Annual Report 2019



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 Tianjin Capital Environmental Protection Group Company Limited

 天津創業環保集團股份有限公司

Important

- I. The board of directors (the "Board"), supervisory committee (the "Supervisory Committee"), directors (the "Directors"), supervisors (the "Supervisors") and senior management of Tianjin Capital Environmental Protection Group Company Limited (the "Company") confirm that the information in this annual report contains no false information, misleading statements or material omissions, and accept joint and several responsibilities for the truthfulness, accuracy and completeness of its contents.
- II. All Directors of the Company attended the Board meetings.
- III. PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers have issued standard unqualified audit reports of the Company.
- IV. Liu Yujun, the officer in charge of the Company, Peng Yilin, the officer in charge of the accounting function, and Liu Tao, the officer in charge of the accounting department (the accounting management officer), have declared that they are responsible for the truthfulness, accuracy and completeness of the financial reports contained in the 2019 annual report.
- V. The proposal on profit distribution or transfer of capital reserve fund to share capital for the reporting period as reviewed by the Board

As audited by PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers, the net profit attributable to the Company in 2019 amounted to RMB507.11 million. After deduction of the statutory common reserve of RMB41.14 million drawn in accordance with the relevant requirements of the Company Law of the PRC and the Articles of Association of the Company, adding the undistributed profits of RMB3,442.84 million at the beginning of the year, and deducting a cash dividend of RMB151.29 million for 2018 that was distributed in 2019, the actual profit distributable to the shareholders for this year amounted to RMB3,757.52 million.

According to the profit distribution policy of the Company, after considering the fact that the Company is still in the development stage and following the Company's arrangements for capital expenses on external project development in 2020, a cash dividend of RMB1.07 (inclusive of tax) for every 10 shares will be proposed to all shareholders for 2019, with the cash dividend amount in the sum of RMB152.71 million, representing 30.11% of the distributable profit realized for the year 2019 concerned attributable to the Company. There will be no transfer from the capital reserve fund to share capital in 2019.

The distribution proposal shall be submitted to the 2019 general meeting of the Company for consideration and approval.

Important

VI. Risk statements for the forward-looking statements

Not applicable

VII. Did the controlling shareholder of the Company and its connected parties misappropriate the Company's funds for non-operating purposes?

No

VIII. Did the Company provide external guarantees in violation of any specified decision-making procedures?

No

IX. SIGNIFICANT RISKS WARNING

Not applicable

X. Others

Unless indicated otherwise, financial figures in this annual report are denominated in RMB.

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I. DEFINITIONS

In this report, unless the context requires otherwise, the following terms shall have the following meanings:

"Group"	Tianjin Capital Environmental Protection Group Company Limited and its subsidiaries
"Subsidiaries"	Subsidiaries of Tianjin Capital Environmental Protection Group Company Limited
"Company"	Tianjin Capital Environmental Protection Group Company Limited
"Tianjin Investment Group"	Tianjin City Infrastructure Construction and Investment Group Company Limited
"Tianjin Municipal Institute"	Tianjin Municipal Engineering Design & Research Institute
"TMICL"	Tianjin Municipal Investment Company Limited
"Bohai Chemical"	Tianjin Bohai Chemical Industry (Group) Company Limited
"Tianjin Haihe"	Tianjin Haihe Construction Development and Investment Company Limited
"Jiayuanxing"	Tianjin Jiayuanxing Innovative Energy Technology Company Limited
"Jiayuanxin"	Tianjin Jiayuanxin Innovative Energy Technology Company Limited
"TLP"	Tianjin Lecheng Properties Company Limited
"TYCOM"	Tianjin Yuanyicheng Commercial Operation Management Company Limited
"Water Recycling Company"	Tianjin Water Recycling Company Limited
"China Construction Third Bureau No. 3 Construction Engineering Company"	China Construction Third Bureau No. 3 Construction Engineering Co., Ltd.* (中建三局第三建設工程有限責任公司)
"Hebei Gaocheng Economic Committee"	the management committee of Economic Development Zone in Gaocheng of Hebei

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"SGCI"	Shijiazhuang Gaocheng Construction Investment Co. Ltd.* (石家莊市槁 城區建設投資有限公司)
"SGEZTC"	Shijiazhuang Gaocheng Economic Development Zone Zhengtong Construction & Development Co., Ltd.* (石家莊槁城經濟開發區政通建 設開發有限公司)
"Guizhou Company"	Guizhou Capital Water Company Limited
"Baoying Company"	Baoying Capital Water Company Limited
"Qujing Company"	Qujing Capital Water Company Limited
"Fuyang Company"	Fuyang Capital Water Company Limited
"Hangzhou Company"	Hangzhou Tianchuang Capital Water Company Limited
"Hong Kong Company"	Tianjin Capital Environmental Protection (Hong Kong) Company Limited
"Wendeng Company"	Wendeng Capital Water Company Limited
"Jinghai Company"	Tianjin Jinghai Capital Water Company Limited
"Xi'an Company"	Xi'an Capital Water Company Limited
"Caring Company"	Tianjin Caring Technology Development Company Limited
"Anguo Company"	Anguo Capital Water Company Limited
"Wuhan Company"	Wuhan Tianchuang Capital Environmental Protection Company Limited
"Jinning Capital Company"	Tianjin Jinning Capital Water Company Limited
"Jiayuantian"	Tianjin Jiayuantian Innovative Energy Technology Company Limited
"Jiayuansheng"	Tianjin Jiayuansheng Innovative Energy Technology Company Limited
"Shandong Company"	Shandong Capital Environmental Protection Technology Co., Ltd
"Karamay Company"	Karamay Tianchuang Capital Water Company Limited
"Jiayuanbin"	Tianjin Jiayuanbin Innovative Energy Technology Company Limited

"Yingshang Company"	Yingshang Capital Water Company Limited
"Changsha Tianchuang Water"	Changsha Tianchuang Capital Water Co., Ltd.
"Changsha Tianchuang Environmental Protection"	Changsha Tianchuang Environmental Protection Co., Ltd.
"Linxia Company"	Linxia Capital Water Company Limited
"Anhui Company"	Anhui Capital Water Company Limited
"Dalian Chunliuhe Company"	Dalian Oriental Chunliuhe Water Quality Purification Company Limited
"Beijing-Tianjin-Hebei Region"	Including the four sewage treatment plants in Dongjiao, Xianyang Road, Jingu, and Beicang of Tianjin as well as Anguo Company, Jinghai Company, Jinning Capital Company, Caring Company, Jiayuanxing, Capital Materials Company and Water Recycling Company
"Southwest Region"	including Guizhou Company and Qujing Company
"Northwest Region"	including Xi'an Company, Karamay Company, Bayannur Company, Linxia Company and Jiuquan Company
"Central China Region"	including Anhui Company, Hefei Company, Fuyang Company, Wuhan Company, Yingshang Company, Honghu Tianchuang, Changsha Tianchuang Water, Changsha Tianchuang Environmental Protection and Hanshou Company
"Eastern China Region"	including Hangzhou Company, Baoying Company and Deqing Company
"Northeast Region"	Dalian Chunliuhe Company, Wendeng Company, Shandong Company and GJTC
"Qudong Company"	Tianjin Qudong Culture Media Co., Ltd.
"CSRC"	the China Securities Regulatory Committee
"Hefei Company"	Hefei Capital Water Company Limited
"Bayannur Company"	Inner Mogolia Bayannur Capital Water Co., Ltd.
"Honghu Tianchuang"	Honghu Tianchuang Water Company Limited
"Jieshou Company"	Jieshou Capital Water Company Limited

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"Chibi Company"	Chibi Capital Water Company Limited
"Shibing Company"	Shibinggui Capital Water Company Limited
"Deqing Company"	Deqing Capital Water Company Limited
"Guokong Jincheng"	Hebei Guokong Jincheng Environmental Control Co., Ltd.* (河北國控津 城環境治理有限責任公司)
"GJTC"	Hebei Guojin Tianchuang Sewage Treatment Company Limited* (河北國 津天創污水處理有限責任公司)
"Capital Materials Company"	Tianjin Capital New Materials Company Limited (天津創業建材有限公司)
"Hanshou Company"	Hanshou Capital Water Co., Ltd. (漢壽天創水務有限公司)
"Jiuquan Company"	Jiuquan Capital Water Company Limited (酒泉創業水務有限公司)

I. INFORMATION OF THE COMPANY

Chinese name of the Company Abbreviation of the Chinese name of the Company English name of the Company

Abbreviation of the English name of the Company Legal representative of the Company 天津創業環保集團股份有限公司 創業環保 Tianjin Capital Environmental Protection Group Company Limited TCEPC Liu Yujun

II. CONTACT PERSON AND METHOD

	Company Secretary to the Board	Company Secretary in Hong Kong	Securities Affairs Representative
Name	Niu Bo	Mona Y.Y. Cho	Guo Fengxian
Correspondence address	TCEP Building	22/F, Worldwide House,	TCEP Building
-	76 Weijin South Road	Central, Hong Kong	76 Weijin South Road
	Nankai District, Tianjin		Nankai District, Tianjin
Telephone number	86-22-23930128	852-21629620	86-22-23930128
Facsimile number	86-22-23930126	852-25010028	86-22-23930126
Email address	niu_bo@tjcep.com	cosec@tjcep.com	guo_fx@tjcep.com

III. COMPANY PROFILE

Company registered address Postal code of the registered address Office address Postal code of the office address Website Email address No. 45 Guizhou Road, Heping District, Tianjin, the PRC 300051 TCEP Building, 76 Weijin South Road, Nankai District, Tianjin, the PRC 300381 http://www.tjcep.com tjcep@tjcep.com

IV. PLACES WHERE INFORMATION IS DISCLOSED AND AVAILABLE FOR INSPECTION

Name of the media designated for the disclosure	Shanghai Securities News
of information Website designated by China Securities Regulatory	www.sse.com.cn
Committee (" CSRC ") for the disclosure of annual repor Place where the annual report is available for inspection	t Office of the Board, 18/F, TCEP Building, 76 Weijin South
	Road, Nankai District, Tianjin, the PRC

V. PROFILE OF THE SHARES OF THE COMPANY

	Stock Exchange for			Stock short name
Shares	listing shares	Stock short name	Stock code	before its change
A Shares	Shanghai Stock Exchange (the "SSE")	創業環保	600874	渤海化工
H Shares	The Stock Exchange of	Tianjin Capital	01065	Tianjin Bohai
	Hong Kong Limited			
	(the "Stock Exchange")			

VI. OTHER RELEVANT INFORMATION

Certified public accountants engaged by the Company (PRC)	Name Office Address	PricewaterhouseCoopers Zhong Tian LLP 11/F, PricewaterhouseCoopers Center,	
		2 Leading Enterprise Square, 202 Hu Bin Road,	
	Name of Signing Accountant	Huangpu District, Shanghai, the PRC Li Jun Song Yijin	
Certified public accountants engaged by the Company (Hong Kong)	Name Office Address Name of Signing Accountant	PricewaterhouseCoopers 22/F, Prince's Building, Central, Hong Kong Cheng Kwong On	

VII. MAJOR ACCOUNTING DATA AND FINANCIAL INDICATORS FOR THE PREVIOUS THREE YEARS

(I) Major accounting data

			Unit: 0'000	Currency: RMB
Major accounting information	2019	2018	Increase/Decrease for the period as compared to the same period last year (%)	2017
Operating revenue	285,145.3	244,751.5	16.50	214,834.1
Net profit attributable to the shareholders of the Company	50,710.7	50,116.8	1.19	50,825.1
Net profit after deduction of extraordinary items	<i>y</i> ,	90,11010		50,02511
attributable to the shareholders of the Company	38,445.2	44,560.6	-13.72	46,887.7
Net cash flows from operating activities	83,928.6	69,264.6	21.17	91,205.2

			Increase/Decrease as at the end of the period as compared to the end of the same	
	As at the end of 2019	As at the end of 2018	period last year (%)	As at the end of 2017
Net assets attributable to the shareholders of				
the Company	617,402.5	581,820.3	6.12	511,704.0
Total assets	1,799,080.7	1,568,744.8	14.68	1,245,289.0

(II) Major financial indicators

			Increase/Decrease for the period as compared to the same period	
Major financial indicators	2019	2018	last year (%)	2017
Basic earnings per share (RMB/share)	0.36	0.35	2.86	0.36
Diluted earnings per share (RMB/share)	0.36	0.35	2.86	0.36
Basic earnings per share after deduction of				
extraordinary items (RMB/share)	0.27	0.31	-12.90	0.33
Weighted average return on net assets ratio (%)	8.48	9.05	-0.57	10.33
Weighted average return on net assets ratio after deduction of extraordinary items (%)	6.43	8.05	-1.62	9.53

VIII. DIFFERENCES IN ACCOUNTING DATA UNDER THE DOMESTIC AND OVERSEAS ACCOUNTING STANDARDS

- Differences between net profit and net assets attributable to the Company's Shareholders as disclosed in the financial report in accordance with the international accounting standards and that in accordance with the accounting standards of the PRC simultaneously Not applicable
- (ii) Differences between net profit and net assets attributable to the Company's Shareholders as disclosed in the financial report in accordance with the overseas accounting standards and that in accordance with the accounting standards of the PRC simultaneously Not applicable
- (iii) Explanation on differences in domestic and overseas accounting standards Not applicable

IX. MAJOR FINANCIAL INFORMATION BY QUARTER FOR THE YEAR 2019

Unit: 0'000 Currency: RMB

	The First Quarter (January to March)	The Second Quarter (April to June)	The Third Quarter (July to September)	The Fourth Quarter (October to December)
Operating Income	59,263.4	63,208.2	71,597.4	91,076.3
Net profit attributable to the shareholders of the Company	9,338.6	12,511.7	16,916.5	11,943.9
Net profit after deduction of extraordinary items attributable to the shareholders of the Company	9,469.6	9,885.7	11,941.7	7,148.2
Net cash flows from operating activities	20,693.1	52,277.6	12,335.0	3,187.6

Differences between information by quarter and information disclosed in periodical reports

Not applicable

X. EXTRAORDINARY PROFIT AND LOSS ITEMS AND AMOUNTS

		Unit: 0'000	Currency: RMB
Extraordinary Profit and Loss Items	Amount in 2019	Amount in 2018	Amount in 2017
Profit/loss from disposal of non-current assets Government grants recognized in current profit and loss, except for those closely related to normal business operation, in compliance with requirements of national policies, and settled in certain amount	70.4	-90	-8.2
which are constantly granted by government	10,810.3	7,848.1	5,343.3
Profit from disposal of other current assets	4,870.3	0	0
Other non-operating income and expenses save for the above items	-152.0	-180.9	-72.6
Effect on non-controlling interests	-183.9	-126.7	-9.5
Effect on income tax	-3,149.6	-1,894.3	-1,315.6
Total	12,265.5	5,556.2	3,937.4

XI. ITEMS MEASURED BY FAIR VALUE

Not applicable

XII. PREPARED IN ACCORDANCE WITH THE HONG KONG FINANCIAL REPORTING STANDARDS

Results

Unit: 0'000 Currency: RMB

	2019	For the yea 2018	ur ended 31 Dece 2017	ember 2016	2015
Turnover	285,145	244,752	193,193	177,381	175,367
Profit before taxation	62,955	69,484	71,879	62,223	49,018
Taxation	(10,059)	(16,806)	(19,959)	(15,432)	(14,570)
Profit after taxation Non-controlling interests	52,896 (2,185)	52,678 (2,561)	51,920 (1,094)	46,791 (2,474)	34,448 (1,394)
Profit attributable to the shareholders of the Company	50,711	50,117	50,825	44,317	33,054
Dividend	15,126			13,559	9,991

Note: The results for each of the five years ended 31 December 2019 have been extracted from the previous annual reports and the audited consolidated income statements as set out in this annual report.

Assets and Liabilities

Unit: 0'000 Currency: RMB

		As	at 31 December		
	2019	2018	2017	2016	2015
Property machinery and equipment,					
Investment properties and Land use rights	80,101	64,199	52,803	53,046	57,114
Right-of-use assets	5,808	—			
Intangible assets	1,170,136	1,031,447	686,970	621,900	624,475
Associated company	19,500	19,500	_	_	2,600
Financial asset at fair value through other					
comprehensive income	200	200	—	_	
Available-for-sale financial assets	_	_	200	200	200
Long-term receivables	23,645	25,369	29,496	30,915	31,946
Deferred income tax assets	421	_	_	_	_
Other non-current assets	19,592	10,918	59,843	18,774	805
Net current assets	124,790	150,129	98,631	159,479	28,637
	1,444,193	1,301,762	927,943	884,314	745,777
Non-controlling interests	96,816	79,676	29,674	25,944	21,764
Long-term liabilities	729,975	640,266	386,564	383,932	283,901
Net assets	617,402	581,820	511,704	474,438	440,112

I. EXPLANATION OF THE PRINCIPAL BUSINESS OF THE COMPANY, ITS BUSINESS MODEL, AND THE INDUSTRY SITUATION DURING THE REPORTING PERIOD

(I) Principal Business of the Company and its Business Model

There was no material change in the principal business of the Company and its business model in 2019 as compared to 2018. The principal business of the Company remained to be the water utilities business and the new energy cooling and heating supply business, with the water utilities business being the main business growth driver.

1. Water utilities business

- (1) Sewage treatment business. As of the end of the reporting period, the Company had sewage treatment projects with a total capacity of 5,349,100 m³/day, inclusive of equity-based projects with a total capacity of 4,786,600 m³/day, a rise of 367,000 m³/day over the beginning of the reporting period, and commissioned operation projects with a capacity of 562,500 m³/day, a slight increase as compared to the previous year. Starting from the four sewage treatment plants covering the urban area of Tianjin, the Company expanded its sewage treatment business to 15 provinces and cities in the Beijing-Tianjin-Hebei Region, Central China, Eastern China, and Northwest China.
- (2) Water supply business. The Company's water supply business is divided into civil tap water supply and industrial water supply; and an additional capacity of 30,000 m³/day of the civil tap water supply was installed during the reporting period. As of the end of the reporting period, the capacity of civil tap water supply and industrial water supply was 240,000 m³/day and 75,000 m³/day, and the water supply business was mainly distributed in Qujing, Hanshou, and Bayannur.
- (3) Recycled water business. As of the end of the reporting period, the Company operated the recycled water business with a capacity of 420,000 m³/day, an increase of 65,000 m³/day as compared to last year. The recycled water business was mainly distributed in Tianjin, Gaocheng in Hebei, and Jiuquan in Gansu.

The Company's sewage treatment and water supply business were operated under the BOT, TOT, and PPP models, while its recycled water business adhered to the model of generating revenue from the production and sales of recycled water and providing recycled water pipeline connection engineering services. There was no material change in the models of the sewage treatment business, water supply business, and recycled water business as compared to the previous year.

2. New energy cooling and heating supply business

The new energy cooling and heating supply business was mainly operated in Tianjin. The new energy service area was 2,050,000 sq.m., with no increase during the reporting period; and the business was operated under the BOT model, same as the previous year.

3. Other businesses

In line with its strategic objective of being a comprehensive environmental service provider, the Company extended its reach to the industrial chain of the water utilities business with the basic water business as the driving point. At the same time, the Company provided itself opportunities and platforms for the development of new businesses such as industrial wastewater treatment, entire-process deodorization of sewage plants, sludge treatment and recycling, and leachate treatment through the advantage of its scale of operation, actively explored new businesses, and optimized the overall business structure of the Company, to further build up its integrated environmental service capabilities.

During the reporting period, the Company made steady progress in the hazardous waste business, increasing the disposal capacity of aluminum-containing sludge by 50,000 tons/year and the disposal capacity of waste hydrochloric acid by 23,000 tons/year. At the same time, the Company produced water purifying agents that can be used for its sewage treatment projects. In addition, the Company added the Dongying hazardous waste transfer station with a storage capacity of 20,000 tons/year. Save as disclosed above, there was no material change in the hazardous waste business.

During the reporting period, the Company increased the capacity of the sludge treatment business by 80 tons/day. As of the end of the reporting period, the capacity of the sludge disposal business that was mainly distributed in Tianjin and Jiuquan was 1,300 tons/day.

(II) Description of Industrial Situation

(1) The traditional water utilities business grows slowly with the advent of the period of high-quality operation of water projects

After years of development, facilities for China's urban water supply and sewage treatment have been equipped. The traditional water utilities business grows slowly. As standards and regulations concerning water treatment continue to be tightened, the Company has come to embrace the period of high-quality operation of water projects. The Company attaches great importance to water supply quality and safety, and puts forward new requirements for the efficiency of sewage treatment, intelligent management and control, and cost reduction and efficiency improvement. The operation and service capabilities of water utilities companies will occupy an important position in industry development and market competition in the future.

(2) Market competition shows a diversified trend and facilitates the concentration of the water utilities industry

With the slowdown of the traditional water utilities business, the period of stimulating industry growth by relying on the scale of new assets ends and is replaced by the asset integration period. As PPP policies become more stringent and project performance assessment is intensified, market entities with different advantages and disadvantages are motivated to accelerate asset integration, and leading companies make an active effort to carry out mergers and acquisitions, and consolidate their market position. In addition to traditional water utilities companies, companies from other industries transform themselves into water utilities companies and enter the water utilities industry through mergers and acquisitions. Market competition shows a diversified trend and the concentration of the water utilities industry becomes higher.

Going forward, the Company will continue to make use of its capabilities of water utilities project operation and further reinforce and expand its traditional water utilities business. Besides, the Company will promote sludge treatment, recycled water utilization, sponge city construction, hazardous waste treatment, and other businesses while enhancing its comprehensive environmental governance capabilities and competitiveness in the market to facilitate the smooth achievement of strategic planning goals.

II. EXPLANATION OF THE SIGNIFICANT CHANGES IN THE COMPANY'S MAJOR ASSETS DURING THE REPORTING PERIOD

Not applicable

III. ANALYSIS OF CORE COMPETITIVENESS DURING THE REPORTING PERIOD

The Group's core competitiveness was still mainly reflected in the following four aspects:

(1) Our ability to operate in a safe, stable, up-to-standard, and efficient manner

Since the construction and operation of Tianjin Jizhuangzi Sewage Treatment Plant, the first large-scale urban sewage treatment plant in China in 1984, the Company has operated water utilities projects across 15 provinces, cities, and autonomous regions of the country, mastered all major processes of municipal sewage treatment and their combinations, and witnessed the entire process that the water quality standard has been raised from class II to class IV. The Company also possesses Grade A qualifications for "operating comprehensive environmental governance facilities" for municipal and industrial sewage and for "operating urban centralized sewage treatment facilities". After the appraising of operation through comparison in the national water industry, many of the Company's projects have been awarded the titles of "Top Ten Operating Units", "National Top Ten Sewage Treatment Plants", and "Advanced Unit of Energy Conservation and Emission Reduction". The Company has devoted intensive efforts in the field of sewage treatment for 40 years and accumulated substantial experience in operation and management. It has cultivated a great number of professionals in sewage treatment and led the preparation of multiple industry standards and technical regulations concerning municipal sewage, recycled water, and sludge; the Company has explored and established the mechanism for operating and managing sewage treatment plants and the mechanism for nurturing plant directors, constantly trained persons in charge of operation for projects nationwide, and built a operation team in the local area, to form a sound echelon building system.

(2) Our practical, leading, flexible, and sustainable research and development capabilities

The Company established an R&D center and a post-doctoral workstation as early as 2004. The Company is also an experimental base for the National Engineering Research Center for Urban Water and Wastewater, and the mechanism for industry-university-research cooperation between the Company and a number of research institutes and universities has been established. In addition to technology R&D, the Company has been undertaking major national and local water projects and has incubated Caring Company, a platform company for the transformation of achievements in technology research. Caring Company has currently grown into a national high-tech subsidiary of the Company. As of the end of the reporting period, the Company owned a total of 91 patents and 3 software copyrights, and prepared and participated in the preparation of 15 national and Tianjin municipal industrial standards, specifications, and regulations concerning sewage and recycled water.

According to the strategic planning at the new development stage, to further highlight the leading role of science and technology, the Company rebuilds the R&D base and restructures the R&D center; promotes the application of scientific and technological innovation in various business areas; implements the "one base and three platforms" function of the R&D center (that is, one scientific and technological innovation base and three platforms of technology R&D, achievement transformation, and technical exchange); and promotes the exchange of high-tech cutting-edge technology information, industry-university-research cooperation, acquisition and transformation of technological achievements, and high-tech business incubation. Being positioned as a "comprehensive environmental service provider", the Company conducts research on the applied technologies of and provides technical support for improving the quality and efficiency of traditional municipal sewage treatment, solid waste treatment, new process and product development, turning garbage into resources, river and soil restoration, new energy utilization, smart water management, and sponge city.

