

2020 Sustainability Report

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Board Statement

The Board of Directors is pleased to present the 2020 Sustainability Report of the Group. As the Group's main business are in water treatment and distribution, this Sustainability Report will focus primarily on the water operations of CIHL (Tianjin) Water Development Limited during the year 2020.

The Board has identified the following factors that have significant impact on sustainability of our operations:

- Energy and Chemicals Consumption
- Health and Safety
- Training and Development
- Employee Engagement
- Customer Satisfaction

This Report comprises the following sections:

- 1. Corporate Development Update
- 2. Current Operations
- 3. Energy and Chemicals Consumption
- 4. Human Resource
- 5. Health and Safety
- 6. Customer Service and Community
- 7. Impact of Covid-19

1. Corporate Development Update

CIHL (Tianjin) Water Development Limited ("Tianjin Water" or "Company") is an integrated water supply company involved in the processing of raw water and reclaimed water, distribution of treated water for industrial and domestic no-drinking uses, and the provision of engineering services to customers in Binhai New District in Tianjin City, China. The Company owns its own processing plants and distribution networks. Tianjin Water was established in September 2004 as a joint venture and as of 31 December 2020, owns and operates the Beitang Water Plant and the Xinhe Water Plant.

The Beitang Water Plant is located near Beitang Reservoir, and takes in raw water from Beitang Reservoir as well as Huanggang No. 1 Reservoir and Huanggang No. 2 Reservoir. Beitang Water Plant commenced operations in March 2006. The water treated by Beitang Water Plant complies with the standard of non-drinking water for urban residential and industrial uses ("城市污水再生利用、城市杂用水水质标准").

The Xinhe Plant, completed in 2019, is located in the Industrial Development Zone for Tianjin Binhai Hi-tech and New-tech, and is designed to treat the water discharged from a third-party-owned sewage treatment plant to the standard of Tianjin Municipal Standard Class One A. Part of the treated water is discharged into environment and the rest is further treated to the standard of reclaimed water suitable for industrial and domestic non-drinking uses, using UF+RO processing technology. The reclaimed water is fed into the network of pipelines owned by Tianjin Water and sold to customers.

The Company's network of pipelines covers the core area of Tianjin Binhai New District (天津滨海新区), which is located between Haifang Road in the East and Tangjin Expressway in the West. It covers Beitang Hi-tech Zone, Tanggu Ocean Hi-tech Zone, Dongxigu Area, Xiangluowan Business District, Lingang Economic Zone, Tianjin Port Bulk Cargo Logistic Centre, Central New Town North District, Tianjin Avenue area, South New Town. It will be further developed in accordance with the urban development plans of the service area, which is approximately 300 square kilometers in size. Since its establishment, the Company through its water treatment services has contributed greatly to the development of Tianjin Binhai New District (天津滨海新区).

Xinhe Water Plant

Tianjin Water successfully completed the whole project by the end of 2019. The project comprises two processes. The first process is to treat discharged water from a third party sewage treatment plant. This treatment is necessary to enable the discharged water to meet the newly implemented Tianjin Municipal Standards before discharging. The second process is to further treat the dischargeable water into re-usable water so that the treated water can be reused for industrial and domestic uses. The plant occupies an area of 20,016 square meters.

Beitang Water Plant

During 2018, the Beitang Water Plant has started to take water from the Huanggang No.2 Reservior as the Beitang Reservior, the previous source of raw water for the plant, had been reclassified by the government as water resources protection zone.

It is noteworthy that, since the commencement of commercial operation of Xinhe Water Plant, the use of raw water has decreased dramatically. This is because the reclaimed water from Xinhe Plant uses the treated sewage water instead of raw ground water. This switch of source from raw ground water to reclaimed sewage water is a great contribution to a better environment.

2. Current Operations

By the end 2020, Beitang Water Plant has reached daily production capacity of 100,000 cubic meters (m³) per day. The Xinhe Water Plant has achieved operational capacity of 70,000 m³ per day for discharging treatment and 50,000 m³ per day for reclaimed water. During the year, the network of pipelines increased by 53.6 kilometers, to reach a total network size of 447.55 kilometers, serving 534 corporate and commercial customers.

In 2020, the Group supplied a total of 16,411,500 cubic meters of water to its customers. The total area of plants and greenery watered by the water from our network has increased by 0.35 million square meters to reach 24.208 million square meters. Water used for watering plants and greenery was about 2.495 million m³, accounting for 15.21% of total water supplied by the Company.

In 2020, the total number of residential customers served by the Company increased by 6,605 to about 108,000 homes. Residential consumption reached 1.451 million m³, and accounting for 8.84% of total water supplied in the year.

In 2020, the number of office and commercial users increased by 21, with total consumption of 0.428 million cubic meters of water, accounting for 2.61% of total water supplied.

In 2020, the total number of industrial customers remains at 19. Water supplied to industrial users amounted to 12.037 million m³, accounting for 73.34%.



