basin Region	328	303	-
Region	Guangdong-Hong Kong-Macao Greater Bay Area Region	218	207	-
5	Southwest Region	253	249	-
	Caring Company	269	268	-
	Green Energy Company	88	83	-
	Zhongshui Company	142	144	-
	Tianchuang Environment	12	-	-
Total		2,321	2,250	2,265
Number of Other Workers <sup>10</sup>				
Conder	Male	51	77	-
Gender	Female	24	35	-

Indicators		2024	2023	2022
	19 Years Old or Younger	0	0	-
	20 - 29 Years Old	6	21	-
Age	30-39 Years Old	6	17	-
	40-49 Years Old	24	29	-
	50 Years Old or Older	39	45	-
Employee Turnover Rate	2			
<b>c</b> 1	Male	5.0%	5.8%	5.6%
Gender	Female	3.6%	3.5%	4.1%
	19 Years Old or Younger	0%	0%	0%
	20 - 29 Years Old	5.2%	10.5%	9.5%
Age	30-39 Years Old	3.1%	4.2%	4.6%
	40-49 Years Old	2.5%	1.8%	1.7%
	50 Years Old or Older	13.1%	9.6%	9.3%
	Headquarters	9.2%	13.4%	-
	Beijing-Tianjin-Hebei Region	3.5%	3.2%	_
	Yangtze River Delta Region	4.6%	9.9%	-
Region	Yellow River Basin Region	5.8%	1.7%	-
	Guangdong-Hong Kong-Macao Greater Bay Area Region	5.5%	2.4%	-
	Southwest Region	3.6%	3.6%	-
	Caring Company	2.2%	3.4%	-
	Green Energy Company	6.8%	6.0%	-
	Zhongshui Company	2.8%	4.2%	-
	Tianchuang Environment	0%	-	-
Total		4.5%	5.1%	5.1%
Percentage of Trained E	mployees			
	Male	94.8%	90.2%	99.1%
Gender	Female	99.1%	94.6%	99.4%
	Other Managers and Employees	95.9%	92.6%	97.5%
Job Level	Middle Management	100%	78.3%	100%
	Senior Management	100%	90.0%	100%
Total		96.2%	91.6%	99.2%
Average Training Hours	Per Employee (Hours)			
	Male	68	53	47
Gender	Female	59	50	46

<sup>9</sup>All employees within the reporting scope of the Group are full-time employees.

<sup>10</sup> It includes the employees of contractors, subcontractors and dispatched workers who work at the operation sites of the Group.

Indicators		2024	2023	2022
	Other Managers and Employees	62	49	44
Job Level	Middle Management	119	79	79
	Senior Management	128	131	170
Total		65	52	46
Employee Health and Safety				
Number of Lost Workdays(Days)		0	-	-
Number of Employees with Occupational Diseases(Persons)		0	-	-
Number of Work - Related Fatalities Each Year in the Past Three Years (Including the Reporting Year)(Persons)		0	-	-
Ratio of Work - related Fatalities Each Year in the Past Three Years (Including the Reporting Year)		0	-	-
Anti - corruption Training				
Average Training Hours (Hours)	Employees	30	15	12
Average Training Hours (Hours)	Directors	28	15	12

## Indicators Index

Indicators Index of Environmental, Social and Governance Reporting Guide

ESG Guideline		Corresponding Report Chapters
Mandatory Disclosure Requirements		
Governance Structure		Analysis of Materiality Issues, ESG Governance
Reporting Principles		About the Report
Reporting Scope	Reporting Scope	
A. Environmental		
Aspect A1: Emissions	General Disclosure	Advancing Environmental Protection Business
	KPI A1.1	ESG Key Performance

Mandatory Disclosure Requirements	
	KPI A1.2
	KPI A1.3
Aspect A1: Emissions	KPI A1.4
	KPI A1.5
	KPI A1.6
	General Disc
	KPI A2.1
Aspect A2: Resource Use	KPI A2.2
	KPI A2.3
	KPI A2.4
	KPI A2.5
Aspect A3: Environment and Natural Resources	General Disc
	KPI A3.1
Aspect A4: Climate Change	General Disc
Aspect A. candle endinge	KPI A4.1
B: Social	
	General Disc
Aspect B1: Employment	KPI B1.1
	KPI B1.2
	General Disc
	KPI B2.1
Aspect B2: Health and Safety	KPI B2.2
	KPI B2.3