(3) Our professional, dedicated, cooperative, and innovative staff team

During the reporting period, the Group had a total of 2,005 employees, among which 17 of them have a high professional title, 227 of them have a senior professional title, and 317 of them have a medium-grade professional title. The professional fields cover environmental engineering, water supply and drainage, electrical engineering, mechanical equipment, economics, and management.

The Group implements linear management on business, nurtures professional teams for technology R&D, market development, engineering construction, and operation management, and nurtures and provides operational management personnel for new development projects nationwide by relying on the water plants of the Company. The subordinate companies implement regional management for the water utilities business, coordinate regional operation and construction and develop surrounding markets, and carry out professional management of strategic emerging businesses including hazardous waste, new energy, and transformation of achievements in technology research, in an effort to nurture professional management and operation teams, and help the teams grow stronger and better.

The Group emphasizes and encourages innovation. For many years, it has been conducting management and technological innovation activities to stimulate the enthusiasm of all employees for innovation. As a result, there comes a constant stream of innovative talents who occupy an important position in the Company. Over the years, the Company has nearly 80 achievements in management innovation and 97 achievements in technology innovation, of which 58 of them have been recognized as scientific and technological achievements in Tianjin and all of such have been transformed into deliverables. Innovation brings tremendous economic benefits to the Company.

(4) Our corporate reputation for being trustworthy, responsible, standardized, and reliable

In the past 20 years since listing, the Company has provided Tianjin and other parts of the country with safe, stable, up-to-standard, and efficient water operation services by drawing on its professional operation capabilities, and assuming social responsibilities as state-owned enterprise, and conducting standardized operations as listed company. Irrespective of the guarantee of daily operation or the cooperation with the construction department to complete emergency construction tasks, dealing of public emergencies, and the assistance to government regulators to solve municipal and livelihood issues, the Company will do everything within its capacity to shoulder its responsibilities, giving consideration to both economic and social benefits. The Company has been acknowledged and praised by relevant national ministries and commissions and local governments for many times.

Under the group management model, the Company has established a group-wide internal control management system under the regulation of the Shanghai Stock Exchange and Hong Kong Stock Exchange, and sets up and implements an updated and optimized mechanism, to ensure the standardized and stable operations, risk control in the course of business development, and business compliance and financial security of the Company.

Adhering to the development strategy of pursuing progress while ensuring stability, the Company continues to optimize the market development system and plan the market development layout as a whole. For years, the Company has maintained growth in the water utilities business and relevant environmental protection businesses. The Company has been awarded the title of "Top Ten Influential Enterprises in China's Water Utilities Industry", establishing a good image and brand reputation for 14 consecutive years since 2005.

These four core competitiveness complement one another in which corporate integrity, diligent employees, and technology innovation provide an ultimate assurance to customers, thereby making a positive brand influence in environmental protection. There was no material change in the core competitiveness of the Group compared with the previous year.

I. OPERATION DISCUSSION AND ANALYSIS

In 2019, under the leadership of the Board and in accordance with the 2019 Operating Strategy and Business Plan of the Group, the management of the Company has continued to solidly promote basic management, technology R&D, market development, institutional mechanism reform and other operations:

1. Further deepening operational management and consolidating operational advantages

Following the introduction of more stringent sewage treatment and discharge standards in various places, the Company upgraded and transformed multiple sewage projects. As the project operation has become more complex, the Company set up a large operational management center to systematize and standardize operational management on the one hand, and refined innovation and optimized technical schemes on the other hand, to strive to provide excellent operational services, control operational cost, and ensure project return.

In 2019, the Company, by overcoming numerous difficulties, completed the upgrading and renovation projects of the Jingu and Beicang sewage water treatment plants in the urban area of Tianjin, and was granted the upgrading projects of the Xianyang Road Sewage Water Treatment Plant by exchanging with non-monetary assets, and achieved overall A standard for effluent water quality. At the same time, the Company and Tianjin Water Bureau* (天津水務局) (Party A to the agreement) jointly evaluated and negotiated the sewage treatment service fee after the upgrade. Both parties agreed, on the basis that the income level of the existing projects remain unchanged, the unit price of the sewage treatment service fee, being RMB2.32/m³, would be applicable to the sewage water treatment plants in Jingu, Beicang, Xianyang Road, and Dongjiao in Tianjin after their upgrades. The new unit price of the sewage treatment service fee is currently subject to the approval procedures of the relevant government departments.

The construction of the Yishui hazardous waste disposal project under Shandong Company, a subsidiary of the Company, was completed and the project was officially put into operation. The construction of projects in other areas are in progress according to the plan.

2. Intensifying marketing effort and expanding the scale of the principal business

During the reporting period, the Company successively obtained the sewage treatment PPP project in Jieshou (2nd batch); the franchised projects of the Yuanquan Waterworks in Hanshou County; the PPP project for the comprehensive improvement of the regional water environment in Gaocheng District, Shijiazhuang City, Hebei Province; the first and the second sewage treatment plants in Suzhou District, Jiuquan City; the Yingdong sewage treatment plant project (phase II); the governmental and social cooperation PPP project of the construction of the urban sewage treatment facilities for towns in Huize County; and phase I of the PPP project of the second sewage treatment plant in the north of Huoqiu County. The newly-added sewage treatment capacity, recycled water capacity, and tap water supply capacity was 367,000 tons per day, 65,000 tons per day, and 30,000 tons per day respectively.

3. Establishing a market-oriented incentive mechanism and deepening management innovation

The Company actively advances marketization reform, establishes a market-based incentive mechanism, and builds a professional manager team and puts in place a corresponding market-based salary and appraisal system, to establish a market-oriented employment mechanism and give full play to the performance-driven role of the management, thus driving the smooth realization of the Company's strategic goals. To adapt to the increasingly complex management of the Group, the Company integrates various management functions, sets up corporate governance centers, corporate management centers, and other functional management centers, combines these centers with the three existing linear business centers, and further optimizes the matrix management system. These efforts lay a solid foundation for improving the overall management efficiency, and management and control capabilities of the Group.

4. Strengthening the foundation, increasing investment, and playing the leading role of science and technology

In 2019, the Company's R&D base and R&D center were preliminarily constructed, while laboratory qualification certification was initiated. The market-oriented scientific research progressed as planned, and functions such as sci-tech liaison, sci-tech information sharing, and sci-tech exchange and training played an increasingly important role. The leading role of technology R&D in market development, particularly in participating in market competition slowly emerged. Favorable economic benefits were made in the transformation of achievements in technology research centering on the CYYF+ entire-process deodorization business of Caring Company. As of the end of the reporting period, the Company owned a total of 91 patents on sewage treatment and deodorization and 3 software copyrights.

5. During the reporting period, the shareholders' meeting of the Company agreed to issue green medium-term notes and green short-term financing bonds with a total amount of no more than RMB2 billion and would initiate the issuance in due time, to provide financial support for the Company's business development while optimizing the Company's financial structure.

II. OPERATION SITUATION OF THE PRINCIPAL BUSINESS DURING THE REPORTING PERIOD

1. Analysis on the overall results of operations during the reporting period

In 2019, the Group recorded an operating revenue of RMB2,851.453 million, representing an increase of 16.50% as compared to that of last year. The operating costs were RMB1,984.537 million, representing an increase of 26.48% as compared to that of last year. The net profit attributable to the Company was RMB507.107 million, representing an increase of 1.19% over last year. The slight increase in net profit as compared to the same period last year was mainly due to the increase in the gross profit resulting from the significant increase in the revenue of various businesses and to the cut in the income tax rate of sewage projects.

2. Analysis of the principal business

During the reporting period, the Group's principal business segment did not change significantly as compared to the previous year and the Group was still engaged in the sewage treatment business, recycled water business, tap water supply, new energy heating and cooling supply business, toll collection business, and transformation of achievements in technology research. It recorded an operating income of RMB2,662.361 million, representing an increase of 17.80% over the previous year.

- The sewage treatment business recorded an income of RMB2,025.026 million, representing an increase of 24.51% as compared to the same period last year, which was mainly attributable to the increased volume of sewage water treatment and the upward adjustment to the unit price of the sewage treatment service fee of the sewage treatment plants covering the urban area of Tianjin. During the reporting period, the Group processed a total of 1,367.419 million m³ of sewage, representing an increase of 12.4% as compared to the same period last year. On the one hand, the volume of the sewage treated by existing projects has increased. On the other hand, certain new sewage treatment projects were put into operation in the first half of this year.
- The recycled water business recorded an income of RMB283.813 million, representing a decrease of 18.88% as compared to the same period last year. This decrease was mainly attributable to: the revenue from the service of pipeline connection for recycled water falls significantly as the settlement of the service as confirmed by the progress schedule decreases over the previous year; and although the revenue of the Zhangguizhuang recycled water plant and Bayannur Company is driven by the year-on-year increase of the water sales volume, the revenue is still less than the decreased revenue from the service of pipeline connection. During the reporting period, the water sales volume was 60.981 million m³, representing an increase of 17.6% as compared to the same period last year.
- ③ The tap water supply business recorded an income of RMB105.374 million, representing an increase of 12.99% as compared to the same period last year, which was mainly attributable to the increase in the water sales volume. During the reporting period, the water sales volume was 48.696 million m³, representing an increase of 6.4% as compared to the same period last year. This was due to the increase of domestic water consumption from the Qujing water supply project; the year-on-year increase in the water sales volume as boosted by the commencement of the operation of the Bayannur project in March 2018; and the newly-added Hanshou water supply project.

- The new energy heating and cooling supply business recorded an income of RMB101.377 million, representing an increase of 11.38% as compared to the same period last year, which was mainly attributable to the year-on-year increase in the income from heating and cooling supply as the operation of the Heiniucheng Road new energy project was commenced in November 2018.
- (5) The business of transformation of achievement in technology research recorded an income of RMB44.386 million, representing an increase of 25.8% as compared to the same period last year, which was mainly attributable to heightened marketing efforts and the year-on-year increase in the sales revenue of deodorization equipment.
- (6) The toll collection business recorded an income of RMB62.302 million, which remained more or less the same as the same period last year.
- The hazardous waste disposal business recorded an income of RMB14.10 million during the reporting period since the commencement of the official operation of the Yishui hazardous waste disposal project in 2019.

During the reporting period, while striving for market expansion for its principal business, the Company continued to strengthen its project operation (including cost control and agreement maintenance), decrease the operating cost as much as possible, and in time adjust the unit price of the sewage treatment service fee for ensuring project income.

3. Analysis of other businesses

The Group's other businesses mainly include the sewage treatment entrusted operation business via the technical service model as well as the technical and engineering consulting business. During the reporting period, it realised an income for other businesses of RMB189.092 million, unchanged from the previous year.

(I) ANALYSIS OF THE PRINCIPAL BUSINESS

Analysis on changes in income statement and cash flow statement

Unit: 0'000 Currency: RMB

Item	Amount for the current period	Amount for the same period last year	Percentage change (%)
Operating revenue	285,145.3	244,751.5	16.50
Operating cost	198,453.7	156,899.5	26.48
Selling costs	707.5	541.7	30.61
Administrative expenses	16,866.1	12,909.6	30.65
Financial expenses-net	19,939.6	16,198.6	23.09
Net impairment losses on financial assets	3,138.3	1,297.3	141.91
Other gains – net	4,787.5	246.1	1,845.35
Income tax expense	10,058.7	16,806.4	-40.15
Net cash flows from operating activities	83,928.6	69,264.6	21.17
Net cash flows from investing activities	-195,348.8	-242,270.2	19.37
Net cash flows from financing activities	137,196.0	164,491.0	-16.59

- 1. Reason for change in operating revenue: It was mainly due to the increase in sewage treatment of existing projects and the price adjustment of the sewage projects covering the urban area of Tianjin, which increased the operating revenue.
- 2. Reason for change in operating cost: It was mainly due to increased water volume and improved water quality standards which resulted in significant increase in the cost per unit of the Group, and the impairment losses for the Anguo sewage treatment project.
- 3. Reason for change in selling expenses: It was mainly due to the operation of the Company's hazardous waste projects, which increased the selling expenses.
- 4. Reason for change in administrative expenses: It was mainly due to the year-on-year increase in asset depreciation as the Company's investment properties transferred to fixed assets and the increase in the staff number and administrative expenses of newly operated projects.

- 5. Reason for change in financial expenses: It was mainly due to the increase in the financial expenses as the interest expenses were recorded as expenses after certain construction projects were put into operation.
- 6. Reason for change in net impairment losses on financial assets: It was mainly due to the increase in the provision of bad debt for receivables accrued by the Company.
- 7. Reason for change in other gains net disposals of assets: It was mainly due to the disposal of the proceeds from the disposal of the tap water business from Anguo Company.
- 8. Reason for change in income tax: It was mainly due to the reduction of the applicable income tax rate of the Company's sewage treatment services.
- 9. Reason for change in net cash flows from operating activities: It was mainly due to the increase in the sewage treatment service fee received as compared to the same period last year.
- 10. Reason for change in net cash flows from investing activities: It was due to the fact that the investment payment of the construction projects of the Company for the current year were lower than those in the same period last year.
- 11. Reason for change in net cash flows from financing activities: It was mainly because the new debt financing for the current year was lower than that in the same period last year.

1. Analysis of income and costs

During the reporting period, while striving for market expansion and increasing the scale of its principal business, the Company continued to strengthen its project operation, on the one hand to improve the operation quality to meet increasingly stringent regulatory requirements, and strive for operating cost control through refined management; and on the other hand to maintain project agreements and adjust the unit price of the sewage treatment service fee in time for ensuring project income.

(1). Principal business breakdown by industry, product, and region

Unit: 0'000 Currency: RMB

Principal business by industry

Industry	Operating revenue	Operating cost	Gross profit margin (%)	Increase/Decrease in operating revenue as compared with last year (%)	Increase/Decrease in operating cost as compared with last year (%)	Increase/Decrease in gross profit margin as compared with last year (%)
Sewage treatment ^(Nove 1)	202,503	138,728	31.49	24.51	32.54	-4.15
Recycled water business	28,381	21,137	25.52	-18.88	-3.80	-11.67
Toll collection business	6,230	712	88.57	-0.29	-	-0.03
Tap water supply business	10,537	7,652	27.38	12.99	22.67	-5.73
Cooling and heating supply business	10,138	7,013	30.82	11.38	19.29	-4.59
Transformation of technology research achievements ^(Nore 2)	4,439	1,937	56.36	25.82	5.16	8.57
Others (Note 3)	4,008	2,800	30.14	2,054.84	3,046.07	-22.01

Principal business by region

Region	Operating revenue	Operating cost	Gross profit margin (%)	Increase/Decrease in operating revenue as compared with last year (%)	Increase/Decrease in operating costs as compared with last year (%)	Increase/Decrease in gross profit margin as compared with last year (%)
Beijing-Tianjin-Hebei Region ^(Note 4)	160,668	103,044	35.87	14.80	28.24	-6.72
Southwest Region (Note 5)	15,123	11,089	26.67	-9.33	1.45	-7.80
Northwest Region (Note 6)	28,711	22,113	22.98	45.33	39.91	2.98
Central China Region (Note 7)	23,712	17,089	27.93	52.08	66.04	-6.06
Eastern China Region (Note 8)	30,196	21,546	28.65	-0.15	1.73	-1.32
Northeast Region (Note 9)	7,826	5,098	34.86	106.38	79.38	9.81

- Note 1: The increase was due to the increased treatment volume of existing water projects and the upward adjustment to the unit price of the sewage treatment service fee of the sewage water treatment plants in the urban area of Tianjin.
- Note 2: The increase was due to the year-on-year increase in the settlement amount of the deodorization business.
- Note 3: The increase was due to the addition of commissioning and installation service plus technical advice service of new equipment.
- Note 4: The Beijing-Tianjin-Hebei Region includes the four sewage treatment plants in Dongjiao, Xianyang Road, Jingu, and Beicang of Tianjin as well as Anguo Company, Jinghai Company, Jinning Capital Company, Water Recycling Company, Caring Company, Jiayuanxing, Capital Materials Company, etc., and the growth was due to the increase in business volume as compared with the same period last year.
- Note 5: The Southwest Region includes Guizhou Company and Qujing Company.
- Note 6: The Northwest Region includes Xi'an Company, Karamay Company, Bayannur Company, Linxia Company, and Jiuquan Company, and the increase was due to the new commissioning and installation service plus technical advice service of Xi'an Company, the operation of the projects of Karamay Company (Phase II) and Linxia Company, and the newly-added Jiuquan Company.
- Note 7: Central China Region includes Fuyang Company, Wuhan Company, Yingshang Company, Changsha Tianchuang Water, Changsha Tianchuang Environmental Protection, Anhui Company, Honghu Tianchuang, Hefei Company and Hanshou Company. The increase was due to the operation of the upgraded projects of Anhui Company, Hefei Company, and Wuhan Company and the newly-added Hanshou Company.
- Note 8: The Eastern China Region includes Hangzhou Company, Baoying Company, and Deqing Company.
- Note 9: The Northeast Region includes Dalian Chunliuhe Company, Wendeng Company and Shangdong Company. The increase was due to the full-year operation of Dailian Chunliuhe Company and the commencement of the trial operation of Shandong Company.

(2). Analysis of production and sales volume

Not applicable

(3). Cost analysis

Unit: 0'000 Currency: RMB

By industry

Industry	Cost item	Amount for the current period	Percentage of total cost for the current period (%)	Amount in the same period last year	Percentage of total cost for the same period last year (%)	Percentage change in the amount for the current period as compared to the same period last year (%)	Explanation
Sewage treatment	Labor	14,532	8.07	12,999	9.19	11.79	Nil
0	Energy consumption (electricity)	24,874	13.82	20,977	14.84	18.58	Nil
	Materials consumption	26,159	14.53	17,042	12.05	53.50	Increase in the material consumption mainly due to the increase in the volume of sewage treatment
	Depreciation and amortization	43,081	23.94	31,068	21.97	38.67	Increase in amortization expenses resulting from the projects that are newly put into operation
	Other manufacturing costs	30,082	16.71	22,581	15.97	33.22	Laboratory testing, sludge disposal, and plant environmental fees resulting from the projects newly put into operation as well as the maintenance and monitoring costs of existing projects has increased
	Subtotal	138,728	77.07	104,667	74.02	32.54	Nil
Tap water	Labor	1,318	0.73	1,060	0.75	24.34	Nil
	Energy consumption (electricity)	936	0.52	689	0.49	35.85	The Hanshou Project is newly added this year
	Materials consumption (including the water resource fees)	3,179	1.77	2,969	2.10	7.07	Nil
	Depreciation and amortization	1,846	1.03	1,411	1.00	30.83	The Hanshou Project is newly added this year
	Other manufacturing costs	373	0.21	109	0.08	242.20	The costs of maintenance, water quality testing, and pipeline network maintenance has increased due to the newly-added Hanshou Project this year
	Subtotal	7,652	4.26	6,238	4.41	22.67	Nil

Industry	Cost item	Amount for the current period	Percentage of total cost for the current period (%)	Amount in the same period last year	Percentage of total cost for the same period last year (%)	Percentage change in the amount for the current period as compared to the same period last year (%)	Explanation
Recycled water	Labor	2,194	1.22	1,829	1.29	19.96	Nil
,	Energy consumption (electricity)	1,261	0.70	1,241	0.88	1.61	Nil
	Materials consumption	1,081	0.60	895	0.63	20.78	Nil
	Depreciation and amortization	2,710	1.51	3,023	2.14	-10.35	Nil
	Other manufacturing costs	5,177	2.88	1,655	1.17	212.81	The pipeline network commissioning and maintenance costs have increased.
	Subtotal	12,423	6.91	8,643	6.11	43.73	Nil
Recycled water	Construction cost	8,714	4.84	13,329	9.43	-34.62	The cost has reduced due to the
pipeline connection							decrease in the settlement of the pipeline connection business.
	Subtotal	8,714	4.84	13,329	9.43	-34.62	Nil
Energy supply	Labor	1,203	0.67	930	0.66	29.35	Nil
	Energy consumption (electricity)	2,343	1.30	2,231	1.58	5.02	Nil
	Materials consumption	74	0.04	64	0.05	15.63	Nil
	Depreciation and amortization	2,348	1.30	1,833	1.30	28.10	Nil
	Other manufacturing costs	1,045	0.58	821	0.58	27.28	Nil
	Subtotal	7,013	3.89	5,879	4.16	19.29	Nil
Toll collection	Collection management fee	712	0.40	712	0.50	0	Nil
	Subtotal	712	0.40	712	0.50	0	Nil
Transformation of achievements in	Expenditure for materials and facilities	1,785	0.99	1,753	1.24	1.83	Nil
technology research	Other manufacturing costs	152	0.08	89	0.06	70.79	The depreciation expenses have increased
	Subtotal	1,937	1.07	1,842	1.30	5.16	Nil
Others	Product marketing	2,196	1.22	0	0	0	The equipment debugging and installation revenue has increased
	Other manufacturing costs	604	0.34	89	0.06	578.65	The cost has increased due to the operation of the hazardous waste business
	Subtotal	2,800	1.56	89	0.06	3,046.07	Nil
	Total	179,979	100	141,399	100	27.28	Nil

Cost analysis and other explanation

Nil

(4). Major customers and major suppliers

Sales from the top five customers amounted to RMB1,666.4789 million, accounting for 58% of the total sales for the year; among which, sales from related parties was RMB0 million, accounting for 0% of the total sales for the year.

Procurement from the top five suppliers amounted to RMB645.5174 million, accounting for 24% of the total procurement for the year; among which, procurement from related parties was RMB0 million, accounting for 0% of the total procurement for the year.

Other explanation

Nil

2. Expenses

See the above analysis statement on relevant subject changes in income statement and cash flow statement for details.

3. Research and development investment

	Unit: 0'000	Currency: RMB
Expensed research and development investment during the current period		1,792.5
Capitalized research and development investment during the current period		849.26
Total research and development investment		2,641.76
Percentage of total research and development investment over operating revenue (%)		0.93
Number of research and development personnel in the Company		212
Percentage of the number of research and development personnel over the		
total number of personnel of the Company (%)		10.57
Ratio of capitalized research and development investment (%)		32.15

Explanation

During the reporting period, the Company has made great efforts to promote the research and development work and rebuild the research and development bases and centers. The investment in R & D has increased significantly compared with the previous year. The main capitalized R & D investment in the year is the expenditure for the purchase of R & D equipment.

4. Cash flow

See the above analysis statement on relevant subject changes in income statement and cash flow statement for details.

(II) MAJOR CHANGES IN PROFITS CAUSED BY THE NON-PRINCIPAL BUSINESS

Not applicable

(III) ANALYSIS OF ASSETS AND LIABILITIES

1. Assets and liabilities

Unit: 0'000 Currency: RMB

Items	Amount as at the end of the current period	Percentage of the amount as at the end of the current period to the total assets (%)	Amount as at the end of the previous period	Percentage of the amount as at the end of the previous period to the total assets (%)	Percentage change in amount as at the end of the current period as compared with the end of the previous period (%)	Explanation
Notes receivable ^(Note 1)	1,613.1	0.09	1,029.5	0.07	56.69	Mainly due to the increase in the bank acceptance notes received during the current period as compared with the same period last year
Prepayments	3,858.3	0.21	2,353.1	0.15	63.97	Mainly due to the increase in the prepayment for materials during the current period as compared to the same period last year
Other receivables	6,515.6	0.36	3,616.2	0.23	80.18	Mainly due to the increase in awarded deposits and the value-added tax refund receivable during this period as compared with last year
Other current assets	8,972.8	0.50	17,947.7	1.14	-56.41	Mainly due to the increase in the value-added tax to be credited by the Company within one year as compared with last year
Investment property	0.0	0.00	8,405.2	0.54	-100.00	Mainly due to the decrease of the external leasing business of the Company's buildings
Property, plant and equipment	80,100.7	4.45	49,758.0	3.17	40.37	Mainly due to the increased investment in the construction of hazardous waste projects and other projects as compared with last year
Deferred income tax assets	420.9	0.02	0.0	0.00	100.00	Mainly due to the impact of deductive temporary differences to income tax
Other non-current assets	19,591.9	1.09	10,918.1	0.70	79.44	Mainly due to the increase in the long-term value-added tax to be credited by the Company as compared with last year
Trade payables	23,129.3	1.29	17,639.8	1.12	31.12	Mainly due to the costs of pipeline network maintenance, water resource fees, and materials expenses payable by subsidiaries
Borrowings – short term	105,986.9	5.89	44,336.9	2.46	139.05	Mainly due to the increase in long-term borrowings due within one year during this period
Borrowings – long term	506,679.7	28.16	411,468.3	22.87	23.14	Mainly due to the newly added long-term borrowings of the Company

Note 1: Notes receivable is included in trade receivables.