3. Energy and Chemical Consumption

Energy Consumption

The Company continually strives to increase efficiency in its consumption of energy and chemicals.

The Company has upgraded the automation for plant operations, improved safety and efficiency measures for operations, and implemented the remote monitoring of the plant operation and the distribution network on a 24/7 basis through centralized video links. This has resulted in higher efficiency and reduced costs.

The Company also improved the sanitation equipment to reduce chlorine use. This achievement has resulted in higher safety, lower maintenance requirements and better work conditions, thus ensuring smoother operations.

The Company has established energy and chemical consumption levels as key performance targets for staff throughout the various processes of the operations. Monthly competitions are organized for work teams and extra incentive bonus is paid in accordance with the competition results at the end of year.

The following tables show the results of energy efficiency results achieved by Beitang Plant in 2020 and Xinhe Plant in 2020 compared to the previous year:

Year	Water Supplied (m ³)	Electricity Used (kw.h)	Energy Consumption (kw.h/1000 m ³)	Decrease
2019	17,416,541	2,573,169.6	147.74	2.58%
2020	7,870,478	1,101,482.6	139.95	5.27%

Chart 2: Beitang Plant Electicity Consumption Reduction

Xinhe has commenced its full commercial operation in 2020. It has set a remarkable record in 2020 as shown below:

Process	Water Supplied(m ³)	•	Energy Consumption (kw.h/1000 m ³)
Treatment	24,516,000	2,335,347	95.26
Reclaimed Water	12,616,000	4,939,582	391.53

Chart 3: 2020 Xinhe Plant Electicity Consumption

Chemical Consumption and Environment Impact

The raw water from reservoirs and discharged water from sewage plants are main sources of raw materials for our water treatment plants. A number of chemicals are used in the process as purifying agents and sanitizing agents.

The table below shows the current levels of chemical consumption in our Beitang Plant:

Category	Names	Total Quantity (t)	Use per Unit (kg/1000 m ³)
Purifying Agent	Poly Aluminum Chloride	210.71	26.77
Sanitizer	Sodium hypochlorite	495.69	58.41

Chart 4: Current Levels of Chemical Consumption-2020

For the first year in commercial operation, Xinhe has achieved an excellent record in 2020 for its chemical consumption in both of the treatment and reclaimed water processes. The table below shows the record.

2020 water treatment (t)	Drug name	2020 Water consumption (t)	Use per Unit (kg/1000 m ³)
	Anti-sludging agent	14.60	1.16
	Reducting agent	26.88	2.13
12,615,947	Sodium hypochlorite	1,189.39	94.27
	Sodium hydroxide	16.28	1.29
	Hydrochloric acid	0	0

Chart 5: The chemicals input of Xinhe reclaimed water plant - 2020

2020 reclaimed water (t)	Chemicals	Total Quantity (t)	Use per Unit (kg/1000 m³)
	Sodium acetate	3,296.39	134.46
24,516,352	Flocculating agent	1,491.73	60.85
	Reducing agent	771.88	31.48
	Coagulant aids (anion)	16.63	0.68
	Coagulant aids (kation)	4.15	0.17
	Catalyst	882	35.98

Chart 6: The Xinhe sewage drug dosing - 2020

Target and Evaluation of Chemical Uses

The uses of chemicals depend on the characteristics of raw materials to be processed, ie, raw water and discharged water, as well as the standard for the products of process. External factors which influence the uses of chemicals include seasonality, weather, source of raw water, quality of raw water as well as users' requirements.

The Company has set targets for chemical and energy consumption and the relevant evaluation mechanism for Beitang Plant, as well as a new system of chemical and energy management system will be established for Xinhe Plant.

4. Human Resource

CIHL (Tianjin) Water has 73 employees. All have signed employment contracts in accordance to PRC Labor Laws.

Recruitment and Promotion

The employees are fully protected by the PRC Labor Laws. The Company seeks applicants through the open labor market and employs a merit based recruitment system. On-job training is provided to employees and staffs are offered long term career development paths.

Salaries and Benefit

All employees are covered by social security insurance and state pension(" Ξ $\mathbb{B}-\mathbb{E}$ "). Employees are also provided with subsidies in transportation, communication subsidies, paid annual leave as well needs-based financial aid.

The following tables list further information of the age profile of the Company's employees as at the end of 2020:

	Age Group	Numbers of Employees	Percentage
	30 and below	14	19%
	30< Age <=40	19	26%
Male	40< Age <=50	11	15%
	Above 50	8	11%
	30 and below	9	12%
	30< Age <=40	6	8%
Female	40< Age <=50	4	5%
	Above 50	2	3%

Chart 8: Employee Age Structure

Corporate Culture

The Company has established a corporate culture which is focused on humanity, practicality, and a sound management system.