#### Corresponding Report Chapters

Addressing Climate Change, Environmental Key Performance

Emission Management, Environmental Key Performance

Emission Management, Environmental Key Performance

Emission Management

Emission Management

Resource Management

ESG Key Performance

Water Resources and Material Management, Environmental Key Performance

Energy Management

Water Resources and Material Management

It has nothing to do with the operation of the Group

Environmental Management, Resource Management

Addressing Climate Change

Employee Employment, Employee Promotion, Employee Care

Employee Employment, Environmental Key Performance

Employee Retention, Environmental Key Performance

Establishing a Solid Safety Baseline

ESG Key Performance

ESG Key Performance

Occupational Health

ESG Guideline		Corresponding Report Chapters
Mandatory Disclosure Requirements		
	General Disclosure	Fulfilling Employee Dreams
Aspect B3: Development and Training	KPI B3.1	ESG Key Performance
	KPI B3.2	ESG Key Performance
	General Disclosure	
Aspect B4: Labor Standards	KPI B4.1	Employee Employment
	KPI B4.2	
	General Disclosure	
	KPI B5.1	
Aspect B5: Supply Chain Management	KPI B5.2	Supply Chain Management
	KPI B5.3	
	KPI B5.4	
	General Disclosure	Information Security and Privacy Protection
	KPI B6.1	The operation of the Group does not involve product recycling
Aspect B6: Product Liability	KPI B6.2	Customer Service Management
	KPI B6.3	Intellectual Property Protection
	KPI B6.4	Quality Management
	KPI B6.5	Information Security and Privacy Protection
	General Disclosure	Clean Construction
	KPI B7.1	Clean Construction
Aspect B7: Anti-corruption	КРІ В7.2	Whistleblower Management
	KPI B7.3	Clean Construction
	General Disclosure	
Aspect B8: Community Investment	KPI B8.1	Demonstrating Social Responsibility
	KPI B8.2	

## Indicators Index of Shanghai Stock Exchange's Self-Regulatory Guidelines for Listed Companies No. 14 - Sustainable Development Reporting

Dimension	Serial number	Issue	Corresponding report chapters
	1	Addressing Climate Change	Addressing Climate Change
	2	Pollutant Emissions	Emission Management
	3	Waste Disposal	Emission Management
Environmental	4	Ecosystem and Biodiversity Conservation	Biodiversity Conservation
	5	Environmental Compliance Management	Environmental Management
	6	Energy Utilization	Resource Management
	7	Water Resource Utilization	Resource Management
	8	Circular Economy	Resource Management
	9	Rural Revitalization	Demonstrating Social Responsibility
	10	Social Contribution	Demonstrating Social Responsibility, Facilitating Industry Development
	11	Innovation-driven Development	Driving Technological Innovation
	12	Science and Technology Ethics	Enhancing Data-driven Empowerment
- · · ·	13	Supply Chain Security	Supply Chain Management
Social	14	Equal Treatment of Small and Medium-sized Enterprises	/
	15	Safety and Quality of Products and Services	High-quality Service
	16	Data Security and Customer Privacy Protection	Enhancing Data-driven Empowerment
	17	Employees	Value People and Jointly Build the Future o Capita
	18	Due Diligence	/
Governance Related to	19	Addressing Climate Change	Stakeholder Engagement
Sustainable Development	20	Pollutant Emissions	Compliant Operation
	21	Waste Disposal	Compliant Operation

### Indicators Index of GRI standard (2021)

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Entering the Capital Environmental Protection		2-1
Topic: Focusing on the "Carbon Pea Promote Green Development	aking and Carbon Neutrality" Strategy to Jointly	/
	1.Adhering to Party Building Leadership	/
I Refine Governance and Stabilize the Foundation of Capital	2.Enhancing Corporate Governance	2-9、2-12、2-17、2-27、205-2、205-3、206-1
	3.ESG Governance	2-14、2-16、2-17、2-29、3-1、3-2、3-3
	1.Advancing Environmental Protection Business	/
II Drive Capital Development through Green and Low-Carbon	2. Addressing Climate Change	305-1、305-2、305-3、305-5
-	3.Implementing Green Operations	301-1、302-1、302-3、302-4、303-4、303-5、304- 2、305-7、306-2、306-3、306-5
	1.Ensuring Compliance in Employment	401-1、405-1、406-1、408-1、409-1
	2.Fulfilling Employee Dreams	404-1、404-2
III Value People and Jointly Build the Future of Capita	3.Creating the Happy Workplace	401-2、401-3、407-1
	4. Establishing a Solid Safety Baseline	403-1、403-2、403-3、403-5、403-6、403-7、403- 9、403-10
IV Led by Technology to Forge	1. Driving Technological Innovation	/
Capital Quality	2. Enhancing Data-driven Empowerment	418-1
	1. Building the Responsible Value Chain	308-1、414-1、416-2
V Join Hands and Contribute Capital Efforts	2. Facilitating Industry Development	/
	3.Demonstrating Social Responsibility	413-1
Appendix of the Report		/

## Reader Feedback Form

To continuously enhance our ESG practices and improve the capabilities and standards of ESG management, we highly value your opinions and suggestions.

We kindly request your assistance in addressing the issues raised in the feedback form and providing feedback to us through the following methods.

Protection Building

Fax: 86-22-23930126

Email: tjcep@tjcep.com

Your Informa	ht
Full Name	
Work Unit	
Contact Numbe	
Email	
Feedback	

1. WHAT IS ye		Julius
□ Excellent	: [	] Good
2.Do you believe this Re on the Company?		
🗆 Unable t	o unde	erstanc
3.How do you assess th and metrics disclosed in		
🗆 High	🗆 Rel	atively

4. What aspect of this Report are you most satisfied with?

Address: No. 76 Weijin South Road, Nankai District, Tianjin, Tianjin Capital Environmental

ion		

1.What is your overall assessment of the Company's ESG Report?

🗆 Fair

Report adequately reflects the significant impact of ESG issues

nd 🗆 Average 🗆 not understand

he clarity, accuracy, and completeness of the information, data, this Report?

high 🗆 Average 🗆 Relatively low 🗆 Low

5. What specific information would you like to further understand?

6.Do you have any suggestions for our future Report publications?

Reception Hotline: 022 - 23930000

Address: Capital Environmental Protection Building, No.76 Weijin South Road, Nankai District, Tianjin

Postal Code: 30038<sup>-</sup>

Official Website of Capital Environmental Protection: http://www.tjcep.com