(IV) ANALYSIS OF OPERATIONAL INFORMATION OF THE INDUSTRY

With the revision of the Water Pollution Prevention and Control Law (水污染防治法) of the PRC, the local governments have been increasing the demands for the enhancement and assurance of the water environment quality. On the one hand, the existing sewage treatment plants have gradually begun to be upgraded in order to meet the higher discharge standards. On the other hand, the comprehensive management of water environment will become the mainstream demand of the market.

The "National Plan for Construction of Urban Sewage Treatment and Recycling Facilities under the 13th Five-Year Plan" ("十三五"全國城鎮污水處理及再生利用設施建設規劃) suggests that by the end of 2020, full coverage of urban sewage treatment facilities shall be achieved, the black and odorous water of urban built districts above the prefecture level shall be controlled within 10%, the urban sludge harmless disposal rate shall reach 75%, and the utilization rate of recycled water in cities and counties shall be raised further.

The above industry policies not only give the enterprises in the water utilities industry ample room for market development, but also present a great challenge for operation, market expansion, capital operation, technology R&D, and other comprehensive capabilities of the enterprises.

Water Utilities Industry Analysis

1. Capacity and operation situation during the reporting period

Section			Capacity	Utilization rate of capacity (%)
Supply of tap water a	nd industrial water		315,000 m³/day	46.1
Sewage treatment			4,211,100 m³/day	89.0
Recycled water			355,000 m ³ /day	38.4
District	Capacity	Scale of new production during the reporting period	Planned capacity of projects under construction	Estimated production time
Beijing-Tianjin- Hebei Region	1,905,000 tons/day	0	600,000 tons/day	2020
Northwest	925,000 tons/day	15.5	100,000 tons/day	2020
Eastern China	698,000 tons/day	4.8	0 tons/day	-
Central China	708,100 tons/day	28.81	276,600 tons/day	2020 to 2021
Southwest	440,000 tons/day	5	31,850 tons/day	2020 to 2021
Northeast	205,000 tons/day	0	100,000 tons/day	2020

2. Sales information

Section	Sales revenue	Cost	Gross margin (%)	YoY change (%)
Supply of tap water	10,537	7,652	27.38	-5.73
Sewage treatment	202,503	138,728	31.49	-4.15
Recycled water	10,839	12,423	-14.61	-5.59

(1). Section of supply of tap water

1.1 The average water price and pricing principle for each district, and adjustment during the reporting period

Unit: Yuan Currency: RMB

Unit: 0'000 Currency: RMB

District	Average water price	Pricing principle	Adjustment during the reporting period	Adjustment mechanism (if any)
Qujing	1.70	The price of water supply services is calculated with the principle of covering the operation and maintenance costs of tap water supply projects with reasonable investment return	No price adjustment	Price adjustment by the cost factor adjustment method
Hanshou, Hunan	2.60	The price of water supply services is calculated with the principle of covering the operation and maintenance costs of tap water supply projects with reasonable investment return	No price adjustment	Price adjustment by the cost factor adjustment method
Bayannur	2.35	The price of water supply services is calculated with the principle of covering the operation and maintenance costs of tap water supply projects with reasonable investment return	No price adjustment	According to the relevant provisions of the Administrative Measures on the Price of Water Supplied to Municipalities (城市 供水價格管理辦法)

1.2 The average water price and pricing principle for each customer type, and adjustment during the reporting period

Unit: Yuan Currency: RMB

Type of client	Average water price	Pricing principle	Adjustment during the reporting period	Adjustment mechanism (if any)
Government	2.14	The price of water supply services is calculated with the principle of covering the operation and maintenance costs of tap water supply projects with reasonable investment return	The Hanshou Project has been newly added during the reporting period	Price adjustment by the cost factor adjustment method

(2). Section of sewage treatment

2.1 The average water price and pricing principle for each district, and adjustment during the reporting period

Unit: Yuan Currency: RMB

District	Average water price	Pricing principle	Adjustment during the reporting period	Adjustment mechanism (if any)
Beijing-Tianjin- Hebei Region	2.12	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	The unit price of the sewage treatment service fee, being RMB2.32/m ³ , will be applicable to the sewage water treatment plants in Jingu, Beicang, Xianyang Road and Dongjiao, in Tianjin after they are upgraded.	Price adjustment by the cost factor adjustment method
Northeast	1.20	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	Wendeng Company changed the water price (exclusive of tax) of RMB1.3/ m ³ to RMB1.39/m ³ (inclusive of tax) due to the adjustment to the value-added tax refund mechanism, and subsequently changed the water price to RMB1.37/m ³ , which should be put into effect as of 1 April 2019.	Price adjustment by the cost factor adjustment method

District	Average water price	Pricing principle	Adjustment during the reporting period	Adjustment mechanism (if any)
Eastern China	1.30	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	The newly-added Deqing Project has been put into operation.	Price adjustment by the cost factor adjustment method
Central China	1.12	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	The newly-added Anhui, Hefei, Honghu and Ninxiang Projects have been put into operation.	Price adjustment by the cost factor adjustment method
Northwest	1.29	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	The newly-added Gansu, Linxia and Jiuquan Projects have been put into operation.	Price adjustment by the cost factor adjustment method
Southwest	1.01	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	The water price for Guiyang Project has been increased to RMB1.40/ m ³ .	Price adjustment by the cost factor adjustment method
2.2 The average water price and pricing principle for each customer type, and adjustment during the reporting period

Unit: Yuan Currency: RMB

Type of client	Average water price	Pricing principle	Adjustment during the reporting period	Adjustment mechanism (if any)
Government	1.46	The price of project services is calculated with the principle of covering the operation and maintenance costs of sewage treatment projects with reasonable investment return.	See more details in the table "Average water price and pricing principle for each district, and adjustment during the reporting period" above.	Price adjustment by the cost factor adjustment method

3. Water quality of water sources of major water collection points

During the reporting period, the water sources of Qujing No. 1, No. 2, and No. 3 Water Plants of the Company are Xiaoxiang Reservoir, Xihe Reservoir, and Shuicheng Reservoir. According to the inspection information of Qujing Zhizhen Environmental Testing Co., Ltd.* (曲靖至臻環境檢測有限公司) in 2019, the water quality indicators of the three reservoirs met Class II surface water environmental quality standards (GB3838-2002). The front banner subsidiary in Bayannur in charge of tap water supply projects was Shengyuan Tap Water Plant. The water source for the plant is underground water of Gongjiqu (公濟渠). According to the inspection information of the Institute of Water Resources for Bayannur* (巴彥淖爾市水利科學研究所) in 2019, the water quality indicators of 10 water source wells met the Standards for Drinking Water Quality (《生活飲用水衛生標準》) (GB5749-2006).

4. Supply of tap water

Water supply	Sales volume	Difference of production and sales volume (%)	YoY change (%)	Reason	Impact on the Company's operation
48,696,000 tons	48,696,000 tons	0	6.4	New water users in the cigarette factory area of Qujing Tap Water Plant	No material impact
6,115,000 tons	6,115,000 tons	0	8.4	An increase in 2019 due to the commencement of industrial water supply in March 2018	No material impact

4. Management Discussion and Analysis

5. Significant capital expenditure

Unit: 0'000 Currency: RMB

Total amount of capital expenditure plan during the reporting period	Source of capital	Capital cost	Project status
326,493	Projects are financed with the Company's own funds, and the construction funds are from bank borrowings		See the table below

Among which: Project status

Unit: 0'000 Currency: RMB

If there is any

Project operation model	Total project budget	Project progress	Amount invested during the reporting period	Accumulated and actual investment amount	Project revenue	significant change or significant difference in the project progress, the reasons shall be stated and disclosed
Hefei taochong project	58,590	Under construction	16,570	48,841	Deficit of RMB13.13 million in 2019	Nil
The 2nd batch of PPP projects in Jieshou City	48,725	Under construction	16,574	16,574	Profit of RMB0.6 million in 2019	Nil
Yuanquan Waterworks in Hanshou County	15,000	Under construction	8,822	8,822	Profit of RMB0.16 million in 2019	Nil
Project for the comprehensive improvement of the water environment in Gaocheng District	72,499	Under construction	20,068	20,068	Under construction and no income	Nil
Project in Suzhou District, Jiuquan City	59,413	Under construction	14,645	14,645	Deficit of RMB1.04 million in 2019	Nil
Phase II project in Yingdong District	17,542	Under construction	2,965	2,965	Under construction and no income	Nil

4. Management Discussion and Analysis

6. Non-monetary assets exchange

According to the policies of the Tianjin Municipal Government (the "Tianjin Government"), the Company is mandated to improve the quality standards of the effluent from two of its sewage treatment plants in Tianjin. As a result, the operations of the Company's Xianyang Road Sewage Plant and Dongjiao Water Plant (include matched recycling water plant) have to be relocated and conducted in another new plants to be constructed by the Tianjian Government (namely the "New Xianyang Road Sewage Plant and the New Dongjiao Water Plant"). All of the construction costs for the new plants (together with the associated land costs) and relocation costs will be borne by the Tianjin Government.

The New Xianyang Road Water Plant becomes ready for use on 1 August 2019 and all of the operations of the Xianyang Road Sewage Plant has been relocated to the New Xianyang Road Sewage Plant. All of the key terms of the service concession right agreement governing the operations of the Xianyang Road Sewage Plant remains unchanged and continued to be applicable to the Company's operations of the New Xianyang Road Sewage Plant till the end of the Concession term. The Tianjin Government has also approved that the Company can increase the fees for its sewage processing services (to certain extent) so as to compensate the higher operating costs for maintaining the improved quality standards of the effluent from the New Xianyang Road Sewage Plant.

As of the Assets Transfer Date, the assets and concession right as recognised by the Group in connection with operations of the Xianyang Road Sewage Plant were included in property, plant and equipment, right-of-use assets (representing the land use rights) and intangible assets with the carrying amounts of RMB19 million (with cost amounts and accumulated depreciation amounts of RMB96 million and RMB77 million respectively), RMB4 million (with cost amounts and accumulated depreciation amounts of RMB5 million and RMB1 million respectively) and RMB685 million (with cost amounts and accumulated amounts of RMB1,094 million and RMB409 million respectively), respectively.

The entire Relocation and Non-monetary Assets Exchange Arrangement is conducted based on the instructions of the Tianjin Government and the Group has not been exposed to or benefit from any significant changes in risks and rewards as a result of that arrangement. In view of this, the Directors of the Company are of the view that the Relocation and Non-monetary Assets Exchange Arrangement will not have any impact on the carrying amounts of property, plant and equipment, right-of-use assets and intangible assets as previously recognised by the Group and the related assets (including the concession right) will continue to be depreciated or amortised on a consistent straight-line basis over their respective remaining useful lives or concession right period (as applicable).

The relocation of the Dongjiao Water Plant under similar arrangement as mentioned above is expected to be commenced and completed in 2020.

(V) ANALYSIS OF INVESTMENT

1. Overall analysis of equity investment

During the reporting period, the Company's equity investment was distributed in the water utilities business and the hazardous waste business, and for the establishment of project companies or purchase of equity thereof. The total amount of equity investment in 2019 was at approximately RMB554.32 million, representing a decrease of RMB213.83 million from last year.

(1) Material equity investments

- (1) On 30 January 2019, the Board agreed to increase the capital of Fuyang Company by RMB146.1822 million for increasing the capital of Jieshou Company. With the amount, Jieshou Company would invest in, construct, operate, and maintain the sewage treatment PPP project (2nd batch) in Jieshou. The investment in the project was expected to be RMB487.2486 million. Following the capital increase, the registered capital of Fuyang Company would increase to RMB337.2822 million. The capital increase has been completed during the reporting period.
- (2) On 25 February 2019, the Board agreed to establish Hanshou Company that would be responsible for the investment, construction, and operation of the franchised projects of the Yuanquan Waterworks in Hanshou County. The Company contributed RMB33.75 million to Hanshou Company, whose registered capital was RMB45 million, accounting for 75% of the share capital; and Hunan Fengyuan Water Investment Construction Co., Ltd.* (湖南省豐源水務投資建設有限公司) contributed RMB11.25 million to Hanshou Company, accounting for 25% of the share capital. Hanshou Company has been established.
- (3) On 11 March 2019, the Board agreed to establish GJTC that would be responsible for the investment, construction, operation, and maintenance of the PPP project for the comprehensive improvement of the regional water environment in Gaocheng District, Shijiazhuang City. The Company contributed RMB128.3232 million in cash to GJTC whose registered capital was RMB217.4969 million, accounting for 59% of the share capital; Guokong Jincheng contributed RMB65.2491 million in cash to GJTC, accounting for 30% of the share capital; China Construction Third Bureau No. 3 Construction Engineering Company contributed RMB1.9575 million in cash to GJTC, accounting

for 0.9% of the share capital; Tianjin Municipal Institute contributed RMB0.2175 million to GJTC, accounting for 0.1% of the share capital; and the government representatives contributed RMB21.7497 million in cash to GJTC, accounting for 10% of the share capital. GJTC has been established during the reporting period.

- (4) On 18 June 2019, the Board agreed to establish Jiuquan Company that would be responsible for the investment, construction, operation, and maintenance of the first and the second sewage water treatment plants in Suzhou District, Jiuquan City. The Company contributed RMB158.2379 million to Jiuquan Company whose registered capital was RMB178.2379 million, accounting for 88.78% of the share capital; and Suzhou District Construction Investment LLC* (肅州區建設投資有限責任公 司), an implementing agency authorized by the government, contributed RMB20 million to Jiuquan Company, accounting for 11.22% of the share capital. Jiuquan Company has been established during the reporting period.
- (5) On 13 August 2019, the Board agreed to increase the capital of Fuyang Company by RMB52.6263 million for the investment, construction, and implementation of the Yingdong Sewage Treatment Plant Project (2nd batch) by Fuyang Company. The investment in the project was expected to be RMB175.4210 million. Following the capital increase, the registered capital of Fuyang Company would increase to RMB389.9085 million. The capital increase has been completed during the reporting period.
- (6) On 16 September 2019, the Board agreed that the Company would increase the capital of Changsha Tianchuang Environmental Protection for implementing the construction project of the emergency accident pool of the sewage treatment plant of Ningxiang Economic and Technological Development Zone. The capital increase of RMB5.7654 million was funded by the shareholders of Changsha Tianchuang Environmental Protection in cash in proportion to their shareholdings. The Company contributed RMB4.6947 million, accounting for 81.43% of the share capital; Tianjin Motianmo Science and Technology Co., Ltd.* (天津膜天膜科技股份有限公司) contributed RMB0.2883 million, accounting for 5% of the share capital; and Changsha Shuntai Investment Management Co., Ltd.* (長沙順泰投資管理有限公司) contributed RMB0.7824 million, accounting for 13.57% of the share capital. The capital increase has been completed during the reporting period.

(7) On 16 September 2019, the Board agreed that Shandong Company and Dongying Runli Municipal Garden Co., Ltd.* (東營市潤鋫園林市政有限公司) would jointly establish Shandong Chuangye Environment Service Co., Ltd.* (山東創業環境服務有限公司) to implement the transfer station projects of hazardous waste in Dongying. Shandong Company contributed RMB5.1 million in cash to Shandong Chuangye Environment Service Co., Ltd.* (山東創業環境服務有限公司) whose registered capital was RMB10 million, accounting for 51% of the share capital; and Dongying Runli Municipal Garden Co., Ltd.* (東營市潤鋫園林市政有限公司) contributed RMB4.9 million in cash to Shandong Chuangye Environment Service Co., Ltd.* (山東創業環境服務有限公司), accounting for 49% of the share capital. Shandong Chuangye Environment Service Co., Ltd.* (山東創業環境服務有限公司), has been established.

(2) Major non-equity investment

During the reporting period, the Jingu and Beichen sewage treatment plants were upgraded and achieved A standards for effluent water quality. After reaching consensus through evaluation and negotiation with Party A to the agreement, the Company and Party A agreed that the unit price of the sewage treatment service fee, being RMB2.32/m³, would be adopted after the upgrade. The unit price of the sewage treatment service fee is currently subject to the approval procedures of the relevant government departments.

(3) Financial assets measured by fair value

Not applicable

(VI) DISPOSAL OF MAJOR ASSETS AND EQUITY INTEREST

(VII) ANALYSIS OF MAJOR COMPANIES IN WHICH THE COMPANY HAS INVESTED

Unit: 0'000 Currency: RMB

Subsidiary	Principal place of business	Major products or services	Registered capital	Type of legal person	Percentage of interest	Asset size	Net assets	Net profits
Water Recycling Company	Tianjin	Production and sales of recycled water; development and construction of water recycling facilities; and manufacturing, installation, debugging, and operation of water recycling facilities etc.	10,000	Limited company	100%	123,263	34,269	6,127
Hangzhou Company	Hangzhou, Zhejiang	Operation and maintenance of facilities for sewage treatment and recycled water usage, and supporting services such as its technical services and technical training	37,744.50	Limited company	70%	100,002	71,353	3,109
Xi'an Company	Xi'an, Shaanxi	Development, construction, operation, and management of municipal sewage treatment plants, and tap water and its supporting facilities; and R&D and promotion of environment protection technology	33,400	Limited company	100%	60,481	42,920	2,663
Jiayuanxing	Tianjin	Development, consulting, service, and transfer of energy conservation and new energy technologies; and property management services	19,195.05	Limited company	100%	70,718	33,271	2,995
Caring Company	Tianjin	Environmental engineering management and technical advice, etc.	3,333.33	Limited company	60%	15,414	12,412	879
Bayannur Company	Bayannur, Inner Mongolia	Processing of sewage water, production and sales of recycled water, and supply of tap water	106,757.79	Limited company	70%	115,139	112,466	1,347
Shandong Company	Shandong	Investment and construction of sewage treatment facilities	19,200	Limited company	55%	48,326	18,387	-459

Water Recycling Company recorded a revenue of RMB264.06 million from principal operations and an operating profit of RMB83.43 million in 2019.

(VIII) STRUCTURED ENTITIES CONTROLLED BY THE COMPANY

III. DISCUSSION AND ANALYSIS OF THE COMPANY'S FUTURE DEVELOPMENT

(I) STATUS AND TRENDS OF THE INDUSTRY

In macroeconomics respect, the Central Committee of the CPC defined the policy of "consolidating, strengthening, upgrading, and ensuring unimpeded flows", which was paired with the two driving factors of "innovation-driven" and "reform and opening up", to improve the economic competitiveness across the board and speed up the building of a modern economic system. This calls for the enterprises to adapt to changes in the macro environment in their development, to pursue progress while ensuring stability. On the one hand, risk control should be focused, and on the other hand, the quality and benefit of development should also be focused. In addition, the Fourth Plenary Session of the 19th Central Committee of the CPC proposed strengthening the building of the basic system in the capital market and perfecting a modern financial system that is highly adaptable, competitive, and inclusive, to forestall and defuse financial risks. It will be more convenient for enterprises to obtain direct financing and conducive to reducing the assets liability ratio of enterprises. It also provides a rare opportunity for merger, acquisition, investment and industrial integration particularly at the stage of economic downturn and underestimation of asset prices.

In addition, in terms of industry development, the following three changes are of concern:

1. The PPP model is further standardized and is used to control project risks

In March 2019, the Ministry of Finance issued the Implementation Opinions of the Ministry of Finance on Promoting the Sound Development of Public-Private Partnership (Cai Jin [2019] No. 10)《(財政部關於 推進政府和社會資本合作規範發展的實施意見》(財金[2019]10號)), specifying the principle of "sound operation, strict supervision, openness and transparency, and credibility and compliance" and emphasizing the financial expenditure, payment mechanism, scope of application, and market operation of PPP projects, which further standardized PPP projects. The Implementation Opinions are beneficial to exerting strict control over local hidden debt risks and rectifying the phenomena of "focusing on engineering to the neglect of operation".

In addition, the National Development and Reform Commission promulgated the Opinions on Innovation and Improvement of the Pricing Mechanism for Promoting Green Development (《關於創新和完善促進 綠色發展價格機制的意見》) in 2018. This policy proposed to formulate the sewage treatment standards according to the principle of compensating the operating costs of facilities for sewage treatment and sludge treatment (excluding the operating costs of sewage collection and pipeline network construction) and making a reasonable profit, to move forward the marketization of sludge disposal.

4. Management Discussion and Analysis

2. Sewage treatment and discharge standards continue to raise and the upgrading will be an important growth point for the industry in the future

China's current national standard for sewage discharge is the Pollutant Discharge Standards for Urban Wastewater Treatment Plants ("城鎮污水處理廠污染物排放標準") (GB18918-2002) promulgated in 2002. Since its publication, urban sewage treatment plants have been upgraded four times, some of which have been upgraded to First Grade B and First Grade A, then the others of which have been upgraded to First Grade B, and finally all of which have been upgraded to First Grade A. In 2015, the State Environmental Protection Administration published the Draft for Comment of the Pollutant Discharge Standards for Urban Wastewater Treatment Plants ("國家環境保護標準城鎮污水處理廠污染物排放標準") (GB18918-2002), in which the pollutant indexes requiring basic control under the "special emission limits" meet the class IV standard for surface water, and the standards introduced by Beijing, Tianjin, Jiangsu, and Zhejiang are stricter than the national standard. In 2018, the sewage treatment rate in urban areas of China reached 96%, and the sewage treatment rate in counties reached 92%. From this respect, further upgrading will be an important growth point for the industry in the future. In addition, as the discharge standards are rising, the requirements for the discharge of total nitrogen and total phosphorus become more stringent. In 2018, the Ministry of Ecology and Environment specially issued the Regulations on Strengthening the Prevention Control of Nitrogen and Phosphorus from Fixed Pollution Sources ("關於加強固定污染源氮燐污染防治的統治"), which expanded the market demand for external carbon sources and related pharmaceuticals.

3. The clear water defense plan is successively introduced and the sewage treatment business model is in great need of innovation

In June 2018, the Central Committee of the CPC and the State Council rolled out the Decisions of the Central Committee of the CPC and the State Council on Comprehensively Enhancing Eco-environmental Protection to Completely Win the Battle Against Pollution ("關於全面加強生態環境保護堅決打好污染防治攻堅戰的意見"), explicitly demanding an all-out fight to keep our skies blue, our waters clear, and our land pollution-free. To win Blue Sky Defense Battle, the Central Committee of the CPC and the State Council proposed to take solid action in the five critical battles of water source protection, treatment of black and odorous water, protection and restoration of the Yangtze River, comprehensive management of the Bohai Sea, and agricultural and rural pollution abatement and successively introduced plans for winning the five critical battles. In response to the requirements for environmental protection including water governance, regional governance, watershed governance, and ecological restoration, the business model for sewage treatment requires immediate innovation.

In 2019, the Ministry of Housing and Urban-Rural Development, the Ministry of Ecology and Environment, and the National Development and Reform Commission jointly unveiled the Three-year Action Plan for Improving Quality and Increasing Efficiency of Municipal Wastewater Treatment ("城鎮污水處理提質增效三年行動方案"), expressing particular concerns about the long-standing issue of "a focus on the construction of sewage treatment plants to the neglect of pipeline networks". On the one hand, although sewage treatment facilities are provided, "bad construction projects" and a low load rate frequently occur due to the inadequacy of pipeline networks. On the other hand, the water quality of rivers is affected due to the disrepair, damage, leakage, and incorrect connection of pipe networks. Different from sewage treatment plants that have a clear financing source, the construction and maintenance of pipeline networks basically rely on government funding, which puts greater pressure on local governments and thus becomes the focus and difficulty of future model innovation.

After years of hard work, the Company's water projects has a total water supply scale of approximately 6.0841 million m³/day, involving water supply, sewage treatment, and recycling. Having accumulated rich experience and capabilities in the market development, construction, operation, and management of water projects, the Company has become a domestically well-known water company. In recent years, the Company has also made achievements in fields such as sludge disposal, industrial wastewater treatment, hazardous waste disposal, soil remediation, new energy supply, and sponge city. It has gradually built up comprehensive environmental service capabilities. In the future, the Company is capable and confident to participate in the competition in the key development areas of the environmental protection industry, creates revenue for shareholders, and contributes to building a beautiful China.

(II) DEVELOPMENT STRATEGIES OF THE COMPANY

Positioning itself as a "comprehensive environmental service provider" and based on the development strategic objectives, the Company will continue to promote the corporate development in all aspects. 2020 is the year of sprint in implementing the "13th Five-Year Plan". The Company will continue to devote consistent efforts to realise new development and step across pedestals in the crucial stage of the "13th Five-Year Plan". In respect of business development, the Company not only continues to consolidate its core business focusing on wastewater treatment, but also actively expands other promising businesses such as solid waste disposal, new energy and environmental protection and technology, and explores emerging businesses such as environmental restoration and environmental monitoring. In addition, the Company focuses on key links in the business industry chain such as pharmaceutical production and high-end environmental protection equipment manufacturing, to further build the comprehensive environmental service capabilities. In 2020, facing the COVID-19, the Company will focus on both epidemic prevention and control and production and operation, and strive to achieve "attaching equal importance to both." Meanwhile, the Company will pay close attention to changes in external risks, make plans for risk prevention and control, and promote deep transformation and high-quality development of enterprises through institutional innovation, technological innovation and model innovation.