The Company promotes the corporate culture through all forms of corporate activities. There is an Employees Guidebook which provides guidance on all aspects of operations. Staff and management are required to comply with all rules set out in the guide book.

The Company highlights company logo and other identification tools in the office and other business environment and holds corporate events to promote corporate culture and staff bonding on a regular basis.

New Honors Received



Chart 9: Opening Ceremony of Tianjin Environmental Protection Chamber of Commerce

5. Health and Safety

Health

2020 has seen the continued spread of the corona virus pandemic first discovered in late 2019. The Company has observed all advice and regulations during the year, provided the employees with necessary personal protection equipment and other equipment, such thermo-temperature detectors, to combat the virus. The Company assists the employees to have access to virus infection tests and vaccines. The Company plans to vaccinate all employees in the first half of 2021 in conjunction with the community vaccine program. The Company has reported no infections among its employees.

As part of employee welfare benefits, the Company provides employees with free annual health checks.

Safety

The Company has set up a safety operation system and put in place measures for enforcement. For pipeline network maintenance, the Company adopts regular patrols, together with a centralized video monitoring system. In the water plants, proper fences are set up around the water pools and life vessels placed inside the pools. There are warnings systems in the plants to highlight various risks. When entering work space, each work team must comprise at least two members walking together. Wearing of life jackets and reporting to central monitoring office in and out of work space are standard compulsory procedures.

In the past three years, the Company has recorded no incidents which result in death or injury to its workers.

The Company has also established relevant model codes for safe operations and protection measures. Stringent inspection rules have been set up for network monitoring and maintenance. For example, security surveillance camera system with alarms has been installed to cover all areas in our water plants. Our protection facilities include protection bars over precipitation pools advection pool, lifebuoys in designated places, water level alarm, alarm in chlorine room, and safety goggles. When working at precipitation pools, all staff is required to notify the central control room before entering the room and live monitoring is activated during the entire process from the central control room. Staff must work in pairs and wear safety jackets in that room. All new joiners must pass a swimming test and other safety tests. We have adopted a practicable emergency management plan. The Company emphasizes on strict compliance in model code for safety operations with adequate protection measure and regular maintenance and repair to our facilities to ensure safety.

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Our philosophy has always been "Safety in Production" when it comes to production. We are active in adopting all relevant rules and guidelines from our supervisory bodies, especially the "Notice on Commencing Deep Safety Operation Inspection" set by the Water Authority and Safety Committee of Binhai New District. We have established a safety operation team and a network safety operation team respectively headed by our Vice General Manager and internal supervisory department. A rewards system has also been established.



Chart 10: Organize staff to vaccinate against COVID-19

Training and Development

The Company trains new employees before deploying them to their jobs. The training covers skills, work environment, process, as well as corporate culture. The purpose is to allow new employees to team up quickly with experienced employees.

On-job and continuous training involves training in the area of specialized skills, fire-fighting, and specialized technology. We also provide work related training courses, including fire drills, safety knowledge, technical skills, etc., to improve our staff's operational skills and professional quality.



Chart 10: Organize safety training for staffs

Work Environment

The Company endeavors to provide all workers with clean and healthy work environment that meets today's standard.



Chart 11: Staff dormitories and dining halls

6. Customer Service and Community

In April 2018, The Company opened a customer service centre in Tianqi International Centre in Xianglongwan Business District to provide comprehensive customer services on site.

Customers can make payments via ATM at 8 branches of the Bank of China 24 hours a day.

There is a professional after-sales service and maintenance team who sees the needs of our customers. In 2020, our customer call centre handles a total of 30,151 services requests from and to our customers, including 13,688 calls from customers, 340 Wechat messages from customers and 2,003 calls to customers.

The Binhai New District is undergoing rapid development and construction. We anticipate that the demand of fresh water for social economic and environmental use will increase rapidly as a result. Scarcity in fresh water in the Binhai New District may emerge over time. The Company will provide quality and efficient service with a constant focus on rigorous management and stable production with an aim of building a water-conservation aware community in the area we operate.



Chart12: Water Service Center of Zhongxiang Tianjin Plant

7. Impact of Covid-19

The outbreak of Covid-19 took place in Wuhan, Hubei Province, at the end of 2019. Its impact on the Company was only felt around the Chinese New Year in late January 2020. Throughout the whole 2020, the Company has maintained continuous supply of water to customers. Water usage has declined in the first half of the year due to slower pace of activities of our customers, resulting from the shutdown of many sectors of the local economy, but rebounded in the second half. The Company complies with all government regulations for the utility industry. After receiving government approval in April, the Company has resumed the engineering and construction work throughout the rest of year. The operation of engineering and construction and the accommodations of workers are now subject to strict hygienic and social distancing requirements. There has been no infection involving our employees and their families.



Chart 13: Leaders of Binhai New Area Water Bureau inspected the Xinhe Plant Chant 14: Leaders of Market supervision and administration inspected our company and guide the work