4. Management Discussion and Analysis

(III) OPERATING PLANS

1. Progress of development strategy and operating plan of the Company during the reporting period

In 2019, the Company used the "13th Five-Year" strategic plan as its guideline to consolidate staff's efforts and further developed new strategic businesses. It deepened organizational and structural reforms and improved research and development system, and focused on the refined management as the major task. It also introduced overall plans, made careful planning, and went forward in a down-to-earth manner, to strive for a critical progress in all respects of work. With the efforts of all employees, the business strategies and plans formulated by the Board at the beginning of the year were basically completed, and the targets of revenue and profit were successfully accomplished.

2. The year 2020 is the first year for the market-oriented reform of the Company. The company will, combining the "13th Five-Year" strategic plan with the annual business plan and on the basis of consolidating operation advantages, continue to strengthen technology R&D and help the Company to grow better, stronger, and bigger; build the new model of market development and accelerate the development of the Company; ensure that the deepening of reform is implemented and corresponding desired results are produced, and energize the Company; and improve the Company's internal control system and continuously boost up the Company's governance. The business strategies for 2020 are as follows:

(1) Continuing to strengthen the leading role of science and technology and improving core competitiveness

Vigorously promote and increase investment in market-oriented scientific research and development, enhance the technological advantages of the Company in project operation, construction, and development and other fields, make new breakthroughs in the leading role of science and technology in respect of the transformation of achievements in technology research and new strategic business development, and continue to inject momentum to the high-quality development of the Company, to help the Company grow better, stronger, and bigger.

(2) Continuing to strengthen project operation and construction management, improving operation quality, and ensuring project construction progress

Step up quality safety and cost management, improve project operation and management using big data and other information technologies, and reasonably control cost, to ensure that operations meet standards and are safe and economic. Devote consistent efforts to ensure project quality and progress.

(3) Ensuring that the deepening of reform is implemented and corresponding desired results are produced, and energizing the Company

In 2020, on the basis of completing the selection and employment of professional managers of the Company, implement the salary and performance appraisal of the management and inspire the spirit and professional competency of the management; promote the deepening of the reform of the affiliated sewage plants and subsidiaries, stimulate the initiative of employees, and encourage employees to grow with the Company; and continue to strengthen the reform of the Company's management structure and enhance management efficiency.

(4) Building the new model of market development and accelerating the development of the Company

In 2020, on the basis of good market development, the Company will build a new market development model: optimizing traditional water projects and raising the requirement for project profitability; and extending the industrial chain, trying to expand new businesses through mergers and acquisitions, and accelerating the development of the Company.

(5) Further improving the Company's internal control system and continuously boosting up the Company's governance

With the operation of the new organizational structure and the guidance of new management ideas, the Company's internal control system will also be further improved to effectively enhance its corporate governance capabilities and consolidate the foundation for its sound development.

(6) Strengthening the leading of the Party to provide solid safeguard for the Company's development

With the focus on the deep integration between the Party-building works and our major works, the Company will unswervingly follow the road of market-oriented reforms and give full play to the Party Committee's leading role of "defining direction, making overall planning and supporting implementation" so as to provide solid political, talent, and organizational safeguard for the Group's transformation and upgrading and escort our operation.

4. Management Discussion and Analysis

3. Income, expenses, and cost plan:

In 2020, it is expected that the sewage treatment business will remain as the principal business of the Group, and the annual sewage treatment will be not less than 1.3 billion cubic meters. With the raising of discharge standards applicable to various water projects of the Company and the continuous increase in costs of various types of resources, energy, and labor, the operation costs of projects increase. If there are no major changes in the prevailing national guidelines, policies, and business environment, it is expected that the amount of variation in revenue from and cost for the sewage treatment service will not be higher than 20%.

4. Plan for investment in technology R&D:

In 2020, the Group will invest not less than approximately RMB14 million in technology R&D plus development and technological reforms, and will continue to conduct research and development on the new technical processes and application technologies in the areas of sewage water treatment and sludge treatment, etc.

5. In 2020, the estimated capital expenditure is RMB4.6 billion, which will be mainly used for the upgrading of water projects and the construction of new energy projects and hazardous waste projects.

In 2020, the capital required for the Group's operation and investment will be satisfied by the Group's existing credit, corporate bonds, equity financing, strategic cooperation, and other channels.

(IV) POSSIBLE RISKS

- 1. Possible risks
 - (1) Risk of the outbreak of COVID-19

The COVID-19 may cause certain impact on the economy in the short term. For existing businesses, in addition to ensuring safety and quality, epidemic prevention and control is also necessary, which will increase the difficulty and cost of the work to a certain extent. As for business development, it is also affected by the whole society's epidemic prevention and control, which may bring certain uncertainty to the market.

(2) Risk of government credit

Given the characteristic of licensed operation in sewage treatment projects, the capital source of the sewage treatment service fee comes mainly from the special account for the sewage-treatment fee charged by the governments through the sales of tap water, and the deficient amount will be supplemented by the local governments. The PPP packaging projects that are recently promoted usually include the investment and construction of infrastructure such as pipe networks. The investment of social capital is relatively huge, and the investment return relies mainly on the payment of the sewage treatment service fee by the governments. Therefore, the uniqueness of the capital source determines the importance and cruciality of the government credibility. Whether water utilities companies can recoup the investment as scheduled and obtain the expected rate of return depends on the level of government credibility. In case the risk related to government credit occurs, the project companies will face cash flow problem, which may generate capital risks such as financial risks and financing risks.

(3) Risk of change in policy

Currently, our country is at the special phase of comprehensive in depth reform. For a long period in the future, there will be transformative changes in policies related to economy, finance, commodity prices, financial taxation, government functions, etc. The policy changes in commodity prices and taxation will directly influence the adjustment of water price. During the exclusive license operation period lasting for 30 years, as a social investor, the Company needs to pay close attention to the risk of changes in policy.

(4) Risk of operation and management

With the introduction of a series of energy-saving and emission reduction requirements under the national "13th Five-Year Plan", the standards for environmental governance will become more stringent, and sewage treatment plants are required to undergo upgrading to better meet the standards. Under this circumstance, on the one hand, sewage treatment plants will face the risk of restructuring and operational risk. On the other hand, enterprises will also face the risk of adjusting the original licensed operation agreement.

4. Management Discussion and Analysis

2. Risk control measures

 Working for "epidemic prevention and control" and at the same time for "production and management" to fully guard against short-term risks

Facing the epidemic of COVID-19, the corporation must complete various tasks and use every feasible means to operate in a planned and orderly manner, while preventing and controlling the epidemic, effectively protecting the health of employees, and fulfilling their social responsibilities.

(2) Protecting the Company's lawful interests by making full use of laws and regulations

The Company will strengthen the concept of corporate governance according to law and protect its lawful interests by making full use of its overall legal advisory system. Meanwhile, the Company calls for and supports the prompt establishment and perfection of "Licensed Operation Law" and "PPP Law" to further assure equality of the contracting parties, tighten up the performance assessment and profit distribution mechanisms, and provide for the government obligations to pay according to contracts and the rights for investors to get reasonable returns under the laws, so as to reduce the risk related to government credit and the financial risk of the investors.

(3) Strengthening comprehensive risk management

The Company will determine the target for comprehensive risk management; establish the institutional framework for comprehensive risk management to identify, analyse, assess and deal with possible hidden risks in different business links; improve the risk management system and establish a sound and comprehensive risk management system for the Company; improve its timing and efficiency of the comprehensive risk management of the Company; and conduct the dynamic management and effective control over risks so as to reasonably ensure the achievement of the Company's strategic targets.

(4) Continuing to raise the standards of operating management

As a listed company in the environmental protection field, the Company exerts control over production and operation risks in a timely manner through standardized management in accordance with relevant changes in policies. Specifically, our risk control measures include staff training, strengthening the consciousness of laws on environmental protection, and improving the management and control of technologies; strengthening the maintenance and protection of facilities for proper preservation of asset value and stable operation; perfecting the monitoring of quality and promoting control over the whole process to ensure the end products could meet the standards of discharge; developing water environment remedy plans and safe production plans, so as to ensure careful operation and the best environmental performance of the Company under force majeure conditions.

(V) OTHERS

Not applicable

IV. FAILURE TO DISCLOSE AS PER RULES DUE TO INAPPLICABILITY OR SPECIAL REASONS, SUCH AS STATE SECRETS AND BUSINESS SECRETS

5. Major Events

I. PROPOSAL ON ORDINARY SHARE PROFIT DISTRIBUTION OR TRANSFER OF CAPITAL RESERVE FUND

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy

In order to establish a sustainable, clear, and transparent cash dividend policy and a scientific decision-making mechanism and to improve the quality of the Company's information disclosure in the principle of the "Listed Companies Regulatory Guidance No. 3 – Cash Dividend Distribution of Listed Companies" issued by the CSRC, the Company revised the article related to profit distribution in its Articles of Association. The aforesaid revision to the Articles of Association was considered and approved by the Company at the 16th meeting of the seventh Board on 8 September 2016 and at the second extraordinary general meeting of 2016 held on 30 December 2016. Article 202 of the Articles of Association was amended as follows:

"I. Basic principles for profit distribution of the Company:

- (1) The Company shall take full account of the return to investors. The Company shall, after making up for the losses of previous years and contributing to the statutory reserve and discretionary reserve, distribute dividends to the shareholders per annum in proportion to distributable profit realized for the year concerned attributable to the Company, which shall be determined by resolutions at the general meetings.
- (2) The Company's profit distribution policy shall be continuous and stable, for the long term interest of the Company, in the interest of all shareholders as a whole, and for sustainable development of the Company.
- (3) The Company shall give priority to dividend distribution in cash.

- (I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)
 - II. Dividend distribution policies of the Company:
 - (1) Dividends shall be distributed in the following manners: The Company may distribute profits in cash, in shares, or in a combination of both cash and shares or by other means permitted by laws and regulations. If the conditions of cash dividends are met, priority shall be given to dividend in cash over dividend in shares.
 - (2) Interval of profit distribution: Provided that the Company makes a profit and the distributable profit is a positive figure for the year, the Company shall distribute profit once a year. To the extent that the scale of profit and the capital position are appropriate for the relevant period, the Company may distribute interim dividend in cash.
 - (3) Conditions of cash dividend distribution of the Company:
 - 1. The Company's profit and aggregate undistributed profit realized for the year are positive with sufficient cash flow, and cash dividend distribution has no impact on the Company's sustained operations;
 - 2. An accounting firm issues a standard unqualified audit report on the Company's financial report for that year;
 - 3. The Company has no events such as material investment plan or significant cash expenditure, excluding investments projects using proceeds raised.

Material investment plans or significant cash expenditures refer to the proposed external investment, acquisition of assets, or purchase of equipment by the Company in the coming twelve months with an accumulated expenditures amounting to or exceeding 30% of the latest audited net assets of the Company.

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

II. Dividend distribution policies of the Company: (Continued)

(4) Proportion of cash dividends:

Subject to the satisfaction of the above conditions, the profit to be distributed in cash per annum will not be less than 20% of the distributable profit realized for that year attributable to the parent company, and the Company's aggregated profit distributed by way of cash for three consecutive years will not be less than 30% of the distributable profit attributable to the parent company realized within such three years. The specific dividend proportion of each year shall be determined by the Board according to the profit for the relevant year and utilization plan for capital.

The Board shall take into full account of various factors such as features of the industries where the Company operates, the stage of development of the Company, its own business model, level of profitability, and whether there is significant capital expenditure arrangement, to distinguish the following situations and put forward a differentiated cash dividend policy in accordance with the procedures as required by this Articles of Association:

- 1. If the Company is at the mature stage of development and has no significant capital expenditure arrangement, the proportion of cash dividends in the profit distribution shall be at least 80% when the profit distribution is made;
- 2. If the Company is at the mature stage of development and has significant capital expenditure arrangement, the proportion of cash dividends in the profit distribution shall be at least 40% when the profit distribution is made;
- 3. If the Company is at the growing stage of development and has significant capital expenditure arrangement, the proportion of cash dividends in the profit distribution shall be at least 20% when the profit distribution is made.

If it is difficult to distinguish the stage of development of the Company and the Company has significant capital expenditure arrangement, the profit distribution may be dealt with pursuant to the preceding provisions.

- (I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)
 - II. Dividend distribution policies of the Company: (Continued)
 - (5) Conditions for distributing dividends in shares by the Company: where the Company's business is in a sound condition, and the Board considers that the stock price of the Company does not reflect its share capital size and distributing dividend in shares will be favorable to all the shareholders of the Company as a whole, provided that the above conditions for cash dividend distribution are fully satisfied, the Company may propose dividend distribution in shares. Distributing profit by way of dividend in shares shall include true and reasonable factors such as growth of the Company and dilution of net assets per share.
 - (6) Profit distribution of the Company shall not exceed the cumulative distributable profit or damage the Company's sustainable operation ability.
 - (7) In case any shareholder misappropriates the funds of the Company unlawfully, the Company will deduct cash dividends to be distributed to such shareholder for making up the amount misappropriated.

III. Decision making procedures and mechanism of the Company's profit distribution:

(1) Formulation of profit distribution policy

The Company shall scientifically formulate its profit distribution policy after comprehensively taking into account factors such as the actual conditions of the Company's operation and development, the needs and requests of the shareholders, social capital costs, external financing environment, etc.

The profit distribution policy of the Company shall be considered and approved by more than two thirds of voting shares held by the shareholders (including their proxies) present at the general meeting. The Board, the Supervisory Committee, and shareholders individually or jointly holding 3% or more of the Company's shares, have the right to propose resolution(s) in respect of the profit distribution policy to the Company.

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

III. Decision making procedures and mechanism of the Company's profit distribution: (Continued)

(1) Formulation of profit distribution policy (Continued)

The Board shall specifically study and discuss matters relating to the returns for shareholders, set out a specific and clear plan on the returns for shareholders, and explain the reasons for the formulation of the plan in details. Opinions of shareholders (especially minority shareholders), independent Directors, and Supervisors shall be fully heard and considered during the meeting of the Directors, the meeting of the Supervisors, and the general meeting of the Company in respect of the study, discussion, and decision-making process of the profit distribution policy of the Company.

The Board, independent Directors, and shareholders satisfying certain conditions can collect the voting rights at general meeting from the shareholders of the Company.

(2) Formulation of specific proposal of profit distribution

The Company's profit distribution plan for each year shall be proposed by the Company's management after taking into account factors such as the requirements in the Company's Articles of Association, production and operation position, cash flows, and future business development plan, and shall be submitted to the Board and the supervisory committee of the Company for consideration. If the supervisory committee has no objection to the profit distribution plan, the Board shall thoroughly discuss its rationality, taking into account the opinions from the independent Directors, and form a special proposal as well as an independent view expressed by independent Directors on profit distribution proposal for the consideration and approval by the shareholders at the general meeting.

The Board shall fully consider the capital needs of normal production and operation, arrangement of investment, actual profit status, cash flows and scale of share capital of the Company, and the sustainability of development when formulating the specific proposal of cash dividend, and carefully study and discuss the timing, conditions, and minimum proportion of cash dividend of the Company, conditions for adjustment, and requirements for decision-making procedures. Independent Directors shall express specific views.

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

III. Decision making procedures and mechanism of the Company's profit distribution: (Continued)

(2) Formulation of specific proposal of profit distribution (Continued)

Independent Directors can collect views from minority shareholders to propose the profit distribution proposal and directly propose to the Board for consideration.

Prior to consideration of the specific proposal of cash dividend at the general meeting, the Company shall actively communicate and exchange ideas with shareholders (especially minority shareholders) through various channels (including but not limited to telephone, facsimile, e-mail, and interactive platforms), fully listen to the opinions and requests of minority shareholders, and reply in a timely manner the questions from minority shareholders. When considering the profit distribution plan, the Company shall make Internet voting accessible to the shareholders.

(3) If the Company makes a profit for the year, but the Board does not propose a profit distribution proposal by the way of cash, the Company shall explain the reason and the usage and plan of utilization for the capital which is not utilized as cash dividends and reserved in the Company, and independent Directors shall express independent views thereupon and timely disclose; it shall propose to the general meeting for consideration after consideration and approval by the Board. Meanwhile, the Company shall make Internet voting accessible to minority shareholders to vote at the general meeting.

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

IV. Adjustment to profit distribution policy:

The Company shall strictly implement the profit distribution policy stipulated in this Articles of Association and the specific proposal of profit distribution considered and approved at the general meeting.

In case of war, natural disasters, and other force majeure, or changes to the Company's external operational environment resulting in a material impact on its production and operation, or relatively significant changes to the Company's operational position, or new policies on profit distribution published by competent authorities, and the profit distribution policy stipulated by this Articles of Association, in particular the cash dividend policy, is required to be adjusted, the Company may adjust its profit distribution policy. The Board shall thoroughly discuss the rationality of the adjustment to the profit distribution policy, and form a special proposal after an independent view is expressed by the independent Directors and submit the same for the consideration by the shareholders at the general meeting. The proposal shall be considered and approved by more than two-thirds of voting rights held by the shareholders (including their proxies) present at the general meeting.

The supervisory committee shall issue its opinions on the adjustment to the profit distribution policy.

The adjusted profit distribution policy shall not contravene with the relevant requirements of the CSRC and the stock exchange on which shares of the Company are listed.

When the general meeting considers the adjustment to the profit distribution policy, the Company shall make Internet voting accessible to the shareholders or collect voting rights of the shareholders.

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

V. Disclosures in regular reports:

The Company shall disclose in details the formulation and implementation of the cash dividend policy in its annual reports, and specifically explain whether it is in compliance with the provisions of this Articles of Association or requirements of the resolutions of the general meeting, whether the criteria and proportion of dividend distribution is specific and clear, whether the relevant decision-making procedures and mechanism are complete, whether independent Directors duly perform their duties and play their due roles, whether minority shareholders have opportunities to fully express their opinions and requests, and whether the legitimate interests and interests of minority shareholders are fully protected.

Where the Company adjusts or changes its cash dividend distribution policy, it shall explain in details as to whether the conditions and procedures of such adjustments or changes are in compliance with relevant regulations and transparent.

If the Company is unable to determine the profit distribution proposal for the year according to the established cash dividend policy or the minimum cash dividend proportion under extraordinary circumstances, the Board shall explain in details the reason for not proposing cash profit distribution according to this Articles of Association, and the usage and plan of utilization for the capital which is not utilized as cash dividends and reserved in the Company, and the independent Directors shall express independent views thereupon and timely disclose.

VI. Supervision on profit distribution by the supervisory committee:

The supervisory committee shall supervise the Board and the management in respect of the formulation and implementation of the profit distribution policy and the status of returns for shareholders and the relevant decision-making procedures.

The supervisory committee shall give specific opinions and monitor the prompt rectification of the Board in the event of any of the following circumstances:

- (1) the cash dividend policy and the plan on returns for shareholders are not strictly implemented;
- (2) the relevant decision-making procedures in respect of the cash dividend distribution are not strictly implemented; and
- (3) the disclosure of the implementation of the cash dividend policy are not true, accurate or complete."

(I) Formulation, Execution, or Adjustment of Cash Dividend Policy (Continued)

VI. Supervision on profit distribution by the supervisory committee: (Continued)

The Company has laid emphasis on reasonable returns to investors since its reorganization was completed in December 2000. Other than no profit distribution was made in 2018 due to the preparation for the non-public issuance of A shares, the Company has made cash dividend distribution in other years.

(II) Plan or proposal of ordinary share profit distribution or transfer of capital reserve fund to share capital of the Company for the latest three years (including the reporting period):

Unit: 0'000 Currency: RMB

Year of dividends	Number of bonus shares per 10 shares (shares)	Amount of dividends distributed per 10 shares (RMB) (inclusive of tax)	Number of shares transferred per 10 shares (shares)	Amount of cash dividends (inclusive of tax)	Net profit attributable to the ordinary shareholders of the Company in the consolidated financial statements for the year	Percentage of the net profit attributable to the ordinary shareholders of the Company in the consolidated financial statements (%)
2019	0	1.07	0	15,271	50,710.7	30.11
2018	0	1.06	0	15,129	50,116.8	30.19
2017	0	0	0	0	50,825.1	0

(III) Any inclusion of shares repurchased through cash in cash dividend

Not applicable

(IV) If the Company records profit and profit distributable to the ordinary shareholders of the Company for the reporting period is positive but there is no proposal for cash dividend, the Company shall disclose the reasons, the usage, and the utilization plan of the undistributed profits in detail

II. PERFORMANCE OF COMMITMENT

(I) Commitment of the Company's Ultimate Controller, Shareholders, Related Parties, Purchaser, the Company, and Other Related Parties During or Subsisted in the Reporting Period

Not applicable

(II) Where the Company Has Profit Forecasts on Assets or Projects, and the Reporting Period Was Within the Term of Profit Forecasts, the Company Has to State Whether Such Profit Forecasts on Assets or Projects Are Fulfilled and the Reasons Therefor

Not applicable

III. FUNDS OCCUPIED AND REPAYMENT PROGRESS DURING THE REPORTING PERIOD

Not applicable

IV. EXPLANATION BY THE COMPANY ON "QUALIFIED AUDIT REPORT" PROVIDED BY THE ACCOUNTING FIRM

V. ANALYSIS AND EXPLANATION OF THE COMPANY ON THE REASONS AND EFFECTS OF THE CHANGES IN ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES OR CORRECTION OF MATERIAL ACCOUNTING ERRORS

(I) Analysis and explanation of the Company on the reasons and effects of the changes in accounting policies and accounting estimates

In December 2018, the Ministry of Finance of the PRC has promulgated the "Accounting Standards for Business Enterprises No. 21 – Leases" (the "New Standard") and required that enterprises listed in both domestic and overseas markets and enterprises listed overseas and adopting the International Financial Reporting Standards or the Accounting Standards for Business Enterprises in preparation of financial statements shall apply the above-mentioned accounting standard from 1 January 2019.

The New Standard mainly introduces a substantial change to the accounting for lessees of assets as compared with the original provisions. Upon assessment of the implementation of the New Standard, the Company considers that, as the Company has no significant leased assets, the application of the New Standard will not have any material impact on the financial statements of the Company.

In 2019, the Ministry of Finance issued the '*Circular on the Amendment to the Formats of Corporate Financial Statements for the Year of 2019*' (Cai Kuai [2019] 06), the revised CAS 7 Exchange of Non-Monetary Assets ('the revised CAS 7') and the revised CAS 12 Debt Restructuring ('the revised CAS 12'). The financial statements for the year 2019 are prepared in accordance with the above circular and standards. The revised standards of non-monetary assets exchange, debt restructurings and new leasing criterions will not have any material impact on the financial statements of the Company.

Except for the New Standard as stated above, there is no change in other accounting policies of the Company.

(II) Analysis and explanation of the Company on the reasons and effects of correction of material accounting errors

Not applicable

(III) Communication with the former accounting firm

Not applicable

(IV) Other explanations

VI. APPOINTMENT AND REMOVAL OF ACCOUNTING FIRMS

Unit: 0'000 Currency: RMB

	Present Appointment
Name of the PRC accounting firm Remuneration of the PRC accounting firm	PricewaterhouseCoopers Zhong Tian LLP 200
Service years of the PRC accounting firm	25 years
Name of the Hong Kong accounting firm	PricewaterhouseCoopers
Remuneration of the Hong Kong accounting firm	130
Service years of the Hong Kong accounting firm	25 years
Name	e Fees

Accounting firm responsible for internal control audit

PricewaterhouseCoopers Zhong Tian LLP

RMB600,000

Explanations on the Appointment and Removal of Accounting Films

During the reporting period, the Company did not change its accounting firm. The PRC auditor and Hong Kong auditor of the Company are PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers, respectively. As at the end of the previous reporting period, the above two accounting firms have provided auditing services for the Company for 25 years.

VII. RISKS OF SUSPENSION OF LISTING

(I) Causes of Suspension of Listing

Not applicable

(II) Measures to be taken by the Company

Not applicable

VIII. SITUATION AND REASONS FOR TERMINATION OF LISTING

Not applicable

IX. MATTERS RELATING TO BANKRUPTCY AND RESTRUCTURING

X. MATTERS RELATING TO MATERIAL LITIGATION AND ARBITRATION

(I) Litigation and arbitration that were disclosed in the Company's announcements without subsequent progress

Not applicable

(II) Litigation and arbitration that were not disclosed in the Company's announcements or have subsequent progress

During the reporting period:

Unit: Yuan Currency: RMB

Complaining party	Responding party	Party to bear joint liability	Type of litigation (arbitration)	Particulars of litigation (or arbitration)	Amount involved in litigation (or arbitration)	Any estimated liabilities incurred in litigation (arbitration) and the amount (RMB0'000)	Progress of litigation (or arbitration)	Ruling results of litigation (or arbitration) and its effect	Enforcement of award of litigation (or arbitration)
Jiayuanxing	Qudong Company	None	Litigation	Note 1	12,030,003	None	Execution	Note 2	Termination of execution (note 2)
Anguo Company	Anguo Municipal Government	None	Litigation	Note 3	47,475,320.86	None	Termination of execution	Note 4	Note 5

Note 1: From 2012 to 2016, Jiayuanxing and Qudong Company signed the "Tianjin Non-residential Buildings Cold Supply Contract (天津 市非居民住宅供用泠合同)" and "Tianjin Non-residential Buildings Heat Supply Contract (天津市非居民住宅供用熱合同)", in which it is stipulated that Jiayuanxing would provide cold and heat supply services to the Tianjin Cultural Center Grand Theatre (天津 文化中心大劇院) that was operated and managed by Qudong Company. Qudong Company did not pay cold and heat supply energy fees to Jiayuanxing on time and in full according to the contract. In order to safeguard the legal rights and interests of Jiayuanxing, on 3 November 2017, Jiayuanxing has filed a civil lawsuit in the People's Court of Hexi District (hereinafter referred to as the "Hexi Court"). On 3 April 2018, the Hexi Court made a first-instance judgment, ruling that Qudong Company shall pay Jiayuanxing cold and heat supply energy fees of RMB12,030,003 from 2012 to 2016 within ten days from the effective date of the first-instance judgment; and case acceptance fees and preservation fees totaling RMB98,980 were burdened by Qudong Company. Both parties refused to accept the first-instance judgment and appealed to the Secondary Intermediate People's Court of Tianjin (hereinafter referred to as the "Secondary Intermediate People's Court"). On 25 September 2018, the Secondary Intermediate People's Court made the final judgment, ruling to reject the appeal applications of both parties and maintained the original judgment.

X. MATTERS RELATING TO MATERIAL LITIGATION AND ARBITRATION (Continued)

- (II) Litigation and arbitration that were not disclosed in the Company's announcements or have subsequent progress (Continued)
 - Note 2: On 22 October 2018, Jiayuanxing applied to the Hexi Court for enforcement. On 19 December 2018, under the direction of the Hexi Court, both parties reached a settlement agreement in implementation. Qudong Company shall pay in advance RMB3.16 million and the remaining amounts shall be repaid by four installments by 31 December 2020. If Qudong Company failed to perform any installment, the implementation based on the original legal documents would be resumed. On 11 January 2019, RMB3.1635 million repaid by Qudong Company in advance was in the account. On 21 January 2019, Jiayuanxing received an execution ruling from the Hexi Court. Upon execution, both parties reached a settlement agreement. As the agreement had not been completed for fulfillment, the court made a ruling to end the implementation of the civil judgment of the Hexi Court (2017) Jin 0103 Minchu No. 12411. Qudong Company repaid the first and second installments according to the settlement agreement before 31 December 2019. At present, Qudong Company has paid a total of RMB7.4013 million.
 - Note 3: As Anguo Municipal Government failed to perform the relevant terms of the licensed operation agreement entered into between Anguo Company and the Anguo Municipal Government, Anguo Company applied for arbitration to China International Economic and Trade Arbitration Commission in 2013, requesting for termination of the licensed operation agreement for a water supply project in Anguo; and claiming payment of service fees for water supply and compensation for investment owed to Anguo Company by the Anguo Municipal Government.
 - Note 4: On 6 April 2017, the China International Economic and Trade Arbitration Commission made its final arbitral award on the case as follows: (1) the agreement related to the water supply project and the sewage treatment plant project involved in the case was terminated on 18 April 2014, and the transfer of the projects was completed on 10 July 2014; (2) from 1 November 2012 to the date of transfer of the water supply project involved in the case, Anguo Company should provide the breakdown of water charges payable by all of its consumers, and should provide assistance to the Anguo Municipal Government in collecting the water charges; (3) the Anguo Municipal Government should pay Anguo Company fees payable for the water supply service that became due before 1 November 2012 in the amount of RMB3.5570 million by 1 July 2014; (4) the Anguo Municipal Government should reimburse Anguo Company for all the capital invested by Anguo Company in the said projects, being RMB47,475,320.86; and (5) the arbitration fee of RMB781,749 for the case should be borne by both parties on the basis of 50:50, which meant each party should pay RMB390,874.5, respectively.

X. MATTERS RELATING TO MATERIAL LITIGATION AND ARBITRATION (Continued)

- (II) Litigation and arbitration that were not disclosed in the Company's announcements or have subsequent progress (Continued)
 - Note 5: The Anguo Municipal Government failed to reimburse Anguo Company for all the capital invested by Anguo Company in the said projects, being RMB47.4753 million, under item (4) of the final arbitral award on time. On 3 April 2019, Anguo Company applied for enforcement to the Baoding Intermediate People's Court (hereinafter referred to as the "Baoding Court"). On 24 December 2019, the Anguo Municipal Government paid in full all the capital invested by Anguo Company in the said projects, being RMB47.4753 million and the default interest of RMB5.9043 million to Anguo Company. On 31 December 2019, the Baoding Court ruled to terminate enforcement.
- (III) Other explanations

Not applicable

XI. PUNISHMENTS TO AND RECTIFICATION OF THE COMPANY AND ITS DIRECTORS, SUPERVISORS, SENIOR MANAGEMENT, ULTIMATE CONTROLLERS, AND PURCHASERS

Not applicable

XII. EXPLANATION ON THE INTEGRITY OF THE COMPANY, ITS CONTROLLING SHAREHOLDERS, AND ULTIMATE CONTROLLERS DURING THE REPORTING PERIOD

XIII. THE COMPANY'S SHARE INCENTIVE SCHEME, EMPLOYEE STOCK OWNERSHIP PLAN, OR OTHER EMPLOYEE INCENTIVE SCHEME AND THEIR EFFECTS

Not applicable

XIV. MATERIAL CONNECTED TRANSACTIONS

- (I) Connected Transactions in the Ordinary Course of Business
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation
 - a. On 28 May 2019, Jiayuanxing, a wholly-owned subsidiary of the Company, entered into the Cold Supply Agreement with TLP and TYCOM for the provision of cold supply services to TLP at an unit price of RMB64.59 per m². The total service area is 288,041.8 m² and the cold supply service fee amounts to RMB18,604,619.86. In addition, TLP applied to Jiayuanxing to suspend the cold supply service for an area of approximately 75,000.2 m² in 2019. Therefore, TLP is required to pay to Jiayuanxing the additional cold energy loss compensation fees in 2019. The amount of the cold energy loss compensation fees is RMB968,852.58, which is calculated by multiplying the area for the above-mentioned suspended cold supply area with the unit price of RMB64.59 per m² and 20%. The total amount of the service fee and the cold energy loss compensation fee under the Cold Supply Agreement is approximately RMB19,573,472.

Connected relationship: Jiayuanxing is a wholly-owned subsidiary of the Company. TLP is an indirect wholly-owned subsidiary of Tianjin Investment Group, the ultimate controlling shareholder of the Company. TYCOM is a subsidiary of TLP.

b. On 1 July 2019, the Company renewed the Zhangguizhuang Sewage Water Treatment Plant Sludge Disposal Centre Entrusted Operation Agreement with Tianjin Investment Group, pursuant to which the Company shall continue to operate and maintain the Zhangguizhuang Sewage Water Treatment Plant Sludge Disposal Centre for Tianjin Investment Group for a service period of 12 months from 1 July 2019 to 30 June 2020, with the total amount of service fees expected to be not more than RMB13.507 million.

Connected relationship: Tianjin Investment Group is the ultimate controller of the Company.

c. On 15 November 2019, Jiayuanxing, a wholly-owned subsidiary of the Company, entered into the Heat Supply Agreement with TLP and TYCOM for the provision of heat supply services to TLP at a unit price of RMB40 per m². The total service area is 286,449 m² and the heat supply service fees will amount to RMB11,457,960. In addition, TLP applied to Jiayuanxing to suspend the heat supply service for an area of approximately 76,593 m² in 2019-2020. Therefore, TLP is required to pay to Jiayuanxing the additional heat energy loss compensation fees in 2019-2020. The amount of the heat energy loss compensation fees is RMB612,744, which is calculated by multiplying the area for the above-mentioned suspended heat supply area with the unit price of RMB40 per m² and 20%. The total amount of the service fee and the heat energy loss compensation fee is approximately RMB12,070,704.

- (I) Connected Transactions in the Ordinary Course of Business (Continued)
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation (Continued)

Connected relationship: Jiayuanxing is a wholly-owned subsidiary of the Company. TLP is a indirect whollyowned subsidiary of Tianjin Investment Group, the ultimate controlling shareholder of the Company. TYCOM is a subsidiary of TLP.

d. On 24 July 2019, the Board considered and approved the Company's provision of guarantees for the loan principal and other expenses not exceeding RMB299,720,000 in respect of the payment obligations under the loan agreement "Loan Agreement" that GJTC intended to enter into with a financial institution owing to the loan in the principal amount of RMB508,000,000 based on its 59% equity interest in GJTC. At the same time, Guokong Jincheng provided guarantee for the loan principal and other expenses of not exceeding RMB152,400,000 in respect of the payment obligations of GJTC under the Loan Agreement based on its 30% equity interest in GJTC.

Connected relationship: GJTC is a subsidiary of the Company, and Tianjin Investment Group, the ultimate controller of the Company, holds a 40% equity interest in Guokong Jincheng. Guokong Jincheng holds a 30% equity interest in GJTC.

2. Connected transactions which have been disclosed in the Company's announcements, with subsequent progress or changes to their implementation

e. On 1 July 2019, the Company renewed the Zhangguizhuang Sewage Water Treatment Plant Entrusted Operation Agreement with Tianjin Investment Group, pursuant to which the Company shall continue to operate and maintain the Zhangguizhuang Sewage Water Treatment Plant for Tianjin Investment Group for a service period of 12 months from 1 July 2019 to 30 June 2020. Currently, the Plant has completed its upgrade and renovation. Its water discharge standard shall comply the Class A standard under the Standard for Discharge of Pollutants from Municipal Sewage Treatment Plant* (《城鎮污水 處理廠污染物排放標準》) (DB12-599-2015) of Tianjin. Tianjin Investment Group shall engage an independent third-party auditor to conduct verification on the service fee standard after implementation of new effluent quality standards. The provisional monthly operation service fee is RMB4.198 million. After auditing, the contracting Parties are likely to enter into a supplemental agreement separately according to auditing results to revise service fee standard.

Connected relationship: Tianjin Investment Group is the ultimate controller of the Company.

- (I) Connected Transactions in the Ordinary Course of Business (Continued)
 - 2. Connected transactions which have been disclosed in the Company's announcements, with subsequent progress or changes to their implementation (Continued)
 - f. As the third-party audit on operating costs have completed, the Company reached consensus on operating service fee standard under new effluent quality standards with Tianjin Investment Group through negotiation. On 31 December 2019, the Company entered into Zhangguizhuang Sewage Water Treatment Plant Entrusted Operation Supplemental Agreement with Tianjin Investment Group to amend the terms of Zhangguizhuang Sewage Water Treatment Plant Entrusted Operation Agreements entered into between the Company and Tianjin Investment Group on 29 June 2018 and on 1 July 2019 respectively, pursuant to which, among other things, the revised unit price of the operating service fee per month is RMB0.98/m³ for the service period of 18 months from 1 January 2019 to 30 June 2020, and taking the monthly actual sewage treatment capacity (but no more than 220,000 tons per day) as the basis for verification (for the year ended 31 December 2019), the revised total operating service fee in 2019 is expected to be not more than RMB79.2 million.

Connected relationship: Tianjin Investment Group is the ultimate controller of the Company

According to Chapter 14A of the Rules Governing the Listing of Securities on The Stock Exchange (the "Listing Rules"), the above-mentioned items (b), (e) and (f) are continuing connected transactions. The independent non-executive Directors of the Company have reviewed the above continuing connected transactions and confirmed that:

- ① the above continuing connected transactions were in the ordinary course of business of the Company;
- 2 the above continuing connected transactions were conducted on normal commercial terms; and
- ③ the above continuing connected transactions were carried out in accordance with the terms of the agreements of the relevant transactions, which were fair and reasonable and in the interests of the Company and its shareholders as a whole.

The Board also confirmed that the auditors of the Company had confirmed the matters as set out in Rule 14A.56 of the Listing Rules regarding continuing connected transactions occured in 2019 namely items (b), (e) and (f).

3. Connected transactions which have not been disclosed in the Company's announcements

- (II) Connected Transactions as a result of Acquisition, Disposal of Assets or Equity
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation

Not applicable

2. Connected transactions which have been disclosed in the Company's announcements, with subsequent progress or changes to their implementation

Not applicable

3. Connected transactions which have not been disclosed in the Company's announcements

Not applicable

4. Discloseable performance for the reporting period of connected transactions with agreed-upon performance targets

Not applicable

- (III) Significant Connected Transactions in Joint External Investment
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation
 - On 11 March 2019, the Board considered and approved the resolution for the Company to enter into a joint a. venture contract with Guokong Jincheng, China Construction Third Bureau No. 3 Construction Engineering Company, Tianjin Municipal Institute, SGCI (a government representative making contributions), and SGEZTC (a government representative making contributions), pursuant to which, inter alia, the parties agreed to establish GJTC for implementing the PPP project for the comprehensive improvement of the regional water environment in Gaocheng District, Shijiazhuang City, Hebei Province. The total investment of the PPP project is estimated to be approximately RMB724,989,500. The registered capital of the project company will be RMB217,496,900, and among other companies, the Company agreed to contribute in cash of RMB128,323,200, representing 59% of the registered capital of the project company, whereas Guokong Jincheng agreed to contribute in cash of RMB65,249,100, representing 30% of the registered capital of the project company, China Construction Third Bureau No. 3 Construction Engineering Company agreed to contribute RMB1,957,500 in cash to the project company, accounting for 0.9% of the share capital; Tianjin Municipal Institute agreed to contribute RMB217,500 to the project company, accounting for 0.1% of the share capital; and the government representatives agreed to contribute RMB21,749,600 in cash to the project company, accounting for 10% of the share capital. On the same day, the Board considered and approved the resolution for the Company to enter into a project contract in relation to the aforesaid PPP project, with Guokong Jincheng, China Construction Third Bureau No. 3 Construction Engineering Company, Tianjin Municipal Institute, and Hebei Gaocheng Economic Committee* (河北槁城經濟委員會), pursuant to which, GJTC takes charge of the investment and financing, design, construction, operation, maintenance and transfer of the PPP project, and collecting sewage treatment fee during franchise operating period.

Connected relationship: Tianjin Investment Group, the ultimate controller of the Company, holds a 40% equity interest in Guokong Jincheng.

- (III) Significant Connected Transactions in Joint External Investment (Continued)
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation (Continued)

Save as disclosed above, there is no related party transaction or continuing related party transaction as set out in the Annual Report 2019 of the Company that falls under the definition of "connected transaction" or "continuing connected transaction" which requires disclosure in Chapter 14A of the Listing Rules. The Company confirms that it has complied with the relevant disclosure requirements in accordance with Chapter 14A of the Listing Rules.

2. Connected transactions which have been disclosed in the Company's announcements, with subsequent progress or changes to their implementation

Not applicable

3. Connected transactions which have not been disclosed in the Company's announcements

Not applicable

- (IV) Creditor's Rights and Debts with Related Parties
 - 1. Connected transactions which have been disclosed in the Company's announcements, but without subsequent progress or changes to their implementation

Not applicable

2. Connected transactions which have been disclosed in the Company's announcements, with subsequent progress or changes to their implementation

Not applicable

3. Connected transactions which have not been disclosed in the Company's announcements
5. Major Events

XV. MATERIAL CONTRACTS AND THEIR IMPLEMENTATION

- (I) Custody, Contracting, and Leasing
 - 1. Custody

Not applicable

2. Contracting

Not applicable

3. Leasing

Not applicable

(II) Guarantees

Unit: 0'000 Currency: RMB

Guarantees provided to external parties by the Company (excluding guarantees provided to subsidiaries)

Total amount of guarantees provided during the reporting period (excluding guarantees provided to subsidiaries)	0
Total balance of guarantees as at the end of the reporting period (A) (excluding guarantees provided to subsidiaries) Guarantees provided to subsidiaries of the Company	0
Total amount of guarantees provided to subsidiaries during the reporting period	226,774.64
Total balance of guarantees provided to subsidiaries as at the end of the reporting period (B)	402,215.89
Total amount of guarantees provided by the Company (including guarantees provided to subsid	liaries)
Total amount of guarantee (A+B)	402,215.89
Percentage of the total amount of guarantees to the net assets of the Company (%) Of which:	65.15
Amount of guarantees provided to shareholders, ultimate controllers, and their connected parties (C)	0
Amount of guarantees provided directly or indirectly to borrowers with a gearing ratio of over 70% (D)	0
Total amount of guarantees exceeding 50% of net assets (E)	0
Total of the above three classes of guarantees (C+D+E)	0
Explanation on contingent joint liability for undue guarantees	Not applicable
Explanation on guarantees	Not applicable

XV. MATERIAL CONTRACTS AND THEIR IMPLEMENTATION (Continued)

- (III) Cash Asset Management Entrusted to Others
 - 1. Entrusted wealth management

Not applicable

2. Entrusted loans

Not applicable

3. Others

Not applicable

(IV) Other Material Contracts

5. Major Events

XVI. DETAILS OF OTHER MAJOR EVENTS

(I) Sale and Purchase or Redemption of Shares of the Company

During the reporting period, the Company or any of its subsidiaries did not purchase, sell, or redeem any shares of the Company.

(II) Corporate Governance Code

None of the Directors is aware of any information that would reasonably indicate that the Company is not or was not, for any part of the reporting period, in compliance with the Corporate Governance Code under the Listing Rules.

(III) Model Code for Securities Transactions by the Directors

The Company has adopted a code of practice with standards not less exacting than those prescribed in Model Code for Securities Transactions by Directors of Listed Issuers as set out in Appendix 10 to the Listing Rules for securities transactions conducted by the Directors. During the reporting period, all Directors complied with the model code in relation to securities transactions conducted by the Directors.

(IV) Public Float

On the basis of published information and to the best knowledge of the Directors, the Company has maintained the amount of public float as required under the Listing Rules as at the date of this annual report.

(V) Pre-emptive Rights

There is no provision regarding pre-emptive rights under the Articles of Association of the Company and there is no restriction on such rights under the laws of the PRC.

XVI. DETAILS OF OTHER MAJOR EVENTS (Continued)

(VI) Tax Concession

Holders of listed securities of the Company were not granted any tax concession for holding securities of the Company.

(VII) Charge of Assets

For details about charge of assets of the Company, please refer to the financial reports as set out below.

(VIII) Audit Committee

On 31 July 2001, the Board approved the establishment of the Audit Committee which is responsible for reviewing and supervising the financial reporting process and internal control of the Company. The Audit Committee has reviewed the accounting principles and practices adopted by the Group and discussed internal control and financial reporting matters including a review of the audited accounts for the year ended 31 December 2019 with the Directors.

XVII. ACTIVE PERFORMANCE OF SOCIAL RESPONSIBILITY

(I) Poverty Alleviation Work of the Company

1. Targeted Poverty Alleviation Plan

In accordance with the overall arrangement of Tianjin's targeted poverty alleviation work, Tianjin Investment Group and its subsidiaries have undertaken six assistance tasks and formulated a three-year plan for assistance. In order to undertake its social responsibility, the Company has been participating in the assistance works, the counterpart of which was Nancaicun Town (南蔡村鎮) government and the Xixiaoliang Village (西小 良村) thereunder, and the relevant assistance agreement was signed during the reporting period. According to the assistance agreement, the assistance to be provided includes the maintenance of the main road in Xixiaoliang Village, the construction of a new road leading to the village committee from Xixiaoliang Village, the dredging and renovation of ditches and ponds in Xixiaoliang Village, and the construction of public facilities and others for Nancaicun Town government. The total investment capital demand for the assistance project is RMB4,167,100, RMB100,000 of which has been paid by the Company at the end of 2017, and the remaining amount of RMB4,067,100 will be paid in three installments with RMB102,800 to be paid before 31 January 2019, RMB2,276,300 to be paid before 31 March 2019, and the remaining RMB1,688,000 to be paid before 31 January 2020. The assistance funds are subject to special account management and the "fixed sum for fixed purpose" policy, and are to be used in accordance with the principle of "special account accounting and special usage only". Special income and expenditure accounts will be established individually, and the funds for each village will be accounted for separately. The resident assistance team sent out by Tianjin Investment Group will be responsible for supervising and verifying the usage of assistance funds. Up to now, the above-mentioned assistance project has been on the rails.

- (I) Poverty Alleviation Work of the Company (Continued)
 - 2. Summary of Annual Targeted Poverty Alleviation

Not applicable

3. Achievements in Targeted Poverty Alleviation

Not applicable

4. Subsequent Targeted Poverty Alleviation Plan

Please refer to the above targeted poverty alleviation plan.

(II) Social Responsibility Work

The Company has disclosed its social responsibility report. For details, please refer to the website of the Shanghai Stock Exchange (http://www.sse.com.cn) on 27 March 2020.

(III) Environment Information

1. EXPLANATION ON ENVIRONMENTAL PROTECTION OF THE COMPANY AND ITS IMPORTANT SUBSIDIARIES CLASSIFIED AS KEY POLLUTANT DISCHARGING ENTITIES AS PUBLISHED BY ENVIRONMENTAL PROTECTION AUTHORITIES

(1) Pollutant Discharging

The Company is mainly engaged in the sewage treatment business which is to collect and treat domestic and municipal sewage by removing the main pollutants therein to the extent that the treated sewage meets the discharge standards stipulated by the national or local government, and then discharge the treated sewage to rivers via sewage outfalls as designated after assessment. The advanced treatment of part of the tail water is further performed for reclaimed water supply. According to the aforesaid effluent quality standards for sewage treatment plants stipulated by the national or local government, the effluent of sewage treatment plants is allowed to contain certain types and amounts of pollutants, mainly comprising chemical oxygen demand (COD), biochemical oxygen demand (BOD), suspended solids (SS), total nitrogen, ammonia nitrogen, total phosphorus, etc. Given the fact that most of sewage treatment projects have a designed capacity of exceeding 20,000 tonnes/day, they are classified as key pollutant discharging entities by local environmental protection authorities.

As at the end of the reporting period, the Company owned 40 sewage treatment projects, each of which has 1 or 2 effluent outfall(s) confirmed by industry competent authorities and experts upon examination and verification. According to the relevant agreements, currently the effluent quality required is class A specified in the Pollutant Discharge Standards for Urban Wastewater Treatment Plants (DB12/599-2015) of Tianjin and First Grade A and First Grade B under the Pollutant Discharge Standards for Urban Wastewater Treatment Plants (GB18918-2002). The common pollutant indexes requiring basic control include COD, BOD, SS, total nitrogen, ammonia nitrogen, total phosphorus, etc. The following table sets out the maximum allowable discharge concentrations (daily average) of the pollutant indexes requiring basic control.

(III) Environment Information (continued)

1. EXPLANATION ON ENVIRONMENTAL PROTECTION OF THE COMPANY AND ITS IMPORTANT SUBSIDIARIES CLASSIFIED AS KEY POLLUTANT DISCHARGING ENTITIES AS PUBLISHED BY ENVIRONMENTAL PROTECTION AUTHORITIES (continued)

No.			National standard – first grade class A	National standard – first grade class B	Tianjin local standard – class A
1	COD		50	60	30
2	BOD		10	20	6
3	SS		10	20	5
4	Animal & plant oil		1	3	1
5	Petroleum		1	3	0.5
6	Anion surfactant		0.5	1	0.3
7	Total nitrogen (N)		15	20	10
8	Ammonia nitrogen (N)	5(8)	8(15)	1.5(3)
9	Total phosphorus (P)	Constructed before 31 December 2005	1	1.5	0.3
		Constructed after 1 January 2006	0.5	1	0.3
10	Chroma (dilution mul	tiple)	30	30	15
11	РН			6-9	
12	Number of fecal colifo	rms/L	1000	10000	1000

(1) **Pollutant Discharging** (continued)

During the reporting period, the discharge concentrations of the major pollutant indexes requiring basic control of the Company's sewage treatment business were all below the above standards. In aggregate, the COD, BOD, SS, total nitrogen, ammonia nitrogen, and total phosphorus discharged by the Company during the reporting period were approximately 27,800 tonnes, 5,700 tonnes, 5,800 tonnes, 12,800 tonnes, 1,200 tonnes, and 300 tonnes, respectively. In aggregate, environmental pollutants, namely, the COD, BOD, SS, total nitrogen, ammonia nitrogen, and total phosphorus, were eliminated by approximately 469,500 tonnes, 220,200 tonnes, 293,600 tonnes, 52,200 tonnes, 45,300 tonnes, and 8,000 tonnes, respectively, representing a significant contribution to water environmental governance.

(III) Environment Information (continued)

2. Construction and operation of pollution prevention facilities

During the reporting period, the sewage treatment projects operated by the subsidiaries of the Company strictly complied with the relevant emission standards with all the effluent quality, odor, noise, and solid emission meeting the requirements. The projects' operation was also in normal condition. The construction of the sewage treatment facilities followed the relevant construction procedures and quality standards and proceeded normally.

As for the supervision and handling of the Xianyang Road sewage treatment plant of the Company (for details, please refer to the relevant disclosure of the 2018 interim report, 2018 annual report, and 2019 interim report of the Company), the newly built Xianyang Road sewage treatment plant has achieved overall A standards under the local discharge standards of Tianjin by the end of July 2019, and the "supervision and handling" rectification task was fully implemented. Such supervisory restrictions were removed on 5 December 2019.

In 2018, the Xiqing District Environmental Protection Bureau, Dongli District Environmental Bureau and Beicang District Environmental Protection Bureau punished Xiangyang Road sewage treatment plant, Dongjiao sewage treatment plant and Beicang sewage treatment plant for not meeting the class A standard. On the other hand, the transitional standard for effluent quality that the Tianjin Municipal Bureau of Environmental Protection required the sewage treatment plants of the Company to implement during upgrading and reconstruction was inconsistent with the enforcement standard of the district environmental protection bureaus. The "one plant one strategy" policy of the Company guarantees that the quality of water being discharged meets the transitional standard, and the Company has been in contact with the relevant governmental departments for the matter. Following the removal of the supervisory restrictions and the satisfaction of the supervision and rectification requirements of the central environmental protection inspection group, the matter is expected to be resolved smoothly in the future.

- (III) Environment Information (continued)
 - 3. Environmental Impact Assessment of Construction Projects and Other Administrative Permissions for Environmental Protection

All the Company's sewage treatment projects in operation have gone through the relevant EIA procedures and obtained approvals and environmental acceptance upon construction completion from the competent environmental authorities.

4. Emergency Plans for Sudden Environmental Incidents

During the reporting period, all key pollutant discharge entities of the Company's sewage treatment business prepared the "Environmental Emergency Response Plan for Sewage Treatment Plants" with reference to the "Interim Measures for the Administration of Environmental Emergency Response Plans", and the plan was approved by and filed with the local environmental protection bureau.

5. Environmental Self-monitoring Program

During the reporting period, all key pollutant discharge entities of the Company's sewage treatment business carried out environmental self-monitoring in accordance with the relevant requirements of the government. At the beginning of each year, each entity prepares the "Environmental Self-monitoring Program" for the year based on the actual situation. The monitoring program mainly specifies the monitoring items, monitoring points, monitoring methods, monitoring frequency, analysis methods, etc. The monitoring results are publicized on the local environmental information monitoring platform. Each entity will also file the self-monitoring program and adjustments and changes with the local environmental protection bureau in a timely manner.

6. Other environmental information that should be disclosed

① On 2 April 2018, the Hangzhou Environmental Protection Bureau imposed a fine of RMB200,000 on the second phase of the project of the Hangzhou Qige Sewage Plant of Hangzhou Company (that is a controlling subsidiary of the Company) because the influent quality and yield had exceeded the provided standard and the effluent ammonia nitrogen had exceeded the effluent standard in a moment.

5. Major Events

XVII. ACTIVE PERFORMANCE OF SOCIAL RESPONSIBILITY (Continued)

- (III) Environment Information (continued)
 - 6. Other environmental information that should be disclosed (continued)
 - ② On 1 July 2018, the Ningxiang Municipal Bureau of Environmental Protection imposed a fine of RMB1 million on the sewage treatment plant of Ningxiang Economic and Technological Development Zone where Changsha Tianchuang Water (that is a controlling subsidiary of the Company) is located because a sudden rainstorm had washed a small amount of sludge temporarily stored in the sewage treatment plant through mater sewage outfalls into the Weishui River, causing the ammonia nitrogen, COD, and total phosphorus concentration on the mater sewage outfalls to exceed the effluent standard.

The above two fines have not had a material impact on the Company.

7. Description of environmental information of companies other than those classified as key pollutant discharge entities

Not applicable

8. Explanation of reasons for non-disclosure of environmental information of companies other than those classified as key pollutant discharge entities

Not applicable

9. Description of follow-up progress or changes in the disclosure of environmental information during the reporting period

Not applicable

(IV) Other Explanations

Not applicable

XVIII. CONVERTIBLE BONDS

6. Details of Changes in Ordinary Shares and Shareholders

I. CHANGES IN ORDINARY SHARE CAPITAL

(I) Changes in Ordinary Shares

During the reporting period, there were no changes in the total number of ordinary shares and the structure of share capital of the Company.

(II) Changes in Restricted Shares

Not applicable

II. ISSUE AND LISTING OF SECURITIES

(I) Issue of Securities as at the End of the Reporting Period

Unit: share Currency: RMB

Types of stock and its derivative securities	Date of issue	Issue price (or interest rate)	Volume of issue	Listing date	Authorized trading volume in respect of the listing	Date of termination of trading		
Convertible corporate bonds, bonds with warrants, debentures								
Corporate bonds	25 October 2016	0.0313	7,000,000	-	-	25 October 2021		
Corporate bonds	26 April 2018	0.0517	11,000,000	-	-	26 April 2023		

Explanation on the issue of securities as at the end of the reporting period (for bonds with different interest rates during the terms, please specify separately):

For details, please refer to "9. Relevant Details of Corporate Bonds" in this annual report.

(II) Changes in the Total Number of Ordinary Shares of the Company and Shareholder Structure and the Company's Assets and Liabilities Structure

Not applicable

(III) Existing Employee Shares

6. Details of Changes in Ordinary Shares and Shareholders

III. DETAILS OF SHAREHOLDERS AND ULTIMATE CONTROLLER

(I) Total Number of Shareholders

Total number of ordinary shareholders as at the end of the reporting period	81,228
Total number of ordinary shareholders as at the end of the previous month before	
the disclosure date of the annual report	76,650
Total number of shareholders of preferred shares whose voting rights have been restored	
as at the end of the reporting period	Not applicable
Total number of shareholders of preferred shares whose voting rights have been restored	11
at the end of last month prior to the date on which the annual report shall be disclosed	Not applicable

Note: The total numbers of shareholders above represent the sum of holders of A Shares and H Shares. The total number of ordinary shareholders as at the end of the reporting period is 81,228, among which 66 are holders of H Shares. The total number of ordinary shareholders as at the end of the previous month before the disclosure date of the annual report is 76,650, among which 65 are holders of H Shares.

(II) Shareholdings of the Top Ten Shareholders and the Top Ten Shareholders of Circulating Shares (or Shareholders of Non-Restricted Shares) at the End of the Reporting Period

Unit: Share

	Increase/	Shareholdings	of the top ten shar	eholders			
	decrease during the reporting	Number of shares held at the end		Number of	Pledged	or frozen	
Name of shareholder	period (shares)	of the period (shares)	Percentage (%)	restricted shares held	Status	Number (shares)	Nature of the shareholder
TMICL	0	715,565,186	50.14	0	None	-	State-owned legal person
HKSCC Nominees Limited	19,910	337,874,810	23.67	0	Unknown	-	Others
Central Huijin Asset Management Co., Ltd.	0	14,169,800	0.99	0	None	-	State-owned legal person
Hong Kong Securities Clearing Company Limited	3,682,224	4,910,588	0.34	0	None	-	Others
Agricultural Bank of China Limited- CSI500 Index Open-ended Fund (中證500交易型開放式指數 證券投資基金)	-61,056	4,552,952	0.32	0	None	_	Others
Zhejiang Jinxin Construction Engineering Co., Ltd. (浙江錦鑫 建設工程有限公司)	70,500	3,400,500	0.24	0	None	-	Domestic non-state-owned legal person
Bank of China Limited – Guangfa China Securities Environmental Protection Industry Index Open-ended Fund (中國銀行股份 有限公司 – 廣發中證環保 產業交易型開放式指數證券 投資基金)	844,300	2,381,317	0.17	0	None	_	Others
Ye Ruiqing (葉鋭清)	2,039,700	2,039,700	0.14	0	None	-	Domestic natural person
Wu Zuojia (吳作佳)	300,000	1,941,219	0.14	0	None	-	Domestic natural person
Liu Lichun (劉立春)	1,464,800	1,714,700	0.12	0	None	-	Domestic natural person

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III. DETAILS OF SHAREHOLDERS AND ULTIMATE CONTROLLER (Continued)

 (II) Shareholdings of the Top Ten Shareholders and the Top Ten Shareholders of Circulating Shares (or Shareholders of Non-Restricted Shares) at the End of the Reporting Period (Continued)

Shareholdings of the top ten shareholders of non-restricted circulating shares

	Type and number of shares			
	Number of non-restricted circulating			
Name of shareholder	shares held	Туре	Number	
TMICL	715,565,186	Ordinary RMB Shares Overseas listed Foreign	715,565,186	
HKSCC Nominees Limited	337,874,810	Shares	337,874,810	
Central Huijin Asset Management Co., Ltd.	14,169,800	Ordinary RMB Shares	14,169,800	
Hong Kong Securities Clearing Company Limited	4,910,588	Ordinary RMB Shares	4,910,588	
Agricultural Bank of China Limited-CSI500 Index Open-ended Fund (中證500交易型開放式指數 證券投資基金)	4,552,952	Ordinary RMB Shares	4,552,952	
Zhejiang Jinxin Construction Engineering Co., Ltd. (浙江錦鑫建設工程有限公司)	3,400,500	Ordinary RMB Shares	3,400,500	
Bank of China Limited – Guangfa China Securities Environmental Protection Industry Index Open-ended Fund (中國銀行股份有限公司 一廣發中證環保產業交易型開放式指數 證券投資基金)	2,381,317	Ordinary RMB Shares	2,381,317	
Ye Ruiqing (葉鋭清)	2,039,700	Ordinary RMB Shares	2,039,700	
Wu Zuojia (吳作佳)	1,941,219	Ordinary RMB Shares	1,941,219	
Liu Lichun (劉立春)	1,714,700	Ordinary RMB Shares	1,714,700	
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Notes on the connected relationship or parties acting in concert among the above shareholders

It is not certain whether there is any connected relationship among the top 10 shareholders.

It is not certain whether there is any connected relationship between the top 10 shareholders of non-restricted circulating shares and the top 10 shareholders.

- Notes: (1) According to the register of members as provided by HKSCC Nominees Limited, those H shares held by it were held on behalf of various clients. There was no client who owned 5% or more interest in the total share capital of the Company.
 - (2) The top ten shareholders are not strategic investors of the Company.

(III) Strategic Investors or General Legal Persons Becoming the Top Ten Shareholders Due to Placing of New Shares

6. Details of Changes in Ordinary Shares and Shareholders

IV. CHANGES IN THE CONTROLLING SHAREHOLDER AND THE ULTIMATE CONTROLLER

(I) Controlling Shareholder

1 Legal person

Name	TMICL
Head of the entity or legal representative	Yu Zhongpeng
Date of incorporation	20 January 1998
Principal operations	Investment, operation and management of commerce, service industry, real estate industry, city infrastructure, road construction and auxiliary facilities with internal funds; property management; leasing of self-owned housings; corporation management and consultation (for the above business covering the industry license, operating with the license within the validity period; for specific projects and operations, in accordance with the State regulations) (projects subject to approval according to law may be operated upon the approval of relevant departments).
The shareholdings of other domestic and foreign listed companies in which the company has controlling interests and has invested during the reporting period	Nil
Notes on other information	Nil

2 Flowchart on the shareholding interests and relationship of control between the Company and its controlling shareholder



infrastructure franchise under the authorisation of the government; construction investment consultation (in accordance with the State

regulations for specific projects and operations).

IV. CHANGES IN THE CONTROLLING SHAREHOLDER AND THE ULTIMATE CONTROLLER (Continued)

(II) Ultimate Controller

1 Legal person

Name	Tianjin Investment Group
Head of the entity or legal representative	Li Baokun
Date of incorporation	23 July 2004
Principal operations	Investment in the development and reconstruction of seas and rivers, investment, construction, operation and management of urban environmental infrastructure and auxiliary projects such as metro, intercity railway, urban roads and bridges, highways, sewage treatment, water supply, heat supply, waste disposal, parking lots (building), underground pipe network and green land in parks by using its own funds; land consolidation and regional development under the authorisation of the government; protective construction, development and operation of historic architecture; housing building and municipal public project management; investment and planning; corporate management and consultation; market establishment and development services; leasing of self-owned housing; leasing of infrastructural facilities and the development and operation of public facilities projects; operating

The shareholdings of other domestic and foreign listed companies in which the company has controlling interests and has invested during the reporting period

Notes on other information

Nil

Nil

6. Details of Changes in Ordinary Shares and Shareholders

IV. CHANGES IN THE CONTROLLING SHAREHOLDER AND THE ULTIMATE CONTROLLER (Continued)

- (II) Ultimate Controller (Continued)
 - 2 Flowchart on the equity interests and relationship of control between the Company and its ultimate controller



V. OTHER LEGAL PERSON SHAREHOLDERS HOLDING MORE THAN 10% OF THE SHARES

As at the end of the reporting period, there were no other legal person shareholders holding more than 10% of the shares of the Company.

VI. DESCRIPTION OF RESTRICTION ON DECREASE OF SHAREHOLDINGS

VII. SUBSTANTIAL SHAREHOLDERS INTERESTS

(a) As at 31 December 2019, so far as is known to or can be ascertained after reasonable enquiries by the Directors, Supervisors or chief executive of the Company, the following entities (other than the Directors, Supervisors or chief executive of the Company) had an interest or short position in the shares or underlying shares (including options) of the Company which would fall to be disclosed to the Company under Divisions 2 and 3 of Part XV of the Securities and Futures Ordinance (the "SFO"):

Name of shareholder	Capacity	Number and class of securities (Note)	Approximate percentage of the relevant class of securities	Approximate percentage of the total issued share capital of the Company
TMICL	Beneficial owner	715,565,186 A Shares (L)	65.82%	50.14%
ISIS Asset Management Plc	Investment manager	17,286,000 H Shares (L)	5.08%	1.21%
UBS Group AG	Person having a security interest in shares	17,367,000 H Shares (L)	5.11%	1.22%
	Interest of controlled corporation	538,502 H Shares (L)	0.16%	0.04%

Note: The letter "L" represents the person's long position in the shares. The letter "S" represents the person's short position in the shares.

(b) Save as disclosed above, there is no other person (other than the Directors, Supervisors or chief executive of the Company) so far as is known to the Directors, Supervisors or chief executives of the Company who, as at 31 December 2019, had an interest or short position in the shares or underlying shares (including options) of the Company which would fall to be notified to the Company under Divisions 2 and 3 of Part XV of the SFO, or had, directly or indirectly, interested in 5% or more of nominal value of any class of share capital carrying rights to vote in all circumstances at general meetings of any members of the Group.

I. CHANGES IN SHAREHOLDINGS AND THE REMUNERATION

(I) Changes in shareholdings and the remuneration of the existing and resigned Directors, Supervisors, and senior management during the reporting period

Name	Position held (note)	Gender	Age	Appointment date	Termination date	No. of shares held at the beginning of the year (shares)	No. of shares held at the end of the year (shares)	Changes in number of shares for the year	Reason for changes	Aggregate pre-tax remunerations received from the Company during the reporting period (RMB: 0'000)	Whether remuneration was received from related parties of the Company
Liu Yujun	Executive Director, Chairman	М	54	13 March 2015	17 December 2021	0	0	0	No change	81.77	No
Tang Fusheng	General Manager	М	46	26 January 2017	17 December 2021	0	0	0	No change	81.32	No
Wang Jing	Executive Director	F	49	18 December 2018	17 December 2021	0	0	0	No change	77.03	No
Niu Bo	Executive Director	М	43	18 December 2018	17 December 2021	0	0	0	No change	67.38	No
	Secretary of the Board			29 January 2016	17 December 2021				Ū		
Yu Zhongpeng	Non-executive Director	М	40	15 May 2018	17 December 2021	0	0	0	No change	0	Yes
Han Wei	Non-executive Director	М	42	15 May 2018	17 December 2021	0	0	0	No change	0	Yes
Si Xiaolong	Non-executive Director	М	43	18 December 2018	17 December 2021	0	0	0	No change	0	Yes
Wang Xiangfei	Independent non- executive Director	М	67	18 December 2015	17 December 2021	0	0	0	No change	22.00	No
Guo Yongqing	Independent non- executive Director	М	45	18 December 2015	17 December 2021	0	0	0	No change	22.00	No
Di Xiaofeng	Independent non- executive Director	М	58	18 December 2018	17 December 2021	0	0	0	No change	22.00	No
Lu Hongyan	Supervisor	F	50	17 May 2017	17 December 2021						
-	Chairwoman of the Supervisory Committee			18 December 2018	17 December 2021	0	0	0	No change	67.38	No
Wu Baolan	Supervisor	F	51	24 August 2011	17 December 2021	0	0	0	No change	46.89	No
Niu Jing	Supervisor	F	49	18 December 2015	17 December 2021	0	0	0	No change	46.75	No
Li Zongqiang	Supervisor	М	49	18 December 2012	17 December 2021	0	0	0	No change	0	Yes
Shen Yue	Supervisor	F	44	18 December 2018	17 December 2021	0	0	0	No change	42.82	No
Huang Lan	Supervisor	F	48	18 December 2018	17 December 2021	0	0	0	No change	36.87	No
Fu Yana	Deputy general manager	F	49	18 December 2012	23 March 2020	0	0	0	No change	68.15	No
Peng Yilin	Chief accountant	F	39	29 January 2016	17 December 2021	0	0	0	No change	70.84	No
Zhao Yi	Deputy general manager	М	49	18 October 2010	17 December 2021	0	0	0	No change	78.30	No
Zhang Jian	Deputy general manager	М	50	17 January 2012	17 December 2021	822	822	0	No change	71.12	No
Zhang Qiang	Deputy general manager	М	56	5 March 2009	17 December 2021	0	0	0	No change	71.52	No
Li Yang	Deputy general manager	М	51	15 March 2017	17 December 2021	0	0	0	No change	83.78	No
Qi Lipin	Chief economist	F	42	29 October 2015	23 March 2020	0	0	0	No change	70.64	No
Li Jinhe	Chief engineer	М	49	29 August 2017	17 December 2021	0	0	0	No change	71.22	No
	Deputy general manager			1 January 2020	17 December 2021						
Total	1	1	1	1	1	822	822	0	1	1,199.78	1

Name Primary working experience

- Liu Yujun Mr. Liu is now the investment director of Tianjin Investment Group and the chairman of the Company. Mr. Liu was the chief accountant of Tianjin No. 4 Municipal Engineering Company from December 1996 to August 2000; the chief accountant of Tianjin Metro General Company from August 2000 to October 2007; the deputy general manager and the chief accountant of Tianjin City Metro Group from October 2007 to November 2008; the deputy chief accountant of Tianjin Investment Group and the deputy general manager and the chief accountant of Tianjin City Metro Group from October 2007 to November 2008; the deputy chief accountant of Tianjin Investment Group and the deputy general manager and the chief accountant of Tianjin City Metro Group and the secretary of the party branch, the chairman of the board, and the general manager of Tianjin Metro Resources Investment from April 2011 to April 2013. He has been the deputy chief accountant of Tianjin Investment Group from April 2013 to December 2019; the general manager, secretary of the party general branch, and director of Tianjin Haihe Jinan Investment Construction Development Company Limited from January 2014 to March 2015; and the investment director of Tianjin Investment Group since December 2019. Mr. Liu Yujun has been a Director and the chairman of the Company since 13 March 2015.
- Tang Fusheng Mr. Tang is now the general manager of the Company. Mr. Tang Fusheng served as the head of the development department, the deputy general manager, and the general manager of Water Recycling Company, a wholly-owned subsidiary of the Company, from July 2001 to April 2009. He served as the assistant to the general manager of the Company, and at the same time served as the director and general manager of Water Recycling Company from April 2009 to February 2010. He served as the deputy general manager of the Company from March 2010 to February 2015. During his tenure as the deputy general manager of the Company, Mr. Tang concurrently served as the director of Water Recycling Company and the general manager of the Company's energy and resources department. His role as the general manager of Water Recycling Company and the general manager of the Company's energy and resources department. He has been serving as the chairman of Hong Kong Company, a wholly owned subsidiary of the Company, since June 2011, and has been serving as an executive director of Jiayuanxing, a wholly owned subsidiary of the Company, since June 2014. In February 2015, Mr. Tang resigned from all of the abovementioned positions as a result of work rearrangement and was transferred to Tianjin Urban Pipe Network Construction Investment Company Limited (天津城市道路管網配套建設投資有限公司) and served as a director and general manager of that company from 14 March 2017 to 17 December 2018.
- Wang Jing Ms. Wang is now a Director and the deputy secretary of the Communist Party Committee and chairwoman of the labour union of the Company. Ms. Wang served as the deputy director, director, and minister of the administration department of Tianjin Municipal Construction Group Co. Ltd. (天津市政建設集團) from June 2007 to December 2010; served as a party branch member, deputy secretary, secretary of the party general branch, chairwoman of the labour union, and director of Tianjin Ziya Circular Economy Industrial Investment and Development Company Limited (天津子牙循環 經濟產業投資發展有限公司) from December 2010 to July 2016; acted as a member of the management committee, deputy secretary, deputy director of Tianjin Ziya Circular Economy Industrial District (天津子牙循環經濟產業區) from September 2012 to July 2016; Ms. Wang has been serving as the deputy secretary of the Communist Party Committee and chairwoman of the labour union of the Supervisory Committee of the Company from 24 November 2016 to 17 December 2018. Ms. Wang has been serving as a Director of the Company since 18 December 2018.
- Niu Bo Mr. Niu is now a Director and the secretary to the Board, and is concurrently the chairman of Hong Kong Company. Mr. Niu Bo joined the Company in August 2004, and from then to December 2009, he has acted as the project manager and assistant department manager of the market development department and the department manager of the strategic investment department of the Company. He has been the deputy chief economist of the Company from December 2009 to December 2019. He concurrently served as the chairman of Hong Kong Company since February 2015. Mr. Niu has been the secretary to the Board of the Company since 29 January 2016. Mr. Niu has been a Director of the Company since 18 December 2018.
- Mr. Yu graduated from School of Economics of Nankai University with a master's degree in economics. He currently Yu Zhongpeng serves as a Director of the Company, and the secretary of party general branch, chairman, and general manager of TMICL, and the member and deputy secretary (temporary post) of the party leadership group of the fourteenth session of the Communist Youth League of Tianjin. From July 2004 to July 2007, Mr. Yu Zhongpeng worked for the development department of Tianjin Expressway Investment & Construction Development Corporation (天津高速公路投資建設 發展公司). From July 2007 to August 2016, he worked for Tianjin Investment Group and successively served as the assistant to head, deputy head, and head of the finance development department and the deputy manager of the finance centre, during which he temporarily served as the assistant to the director of office of the Tianjin Municipal Infrastructure Project Financing Leading Group. From August 2016, he has served as the secretary of party general branch, chairman, and general manager of TMICL. From January 2018, he has temporarily served as the member and deputy secretary of the party leadership group of the fourteenth session of the Communist Youth League of Tianjin. Mr. Yu Zhongpeng has been concurrently a Director of Tianjin City Investment Development and Leasing Co., Ltd. since January 2016, and a member of the Investment Committee of Tianjin Juncheng Industrial-financial Equity Investment Fund Partnership (L.P.) since January 2018. He has been concurrently serving as the Director and Vice Chairman of AECOM (Tianjin) Engineering Consultants Co., Ltd. (偉信 (天津) 工程諮詢有限公司) since August 2018, and a Director of Tianjin Xiqing BOC Fullerton Community Bank Corp. (天津西青中銀富登村鎮銀行股份有限公司) since January 2020. Mr. Yu Zhongpeng has been a Director of the Company since 14 May 2018.

Name Primary working experience

- Han Wei Mr. Han graduated from School of Management of Tianjin University with a degree in management. He currently serves as a Director of the Company and the general manager of the investment and development department of Tianjin Investment Group and concurrently serves as a director of TMICL. From March 2009 to September 2015, Mr. Han Wei worked for Tianjin Financial City Development Co., Limited (天津金融城開發有限公司), and successively served as the deputy head of the asset management department, the head of the asset management department of Tianjin Investment Group. From October 2015 to March 2018, he served as the deputy head (in charge of overall operation) of the investment and development department of Tianjin Investment Group. From April 2018 to December 2019, he served as the general manager of the investment and development department of Tianjin Investment Group and has been concurrently serving as a director of TMICL since September 2019. From December 2019, he served as the general manager of the investment and development department Group; and since 14 May 2018, he has been a Director of the Company.
- Si Xiaolong Mr. Si, a senior economist, currently serves as a Director of the Company, and the deputy general manager of the corporation management department, the deputy head of the office of the board of Tianjin Investment Group and concurrently serves as a director of Guokong Jincheng. Mr. Si Xiaolong graduated from School of Management of Tianjin University with a master's degree in business administration. He had worked for Tianjin Road Pipe Network Supporting Construction Investment Limited (天津道路管網配套建設投資有限公司). He joined Tianjin Investment Group in April 2009, engaging in asset management, corporate governance, and other work for a long term. He served as the deputy head of the office of the board of Tianjin Investment Group from July 2016 to December 2019 and acted as the deputy head of the corporation management department of Tianjin Investment Group from March 2018 to December 2019. Mr. Si has been the deputy general manager of the corporation management department and the deputy head of the office of the board of Tianjin Investment Group since December 2019, has been concurrently serving as a director of Guokong Jincheng from October 2018 and has been a Director of the Company since 18 December 2018.
- Wang Xiangfei Mr. Wang is now an independent non-executive Director of the Company, the financial advisor of China Development Bank International Investment Limited*(國開國際投資有限公司) and China Sonangol International Holding Limited, and an executive director of Nan Nan Resources Enterprise Limited. Mr. Wang is a senior accountant who graduated from Renmin University of China, majoring in finance and received a bachelor degree in economics. He also has worked in senior management teams of a couple of companies engaging in banking and other financial services. He was the independent non-executive director of China CITIC Bank Co., Ltd., SSEC Media Group Limited, Chongqing Iron and Steel Company Limited, and Shandong Chenming Paper Holdings Limited and an internal supervisor of Shenzhen Rural Commercial Bank Limited, and was the independent non-executive Director of the Company from April 2002 to April 2008. Mr. Wang Xiangfei has been an independent non-executive Director of the Company since 18 December 2015.
- Guo Yongqing Mr. Guo is a post-doctorate, professor in accounting, and certified public accountant in the PRC. Mr. Guo is now an independent non-executive Director of the Company and an accounting professor of the Shanghai National Accounting Institute, and concurrently serving as an independent director of Huangshan Tourism Development Co., Ltd. and Chongqing Porton Pharmacy Science & Technology Co., Ltd. Mr. Guo has been the department head of Shanghai National Accounting Institute. Mr. Guo Yongqing has been the independent non-executive Director of the Company since 18 December 2015.
- Di Xiaofeng Mr. Di is now a partner of the Commerce & Finance Law Offices in Beijing and an independent non-executive Director of the Company. Mr. Di received a bachelor's degree of law from Peking University in 1983 and a master's degree of law from the Chinese Academy of Social Sciences in 1986. From September 1986 to February 1988, he worked for the law department of the China Council for the Promotion of International Trade, specializing in legal affairs. From March 1988 to April 1992, he worked as a full-time lawyer for the China Legal Affairs Centre under the supervision of the Ministry of Justice of the PRC. Mr. Di was qualified as a solicitor in 1989. Mr. Di was the independent non-executive Director of the Company from April 2008 to April 2014 and has been the independent non-executive Director of the Company since 18 December 2018.
- Lu Hongyan Ms. Lu obtained a doctoral degree in laws from Nankai University. She is the chairman of the Supervisory Committee and the general counsel of the Company. Ms. Lu served in Tianjin Winners Law Firm (天津金諾律師事務所) and Tianjin Hongyi Law Firm (天津泓毅律師事務所) consecutively from January 2001 to December 2009 as a lawyer. She joined the Company in January 2010 and served as a legal specialist, and has been the general counsel of the Company since January 2016. She is responsible for the legal affairs of the Company. Ms. Lu has vast legal experience in economic and corporate governance. Ms. Lu has been a Supervisor of the Company since 17 May 2017 and the chairman of the Supervisory Committee of the Company since 18 December 2018.
- Wu Baolan Ms. Wu is now a Supervisor of the Company and the head of the party-masses department of the Company. Ms. Wu joined the Company since December 2000 and was the assistant to the general manager of human resource department of the Company. Ms. Wu was the director of office of Rijiyuan Company under Tianjin Municipal Investment Company Limited from December 2004 to December 2005. Ms. Wu joined the Company again in December 2005, and acted as the vice head of the party-masses department of the Company, the chairman of the institutional labour union of the Company, and the head of the party-masses department of the Company. Ms. Wu has been elected as the Supervisor on behalf of the Company's staff since 24 August 2011.

Name Primary working experience Niu Jing Ms. Niu is now a Supervisor of the Company, the manager of the legal and audit department, and an assistant accountant. Ms. Niu Jing graduated from Tianjin University of Finance and Economics in 1993, majoring in finance. She worked as an accountant in Tianjin Xianda Hotel (天津先達酒店) from 1993 to 1995; worked as the financial controller in Tianjin Shandong McDonald's Food Company Limited (天津山東麥當勞食品有限公司) from 1995 to 2002; and worked as the financial manager and internal control manager of Tianjin Jiafu Commercial Company Limited (天津家福商業有 限公司) from 2002 to 2009. She joined the Company since July 2009 and served as the manager of the legal and audit department of the Company since then. Ms. Niu was appointed as a Supervisor of the Company since 18 December 2015. Li Zongqiang Mr. Li is now an accountant and the head of the risk management department of TMICL. Mr. Li Zongqiang graduated from Tianjin University of Finance and Economics, majoring in accounting and received a bachelor's degree in economics. He is a certified public accountant, a registered tax advisor, and a registered asset appraiser. He had worked for Tianjin Jinhua Accounting Firm (天津津華會計師事務所) and Tianjin Jiwei Accounting Firm (天津吉威會計師事務所). He joined TMICL in 2007, and successively served as the deputy manager of finance department, the chief accountant of Wanning Kaide Investment Company (萬寧凱德投資公司), the financial director of Yuanyicheng Business Operations Management Company (元易誠商業運營管理公司), and other positions, engaging in financial auditing and management for a long term. He has acted as the deputy head (in charge of overall operation) of the risk management department of TMICL since April 2017, the head of the risk management department of TMICL since January 2019, and a Supervisor of the Company since 18 December 2018. Shen Yue Ms. Shen is now a senior economist and a Supervisor and the head of the organizational department under the Communist Party Committee of the Company. Ms. Shen graduated from Nankai University with a master's degree in laws. She joined the Company in 2006, worked in the party committee and affairs department (黨群工作部). From January 2011 to May 2018, she successively served as the assistant to head and the deputy head of the party committee and affairs department of the Company, and also acted as the secretary of the first party general branch. Since January 2014, she has served as the deputy head of the party committee and affairs department of the Company. She was appointed as the deputy head of the party committee and affairs department of the Company and the secretary of the first party general branch from November 2016 and was appointed as the head of the organizational department under the Communist Party Committee of the Company from October 2018. Ms. Shen has acted as a Supervisor of the Company since 18 December 2018. Huang Lan Ms. Huang is a Supervisor, the deputy manager of the operation management department, and the secretary of the 4th institutional party branch of the Company. Ms. Huang joined the preparatory office of the Haihe river basin wastewater treatment project of the Company in March 2002 and has been the director of the general office of the Xianyang Road wastewater treatment plant of the Company since March 2005. She has successively served as the deputy director and the director of the general office of the Tianjin water services department of the Company since December 2009. She has been the director of the general office of the Company's branch company for water services since January 2016 and has concurrently served as the secretary of the 4th institutional party branch of the Company since June 2016. She has been the deputy manager of the operation management department and the secretary of the 4th institutional party branch of the Company since April 2017. Ms. Huang is the staff representative Supervisor of Company since 18 December 2018. Fu Yana Ms. Fu was the deputy general manager and also the officer to the office of general manager of the Company during the reporting period. She was appointed as the Director, the deputy general manager, and the secretary to the Board since December 2003, served as the manager of the human resources department from November 2010 to November 2018, and has concurrently served as the officer to the office of general manager since November 2015. She ceased to be the secretary of the Board from 28 January 2016 and ceased to be the Director of the Company from 18 December 2018. Peng Yilin Ms. Peng is now the chief accountant of the Company. Ms. Peng worked as the project manager of the investment management department of Tianjin Haitai Technology Development Company Limited (天津海泰科技發展股份有 限公司) from October 2005 to March 2008. From March 2008 to September 2015, she worked for Tianjin Investment Group, acting as the assistant department head of the financing development department and the financial central manager, respectively. Ms. Peng has been the assistant general manager of the Company since 29 October 2015, the chief accountant of the Company since 29 January 2016, and a Director of the Company from 16 March 2016 to 17 December 2018. Zhao Yi Mr. Zhao is now the deputy general manager of the Company. From August 2005 to March 2009, Mr. Zhao held the positions of the general manager of Qujing Company and Caring Company, subsidiaries of the Company. He was the deputy general manager of Tianjin Beiyangyuan Investment Development Company Limited from April 2009 to October 2010. He has been the deputy general manager of the Company since 18 October 2010. He concurrently served as the general manager of the non-local water business division from November 2010 to January 2016. Also, he concurrently acted as the chairman of eight controlling subsidiaries under the non-local business division from November 2010 to September 2015.

Name	Primary working experience
Zhang Jian	Mr. Zhang is now the deputy general manager of the Company, the general manager of the Company in Eastern China, the chairman of Hangzhou Company, and the director and chairman of Baoying Company. From April 2006 to December 2009, Mr. Zhang was the administrative deputy general manager (presiding over the work) of Hangzhou Company. He has been the general manager of the non-local water business division of the Zhejiang region and the general manager of Hangzhou Company, and the director and chairman of Baoying Company, and the director and chairman of Baoying Company since December 2009. He has been the chairman of Hangzhou Company, and the director and chairman of Baoying Company since September 2015. He has been the deputy general manager of the Company since January 2012.
Zhang Qiang	Mr. Zhang is now the deputy general manager of the Company. From October 2007 to February 2009, Mr. Zhang Qiang was appointed as the chairman and general manager of Tianjin Seventh Municipal Highway Engineering Company Limited in charge of the overall work. Mr. Zhang joined and served as the deputy general manager of the Company since 5 March 2009. During the period, he was also the general manager of the business department of the urban projects of the Company, and was the general manager of the 2nd engineering branch company from December 2010 to January 2016.
Li Yang	Mr. Li is now the deputy general manager of the Company, the general manager of the northwest region of the Company, and the chairman of Xi'an Company. From November 2005 to April 2009, he was the general manager of Fuyang Company, the wholly-owned subsidiary of the Company. From April 2009 to December 2009, he was the general manager of the 2nd water operation branch of the Company. He was the general manager of the eastern region of Tianjin water business division from January 2010 to February 2011 and was the general manager of Xi'an Company since February 2011 to May 2017. Mr. Li was appointed as the assistant to general manager of the Company since January 2012, and as the chairman of Xi'an Company since September 2015. Mr. Li Yang was a Supervisor of the Company from 8 September 2009 to 15 March 2017. Mr. Li was appointed as the deputy general manager of the Company since 15 March 2017.
Qi Lipin	Ms. Qi was the chief economist and the manager of investment and management department of the Company during the reporting period. Ms Qi worked for Binhai City Municipal Construction and Development Company Limited from July 1999 to February 2001. She joined the Company in February 2001, acted successively as the officer of project development department, assistant to the manager of market development department, deputy manager of the department of assets management and corporate development and research, deputy manager of the planning department, and manager of the operation and management department. She was appointed as the deputy chief economist and the manager of the operation and management department of the Company since January 2010. She was appointed as the chief economist of the Company since October 2015. Ms. Qi was a Supervisor of the Company from June 2009 to October 2015.
Li Jinhe	Mr. Li is now the deputy general manager and the chief engineer of the Company and also the chairman of Caring Company and a senior engineer. He holds a Master of Engineering degree. Mr. Li graduated from the department of environmental engineering of Hebei University of Science and Technology in 1993 majoring in environmental engineering. Mr. Li has served in the 9th design institute of North China Municipal Engineering Design & Research Institute Co., Ltd. since March 1999 and acted successively as the technician, leader of the 2nd Process Group, deputy chief engineer, and chief engineer as well as the deputy chief engineering design and research works for years and has extensive experience in such fields as water treatment facilities and designing, research and operation of process. Mr. Li Jinhe has been the chief engineer of the Company since 29 August 2017 and the deputy general manager of the Company since 1 January 2020.

Each Director or Supervisor has not entered into any service contract which is not determinable by the Company within one year without payment of compensation (other than statutory compensation).

(II) Equity incentives granted to Directors and senior management during the reporting period

Not applicable

Directors', Supervisors' and the Company's chief executives' interests and/or short positions in the shares, underlying shares and debentures of the Company or its associated corporations

As at 31 December 2019, the interests and/or short positions of the Directors, Supervisors and chief executives of the Company in the shares, underlying shares and debentures of the Company or its associated corporations (within the meaning of Part XV of the SFO), which would have to be notified to the Company and the Stock Exchange pursuant to Divisions 7 and 8 of Part XV of the SFO, including interests and short positions which were taken as or deemed to have pursuant to the SFO, or which were required, pursuant to section 352 of the SFO, to be entered in the register referred to therein, or otherwise, pursuant to the Model Code for Securities Transactions by Directors of Listed Issuers as set out in the Appendix 10 to the Listing Rules, to be notified to the Company and the Stock Exchange were as follows:

Name	Company/ name of associated corporations	Capacity	Number and class of securities (Note)	Approximate percentage in the total issued share capital of the Company/ associated corporations
Deputy general manager Zhang Jian	Company	Beneficial owner	822 domestic shares (non- restricted circulating shares) (L)	0.000058%

Note: The letter "L" represents the person's long positions in the shares, underlying shares and debentures of the Company or its associated corporations.

As at 31 December 2019, none of the Directors, Supervisors or chief executives of the Company or their spouses or children under 18 years of age were granted or had exercised any right to subscribe for any equity or debt securities of the Company or any of its associated corporations (within the meaning of Part XV of the SFO).

II. POSITIONS HELD BY THE EXISTING AND RESIGNED DIRECTORS, SUPERVISORS, AND SENIOR MANAGEMENT DURING THE REPORTING PERIOD

(I) Positions held at the shareholder's entity

Name	Name of shareholder's entities	Position held in shareholder's entities	Appointment date	Termination date
Yu Zhongpeng	TMICL	Secretary of the party general branch, chairman, and general manager	16 August 2016	-
Han Wei	TMICL	Director	25 September 2019	_
Li Zongqiang	TMICL	Head of the risk management department	18 January 2019	_

Description of positions held at shareholders' entities: nil

(II) Positions held at the other entities

For more details, please see the major work experiences of aforesaid directors, supervisors and senior management.

III. REMUNERATION OF DIRECTORS, SUPERVISORS, AND SENIOR MANAGEMENT

The procedures for determining the remuneration of the Directors, Supervisors, and senior management	The remuneration of the Directors and Supervisors will be determined in accordance with the remuneration standard for the Directors and Supervisors as approved at the general meetings of the Company. The remuneration of the senior management officers will be determined on the basis of the remuneration plan approved by the Board and the operation result of the Company, and an annual salary system and an year-end award system based on the completion of annual operating targets will be implemented. The Directors (other than the independent Directors) and Supervisors of the Company do not receive remuneration for acting as directors or supervisors.
The basis for determining the remuneration of the Directors, Supervisors, and senior management	The remuneration of the Company's senior management will be distributed in accordance with their achievements in production and operation tasks and their usual management activities. The performance pay will be distributed according to the achievement of annual operating targets and performance appraisal results.
Actual payment of the remuneration to the Directors, Supervisors, and senior management	The remuneration distributed by the Company to the Directors, Supervisors, and senior management is in line with the salaries and performance appraisal requirements of the Company and distributed according to the requirements.
Actual remuneration received by all Directors, Supervisors, and senior management as at the end of the reporting period (in total)	RMB11.9978 million

III. REMUNERATION OF DIRECTORS, SUPERVISORS, AND SENIOR MANAGEMENT (Continued)

During the financial year, the Company did not pay any housing allowance, other allowance, and benefits in kind and bonus to the Directors, Supervisors and senior management, nor any payment to them as an inducement to join the Company or as compensation for loss of office of Directors, Supervisors or senior management. None of the Directors, Supervisors and senior management of the Company waived or agreed to waive any emoluments. The Company has not provided any loans or guarantees to the Directors, Supervisors or senior management. Except for remuneration, the Directors, Supervisors and senior management of the Company or such entities connected thereto have not derived other material interests, whether directly or indirectly, from other transactions, arrangements or contracts. The Company, during the reporting period, did not enter into any administration or management contracts for all or material parts of its business.

IV. CHANGES IN DIRECTORS, SUPERVISORS, AND SENIOR MANAGEMENT OF THE COMPANY

Name	Position held	Changes	Reason for changes
Li Jinhe	Deputy general manager	Appointment	Work engagement

V. PUNISHMENTS IMPOSED BY SECURITIES REGULATORY AUTHORITIES IN THE LAST THREE YEARS

VI. EMPLOYEES OF THE COMPANY AND ITS MAJOR SUBSIDIARIES

(I) Employees

Number of on-duty employees of the Company Number of on-duty employees of major Subsidiaries Total number of on-duty employees	466 1,539 2,005
Number of retired employees to whom the Company and its major Subsidiaries are required to pay charges	89
Composition by profession	
Category of profession	Number
Production	1,019
Sales	78
Technical	453
Finance	105
Administration	167
Corporate management	183
Total	2,005
Education	
Category of education	Number (persons)
Doctor	5
Master	112
Undergraduate	1,027
Tertiary	537
Secondary	165
Below secondary	159
Total	2,005

(II) Remuneration policy

The Company has established a sound remuneration system, implementing the job-rank salary system and the performance-related salary system. The remuneration of the Company's employees under the annual salary system comprises the standard annual job-rank salary and the performance-related salary. The remuneration of the Company's employees under the monthly salary system comprises the job-rank salary, skill-based salary, and performance-related salary. The performance-related salary is provided and distributed based on the completion of the annual targets.

(III) Training programs

The Company implements an independent training policy under the control of training funds. Each of the Company's departments and units develops the training programs according to the needs of the employees and the enterprise, to ensure the training courses are target-oriented and ensure the employees to grow with the enterprise.

(IV) Subcontracting labor

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY

(i) Corporate Governance of the Company

During the reporting period, the Company strictly complied with the requirements under the PRC Company Law, Code on Corporate Governance for Listed Companies, the Articles of Association of the Company and the requirements of the relevant laws and regulations of the CSRC, to continuingly improve its corporate governance structure and regulate its daily operation.

According to the Articles of Association of the Company and the relevant regulations, the general meeting shall be the highest authority of the Company. The Company shall convene and hold general meetings in strict compliance with the Rules of Procedures for General Meetings in order to ensure shareholders can exercise their voting rights duly and successfully. Within the scope of authorization by the general meetings, the Board shall be responsible for the overall operation and management of the Company and convene the Board meetings in strict compliance with the Rules of Procedures for Board Meetings. All Directors shall duly discharge their duties in a diligent way, independently perform their duties and pay sufficient attention to the interests of all medium and small shareholders. Committees of the Board of the Company such as the Audit Committee, Remuneration and Assessment Committee, Nomination Committee and Strategy Committee shall perform their work independently according to their respective detailed working rules, and provide support for the scientific decisions of the Board, he responsible for the daily operation and management of the Company according to the Rules of Procedures for General Manager's Meeting. Within the scope of authorization by general meetings, the Supervisory Committee shall be responsible for supervision of the legality and compliance of the performance of duties by the Board and managers.

The Company is in compliance with the relevant requirements of regulatory authorities in respect of major governance aspects such as the controlling shareholder and the Company, the Directors and the Board, the Supervisors and the Supervisory Committee, performance appraisal and incentive control mechanism, stakeholders as well as information disclosure and transparency. There is no difference between the actual governance practices of the Company and the requirements of the Company Law and the relevant requirements of the CSRC.

In order to further improve the structure of the corporate governance of the Company and protect the interests of shareholders, the Company amended the "Articles of Association of Tianjin Capital Environmental Protection Group Company Limited" during the reporting period in accordance with "Code of Corporate Governance for Listed Companies" newly revised by CSRC and the actual situation of the Company.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report

1. About Corporate Governance Practices

The Company has continuously amended its relevant codes on corporate governance with strict implementation pursuant to the revised corporate governance rules of regulatory bodies. During the reporting period, the Company complied with the Corporate Governance Code.

2. About Securities Transactions by the Directors

According to the Company's Articles of Association and the "Management System for Inside Information"* (《內幕信息管理制度》), the Company has formulated the "Management System for the Shareholding of Directors, Supervisors and Senior Management"* (《董事、監事、高級管理人員持股管理制度》), which requires that the Directors, Supervisors, managers and other senior management shall during their terms of office make regular reports to the Company on the Company's shares they held, shall not transfer more than a total of 25% of the shares of the Company they held for each year during their terms of office, and shall not transfer the Company's shares they held within six months after their resignation, etc.

After making detailed enquiries by the Board, as at the end of the reporting period, save of Mr. Zhang Jian holding 822 domestic Shares of the Company, none of the Directors of the Company held any other share of the Company and they did not conduct any share transaction during the reporting period.

3. About the Board

According to the Articles of Association of the Company, the Board of the Company consists of nine Directors. During the reporting period, the seventh session of the Board of the Company expired on 17 December 2018 and the general meeting of the Company held on the same day elected the members of the eighth session of the Board of the Company, including Mr. Liu Yujun (Chairman of the Board), Ms. Wang Jing and Mr. Niu Bo as executive Directors; Mr. Yu Zhongpeng, Mr. Han Wei and Mr. Si Xiaolong as nonexecutive Directors; Mr. Di Xiaofeng, Mr. Wang Xiangfei and Mr. Guo Yongqing as independent nonexecutive Directors; Terms of the Directors of the eighth session of the Board were from 18 December 2018 to 17 December 2021.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

3. About the Board (Continued)

There was no relationship including financial, business, family or other material and relevant relationship between the members of the Board of the Company. All of the Board members possess immense qualifications and management experience. The qualifications and professional experiences of the independent Directors have fully complied with the requirements under the Listing Rules. The Board of the Company has accepted the declaration of independence for the year 2019 by each independent non-executive Director, and confirms that they comply with the relevant independence requirements as set out under Rule 3.13 of the Listing Rules.

The Company held 21 Board meetings and 3 general meetings during the reporting period. For details of the attendance of Directors, please refer to "Attendance of Directors at the Board meetings and general meetings" in this section.

There is a clear demarcation on the duties of the Board and the managerial level in the Articles of Association of the Company and the "Rules of Procedures for Board Meetings". The Rules of Procedures for Board Meetings and the Rules of Procedures for General Manager's Meeting have made specific requirements on the decision making procedure and basis of decisions for the Board and the managerial level, so as to ensure the decisions of the Directors, the Board, the senior management and the managerial level to be scientific and legal. Within the scope of authorization by general meetings, all matters that are required to be disclosed shall be submitted to the Board of the Company for its decision and disclosed according to the requirements under the share listing rules of the SSE and the Listing Rules, and matters which are not required to be disclosed are generally decided and implemented by the General Manager's meeting of the Company.

Trainings for Directors in 2019

With the continuous growth of the Company's business and the amendments of the Listing Rules from time to time, professional development on an on-going basis has become very important for the Directors. In order to ensure the Directors to constantly develop talents and knowledge necessary for their performance of duties, the Company has arranged some training for the Directors with proper training records kept at the Board office of the Company.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

4. About the Chairman and the Chief Executive Officer

In accordance with the Articles of Association of the Company, the main duties of the Chairman of the Board and the Chief Executive Officer (the Articles of Association refers the Chairman of the Board as "Chairman" and the Chief Executive Officer as "General Manager", therefore hereinafter referred to as "Chairman" and "General Manager" respectively) are clearly separated. The Chairman is responsible for holding and presiding over the Board meetings, and the effective operation of the Board, while the General Manager of the Company is responsible for various operation activities of the Company, and is accountable to the Board. The appointment of the Chairman should be approved by more than a half of all the Directors while the General Manager should be nominated by the Chairman with his appointment to be approved by the Board.

During the reporting period, Mr. Tang Fusheng was the General Manager of the Company.

5. About Non-executive Director

The tenures of Mr. Yu Zhongpeng, Mr. Han Wei and Mr. Si Xiaolong as non-executive Directors, and Mr. Di Xiaofeng, Mr. Wang Xiangfei and Mr. Guo Yongqing as independent non-executive Directors, of the eighth session of the Board of the Company, who were elected on 17 December 2018, were from 18 December 2018 to 17 December 2021.

6. About Committees under the Board

(1) The eighth Remuneration and Assessment Committee consists of three independent non-executive Directors (Mr. Di Xiaofeng, Mr. Wang Xiangfei and Mr. Guo Yongqing) of the Company, and the chairman is Mr. Di Xiaofeng. Its primary duties are to propose remuneration plan for the Directors and senior management of the Company to the Board and to assess and evaluate the performance of the Company, by adopting the second model under B.1.2(c) as set out in Appendix 14 to the Listing Rules. For its written working scope, please refer to the Implementation Rules for the Remuneration and Assessment Committee of the Company which is available on the website of the Stock Exchange.

During the reporting period, the Company held 3 meetings of the Remuneration and Assessment Committee which mainly discussed the performance of the Company and its evaluation for the year 2018 (including the performance of executive Directors and its evaluation, the advice on remuneration and evaluation of professional managers). The members of the Remuneration and Assessment Committee attended all the meetings held during the reporting period.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

6. About Committees under the Board (Continued)

(2) Members of the eighth Nomination Committee of the Company comprised two executive Directors (being Mr. Liu Yujun, the Chairman, and Ms. Wang Jing, the executive Director) and three independent non-executive Directors (Mr. Di Xiaofeng, Mr. Wang Xiangfei and Mr. Guo Yongqing) of the Company with Mr. Di Xiaofeng as its chairman. The primary duties of the Nomination Committee are to study and propose candidates, selection criteria and procedures of Directors and senior management of the Company. For its written working scope, please refer to the Implementation Rules for the Nomination Committee of the Company which is available on the website of the Stock Exchange.

In respect of the nomination procedures as well as the selection and recommendation of candidates for the Director, the Articles of Association of the Company provides that, the Board of the Company and shareholders representing, in aggregate, more than 10% of the total shares of the Company may nominate candidates for the Director of the Company. The Nomination Committee under the Board of the Company shall make suggestions to the Board regarding the nomination, selection and recommendation of candidates of Directors pursuant to the Implementation Rules for the Nomination Committee of the Company. The appointment of executive Directors is determined by the general meetings. The nomination and appointment of the executive Directors and non-executive Directors have been carried out in accordance with the above-mentioned procedures of nomination, selection and recommendation. In addition, the qualifications for acting as independent non-executive Directors are subject to review and approval by SSE.

The Board of the Company has adopted a board diversity policy which sets out the approach to achieve diversity on the Board. Accordingly, selection of candidates to the Board is based on a range of measurable objectives, including but not limited to gender, age, cultural and educational background, professional experience and qualifications, skills, knowledge and length of service, having regard to the Company's own business model and specific needs from time to time. Nomination Committee considers that the current members of directors are in conformity with the Implementation Rules for the Nomination Committee of the Board of the Company, board diversity policy as well as the present situation and future development plan of the Company in terms of gender, age, cultural and educational background, professional experience, skills.

During the reporting period, the Company held 1 meeting of the Nomination Committee which discussed matters in relation to the building of professional managers team.

The members of the Nomination Committee attended all the meetings held during the reporting period.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

6. About Committees under the Board (Continued)

(3) The eighth Audit Committee of the Company comprised three independent non-executive Directors (Mr. Di Xiaofeng, Mr. Wang Xiangfei and Mr. Guo Yongqing) of the Company with Mr. Guo Yongqing as the chairman. The primary duties of the Audit Committee include reviewing of yearly, half-yearly and quarterly financial statements, reviewing and monitoring the financial management, internal control, risk management and corporate governance of the Company and making proposal for the appointment of external auditors. For details of its written working scope, please see the Implementation Rules for the Audit Committee of the Company which is available on the website of the Stock Exchange.

With respect to reviewing of the Company's periodic reports, during the preparation of annual reports, half-yearly reports and quarterly reports, the Audit Committee hears the audit opinions of the external auditor and internal auditor, and reviews the results report at a separate meeting; With the assistance of the internal audit department of the Company, the Audit Committee reviews the effectiveness of the Company's internal control system at the beginning of each year and reviews the annual internal control evaluation report of the Company and discloses it together with the annual results report.

With respect to corporate governance, the Company has established a relatively sound corporate governance structure according to the relevant laws and regulations and the actual situation of the Company. For details of the corporate governance, please refer to "(i) Corporate Governance" above. The Audit Committee reviews and assesses the internal control of the Company annually, including the evaluation of the corporate governance of the Company.

During the reporting period, the Company held 7 meetings of the Audit Committee which mainly discussed financial information in quarterly reports, half-yearly reports and annual reports, and reviewed the internal control of the Company, and made proposal for the appointment of external auditors, etc. The members of the Audit Committee have attended all the meetings during the reporting period.

(4) The eighth Strategy Committee of the Board of the Company consists of two executive Directors (being Mr. Liu Yujun, the Chairman, and Ms. Wang Jing, the executive Director), two non-executive Directors (Mr. Yu Zhongpeng and Mr. Han Wei) and one independent non-executive Director (Mr. Guo Yongqing) of the Company with Mr. Liu Yujun, the Chairman, as its chairman. Its primary duties are to study and propose the medium and long-term development strategies and major investment decisions of the Company.

No Strategy Committee meeting was held during the reporting period.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

7. About the Remuneration of Auditors

During the reporting period, the Company re-elected PricewaterhouseCoopers Zhong Tian LLP and PricewaterhouseCoopers as the Company's external auditors which were approved at the general meeting. The appointment agreement sets out the details of the audit content and remuneration of the auditors. For the remuneration of auditors, please see "Appointment and Removal of Accounting Firm" in this report.

During the reporting period, the auditors provided internal control audit services to the Company and issued an audit opinion on the internal control of the Company. The Company signed an appointment agreement with the auditors with respect to such non-auditing services, which sets out the scope of the audit contents and remuneration of the auditors.

8. About Company Secretary

On 18 December 2018, the eighth session of the Board of the Company appointed Ms. Cho Yee Yung, Mona of Li & Partners as company secretary and the authorised representative of the Company under Rule 3.05 of the Listing Rules. Ms. Cho Yee Yung, Mona attended not less than 15 hours of relevant professional trainings during financial year 2019 in accordance with Rule 3.29 of the Listing Rules. Ms. Cho Yee Yung, Mona generally contacts Mr. Niu Bo, the secretary to the Board of the Company.

9. About Shareholders' Rights

In accordance with the relevant requirements of the Articles of Association and the Rules of Procedures for General Meetings of the Company, shareholders who severally or jointly hold 10% or more shares in the Company are entitled to request the Board or the Supervisory Committee to convene or convene by themselves an extraordinary general meeting. The conditions and procedures for the application for convening or convening by themselves such a general meeting shall be explicitly stated. For details of the regulations, please refer to the Articles of Association of the Company and the Rules of Procedures for General Meetings.

10. About Investor Relationship

During the reporting period, in order to further enhance corporate governance and protect the interests of investors, the Company proposed the amendment to the Articles of Association of Tianjin Capital Environmental Protection Group Company Limited.

I. DESCRIPTION OF CORPORATE GOVERNANCE OF THE COMPANY (Continued)

(ii) Corporate Governance Report (Continued)

11. Risk Management and Internal Control

During the reporting period, the Company has established an appropriate internal control system. The internal control system is established and gradually improved with the orientation to possible risks exposed by the Company in various key business and management activities. The investment and management department of the Company is responsible for the building of the risk management and internal control system. The legal and audit department of the Company is responsible for reviewing the effectiveness of risk management and internal control.

The Audit Committee of the Board of the Company shall hear the report from the legal and audit department on annual conclusion and plans of the internal audit in due course every year and review the internal control and risk management of the Company.

Each year, the Board of the Company shall review the internal control monitoring system, and issue the Annual Self-Evaluation Report on Internal Control to investors.

12. About Other Specific Disclosures

The Directors are responsible for supervising the compilation of the accounts for each financial period, in order to ensure that those accounts reflect genuinely and fairly the business and results of the Company for the period. In compiling the accounts for the year ended 31 December 2019, the Directors have chosen and thoroughly applied the appropriate accounting policies with due and reasonable judgment and estimates having been made, and prepared the accounts on a going concern basis.

The Directors consider that there was no occurrence of material uncertainties or situations which may affect the ability of the Company as a going concern during the reporting period.

The Board of the Company has been much concerned about the internal control of the Company. At the twenty-sixth meeting of the eighth Board held on 26 March 2020, the resolution in respect of the internal control of the Company in 2019 was solely considered and a self-evaluation report on internal control was issued. PricewaterhouseCoopers Zhong Tian LLP has audited the internal control of the Company during 2019, and has issued a standard unqualified audit opinion.

II. SHAREHOLDERS' GENERAL MEETINGS

Session of meeting	Date of meeting	Inquiry index for the designated website for publishing the voting results	Date of disclosure of the resolutions
2018 annual general meeting	14 May 2019	Website of the SSE at www.sse.com.cn; Website of the Stock Exchange at www.hkex.com.hk; Website of Merrill IFN at http://www.ifn.com.hk/ir/tjcep/	15 May 2019
2019 first extraordinary general meeting	10 September 2019	Website of the SSE at www.sse.com.cn; Website of the Stock Exchange at www.hkex.com.hk; Website of Merrill IFN at http://www.ifn.com.hk/ir/tjcep/	11 September 2019
2019 second extraordinary general meeting	16 December 2019	Website of the SSE at www.sse.com.cn; Website of the Stock Exchange at www.hkex.com.hk; Website of Merrill IFN at http://www.ifn.com.hk/ir/tjcep/	17 December 2019

III. PERFORMANCE OF DUTIES BY DIRECTORS

(I) Attendance of Directors at the Board meetings and general meetings

	Attendance at the Board meetings					Attendance at the general meetings		
Director name	Independent non-executive Director	Number of Board meetings required to attend during the year	Number of attendance in person	Number of attendance through communication	Number of attendance by proxy	Number of absences	Not attend in person for 2 consecutive meetings	Number of attendance at the general meetings
Liu Yujun	No	21	21	17	0	0	No	3
Wang Jing	No	21	21	17	0	0	No	3
Niu Bo	No	21	21	17	0	0	No	3
Yu Zhongpeng	No	21	19	19	2	0	No	3
Han Wei	No	21	21	19	0	0	No	3
Si Xiaolong	No	21	21	20	0	0	No	3
Wang Xiangfei	Yes	21	21	21	0	0	No	3
Guo Yongqing	Yes	21	21	20	0	0	No	3
Di Xiaofeng	Yes	21	21	20	0	0	No	3
Number of Board meetings convened during the year Among all: number of meetings held on site Number of meetings held through communication Number of meeting held on site combined with communication					21 0 17 4			

(II) Disagreement on the relevant matters of the Company by the independent non-executive Directors
8. Corporate Governance

IV. IMPORTANT OPINIONS AND SUGGESTIONS RAISED BY SPECIAL COMMITTEES UNDER THE BOARD WHEN PERFORMING THEIR DUTIES DURING THE REPORTING PERIOD AND DISCLOSURE ON EVENTS INVOLVING OBJECTIONS AND DISSENTS

- (1) During the reporting period, the Company held 7 meetings of the Audit Committee, at which 4 periodic reports of the Company and reports on appointment of accounting firms and internal control evaluation were reviewed, and no disagreement was raised.
- (2) During the reporting period, the Company held 1 meeting of the Nomination Committee, at which the building of a team of professional managers by the Company was considered and proposals and suggestions for candidates for the professional managers were made. Both the consideration results and the proposals and suggestions were approved by the Board.
- (3) During the reporting period, the Company held 1 meeting of the Remuneration and Assessment Committee, at which the remuneration and appraisal system for the team of professional managers proposed to be appointed was evaluated and corresponding proposals and suggestions were made. Both the evaluation results and the proposals and suggestions were approved by the Board.
- (4) During the reporting period, the Company held no meetings of the Strategy Committee.

V. DESCRIPTION OF RISKS IN THE COMPANY FOUND BY THE SUPERVISORY COMMITTEE

Not applicable.

VI. SITUATION OF NO GUARANTEE OF INDEPENDENCE AND INCAPABILITY ON SELF-OPERATION BETWEEN THE COMPANY AND ITS CONTROLLING SHAREHOLDER WITH RESPECT TO THE MATTERS INCLUDING BUSINESS, STAFFS, ASSETS, ORGANIZATION, AND FINANCE

Not applicable.

Measures, work progress, and subsequent work plans of the Company concerning non-competition issues

Not applicable.

VII. ESTABLISHMENT AND IMPLEMENTATION OF THE ASSESSMENT MECHANISM AND INCENTIVE SYSTEM FOR SENIOR MANAGEMENT DURING THE REPORTING PERIOD

During the reporting period, the Company operated an assessment mechanism combining objective assessment and post assessment for the senior management. The performance bonus in the annual salary of the senior management is linked to the assessment results of the completion of individual targets. The provision of the year-end bonus is made on the completion of the targets of the Company or the annual profit recorded by respective departments, while the distribution of the year-end bonus is tied to the assessment results of individual target assessment and post assessment.

During the accounting period, the contributions made to the pension schemes of the five highest paid individuals by the Company are as follows:

Unit: RMB (Yuan)

Name	Contribution to pension scheme
Li Yang Liu Yujun Tang Fusheng Zhao Yi Wang Jing	35,075.16 35,075.16 35,075.16 35,075.16 35,075.16 35,075.16
8,8	

Note: The basic remuneration for each of the above five persons is less than HK\$1 million.

VIII. DISCLOSURE OF THE SELF-EVALUATION REPORT ON INTERNAL CONTROL

For details, please refer to "2019 Self-Evaluation Report on Internal Control" disclosed at the website of the SSE on 27 March 2020.

Descriptions of Material Defects Relating Internal Control during the Reporting Period

Not applicable

IX. EXPLANATION IN RESPECT OF THE INTERNAL CONTROL AUDIT REPORT

PricewaterhouseCoopers Zhong Tian LLP engaged by the Company has audited the effectiveness of internal control relating to the financial reporting of the Company and has issued an internal control audit report with standard unqualified opinions.

For details of the internal control audit report, please refer to the "2019 Internal Control Audit Report" disclosed on the website of the SSE on 27 March 2020.

9. Relevant Details of Corporate Bonds

I. BASIC DETAILS OF CORPORATE BONDS

Unit: Yuan Currency: RMB

Name of Bond	Abbreviation	Code of Bond	Issue Date	Maturity Date	Balance of Bond	Coupon (%)	Debt Service	Trading Place
Public Issue of Corporate Bonds of Tianjin Capital Environmental Protection Group Company Limited in 2016 (Phase I)	16津創01	136801.SH	25 October 2016	25 October 2021	700,000,000	3.13	Interest shall be paid annually, while the principal shall be fully repaid upon maturity. Principal will be repaid upon maturity together with interest payable for the last period.	SSE
Public Issue of Corporate Bonds of Tianjin Capital Environmental Protection Group Company Limited in 2018 (Phase I)	18津創01	143609.SH	26 April 2018	26 April 2023	1,100,000,000	5.17	Interest shall be paid annually, while the principal shall be fully repaid upon maturity. Principal will be repaid upon maturity together with interest payable for the last period.	SSE

Interests payment and bonds repayment of the Company

During the reporting period, the Company has completed interest payment of "16津創01" and "18津創01" for the year 2019 as scheduled.

Explanation on other circumstances of corporate bond

"16津創01" has no issuer or investor option terms nor special terms such as exchangeable terms. Issuing targets of "16津 創01" are eligible investors who satisfy requirements of laws and regulations.

"18津創01" contains terms which offer the issuer's option to adjust the coupon rate and investors' put option but does not contain other special terms such as exchangeable terms. During the reporting period, both the issuer's option to adjust the coupon rate and investors' put option were not triggered for "18津創01". Issuing targets of "18津創01" are eligible investors who satisfy requirements of laws and regulations.

As at the end of the reporting period, for the information of the environmental penalty received by the Company, please refer to the above "Environment Information" in Section 5.

II. CONTACT PERSON AND MEANS OF COMMUNICATION OF CORPORATE BOND TRUSTEE AND MEANS OF COMMUNICATION OF CREDIT RATING AGENCY

Bond trustee

Name Office address

Contact person Contact number

Credit rating agency

Name Office address Ping An Securities Co., Ltd. 16/F, North Tower, Financial Street Centre, 9 Financial Street, Xicheng Beijing Li Chuan (李川), Jia Xuan (賈軒) 010-56800258

United Credit Rating Co., Ltd. 12th Floor, PICC Office Tower, No.2 Jianguomen Outer Street, Chaoyang District, Beijing

During the reporting period, the Company did not change the bond trustee and credit rating agency engaged.

III. USE OF PROCEEDS FROM BOND OFFERING

Scale of issue of "16津創01" reached RMB700 million, the proceed reached RMB697.2 million (net of underwriting fees). As of the end of the reporting period, the proceed was fully utilized as intended as mentioned in the prospectus and the remaining amount was nil.

Scale of issue of "18津創01" reached RMB1,100 million, the proceed reached RMB1,097.36 million (net of underwriting fees). As of the end of reporting period, RMB1,097,074,280.1 of the proceed was utilized as intended as mentioned in the prospectus and the remaining amount was RMB285,719.9.

During the reporting period, the proceed account operates well.

The Company strictly follows its capital management system and relevant laws and regulations and executes relevant procedures of use of proceed, and the use of proceeds is in line with intended use as mentioned in the prospectus, plan of use, and other arrangements.

IV. CORPORATE BOND RATING

On 17 May 2019, United Credit Rating Co., Ltd. completed ongoing credit rating for the Company, "16津創01" and "18津創01"; long term credit of the Company maintained at "AA+", the credit rating outlook maintained at "stable", and the credit rating of the bond loans, "16津創01" and "18津創01", maintained at "AA+". Investors should be aware that United Credit Rating Co., Ltd. will perform updated ongoing credit rating for the Company for corporate bond within two months upon disclosure of the annual report and relevant disclosure will be made in the Shanghai Stock Exchange website (www.sse.com.cn).

V. CORPORATE BOND CREDIT ENHANCEMENT MECHANISM, DEBT REPAYMENT SCHEDULE, AND OTHER RELEVANT INFORMATION DURING THE REPORTING PERIOD

During the reporting period, both the repayment schedule and repayment protection mechanism of "16津創01" and "18津創01" were well executed and were in line with the arrangement and underlying undertakings as mentioned in the prospectus. There were no changes in that regard. The Company has set up a specialized repayment account for the said corporate bond and has completed withdrawal for such specialized repayment account in accordance with the undertakings as stated in the prospectus.

VI. CONVENING OF MEETINGS OF BONDHOLDERS

Not applicable

VII. PERFORMANCE OF CORPORATE BOND TRUSTEE

During the terms of the corporate bond, the corporate bond trustee strictly complies with the arrangement stated in the "Corporate Bond Trustee Agreement" and perform ongoing tracking on credit condition, management on use of proceed fund, and corporate bond interest payment of the Company. It has also ensured that the Company performs obligations as stipulated in the corporate bond prospectus. The corporate bond trustee actively performs its responsibilities and protects the legal rights of bondholders.

Investors should be aware that corporate bond trustee shall issue its corporate bond trustee management report (2019) before 30 June 2020 and is expected to disclose on the Shanghai Stock Exchange website (www.sse.com.cn).

VIII. ACCOUNTING DATA AND FINANCIAL INDICATORS OF THE COMPANY IN THE PREVIOUS TWO YEARS AS OF THE END OF THE REPORTING PERIOD

Unit: 0'000 Currency: RMB

Major Indicators	2019	2018	Increase/ Decrease for the period as compared to the same period last year (%)	Reasons
Profit before EBITDA	135,301.40	128,487.00	5.30%	Increases in interest expenses and amortisation
				of intangible assets
Current ratio	1.35	1.56	-13.46%	Significant year-on-year increase in the current portion of non-current liabilities and other current liabilities
Quick ratio	1.35	1.56	-13.46%	Significant year-on-year increase in the current portion of non-current liabilities and other current liabilities
Assets liability ratio (%)	60.30	57.83	4.27%	Increase in total liabilities
Debt to EBITDA ratio	0.22	0.28	-21.43%	Increase in total debt
Interest protection multiples	3.94	4.50	-12.44%	Increase in interest expenses in the current year
Cash interest protection multiples	5.02	5.94	-15.49%	Increase in interest expenses in the current year
EBITDA interest protection multiples	6.32	6.46	-2.17%	Increase in interest expenses in the current year
Debt service ratio (%)	100	100	0.00%	
Interest coverage rate (%)	100	100	0.00%	

IX. REDEMPTION OF OTHER BONDS AND DEBT FINANCING INSTRUMENTS OF THE COMPANY

During the reporting period, redemption of other bonds and debt financing instruments issued by the Company has been fully made as scheduled. There is no delay in interest payment and principal and inability to repay interest payment and principal.

X. BANK CREDIT OF THE COMPANY DURING THE REPORTING PERIOD

As of the end of the reporting period, the Company has obtained, in aggregate, a credit facility of approximately RMB9.220 billion from various banks, of which approximately RMB2.822 billion was utilized with a remaining balance of approximately RMB6.398 billion. During the reporting period, the Company has repaid each bank loans as scheduled and there is no renewal or concession for such loans.

XI. PERFORMANCE OF RELEVANT AGREEMENT OR COMMITMENT OF THE CORPORATE BOND PROSPECTUS BY THE COMPANY DURING THE REPORTING PERIOD

During the reporting period, the Company has strictly performed the relevant agreements or commitments as set out in the corporate bond prospectus. This is no major impact to the bondholders.

XII. MAJOR ISSUES OF THE COMPANY OCCURRED DURING THE REPORTING PERIOD AND ITS EFFECT ON THE OPERATION AND SOLVENCY OF THE COMPANY

The Company's cumulative new borrowings (including but not limited to funds raised by the Company and its subsidiaries through bank loans, entrusted loans, finance lease borrowings, microfinance loans and the issuance of corporate bonds, enterprise bonds, financial bonds, and non-financial corporate debt financing instruments) as of the end of December 2019 exceeded 20% of the net assets as of the end of previous year, and the Announcement on the Cumulative New Borrowings for the Current Year Exceeding Twenty Percent of the Net Assets as of the End of Previous Year of Tianjin Capital Environmental Protection Group Company Limited (《天津創業環保集團股份有限公司當 年累計新增借款超過上年末淨資產的百分之二十公告》) was published on the Shanghai Stock Exchange website (www.sse.com.cn). As of the end of December 2019, the Company's cumulative new borrowings for the current year amounted to RMB1,552.2306 million which represented 23.47% of the net assets as of the end of 2018. The said new borrowings satisfy the requirements of the relevant laws and regulations and they were made within the scope of the Company's normal operation activities. The financial position of the Company is stable. At present, principal and interests of all our debts are repaid on time. The above new borrowings will not adversely affect the Company's operating condition and solvency.

10. Financial Report

For details, please refer to the accounting statements and audited reports for 2019 of the Company.

11. Report of the Auditors

Auditor's Report

PwC ZT Shen Zi (2020) No. 10031 (Page 1 of 6)

To the Shareholders of Tianjin Capital Environmental Protection Group Company Limited,

OPINION

What we have audited

We have audited the accompanying financial statements of Tianjin Capital Environmental Protection Group Company Limited (hereinafter the "Capital Environmental Protection"), which comprise:

- the consolidated and company balance sheets as at 31 December 2019;
- the consolidated and company income statements for the year then ended;
- the consolidated and company cash flow statements for the year then ended;
- the consolidated and company statements of changes in shareholders' equity for the year then ended; and
- notes to the financial statements.

Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the consolidated and company's financial position of Capital Environmental Protection as at 31 December 2019, and their financial performance and cash flows for the year then ended in accordance with the requirements of Accounting Standards for Business Enterprises ("CASs").

11. Report of the Auditors

PwC ZT Shen Zi (2020) No. 10031 (Page 2 of 6)

BASIS FOR OPINION

We conducted our audit in accordance with China Standards on Auditing ("CSAs"). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

We are independent of Capital Environmental Protection in accordance with the Code of Ethics for Professional Accountants of the Chinese Institute of Certified Public Accountants ("CICPA Code"), and we have fulfilled our other ethical responsibilities in accordance with the CICPA Code.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter identified in our audit is summarised as follows :

Key Audit Matter

Measurement of expected credit losses for trade receivables

Refer to Notes 4 (3) to the consolidated financial statements

As at 31 December 2019, the Group's gross trade receivables amounted to RMB2,573,720 thousand and a loss allowance of RMB80,956 thousand was recognised on these trade receivables. The balance of loss allowance for trade receivables represent the management's best estimates on the expected credit losses ("ECL") for these trade receivables as of the balance sheet date.

Management has assessed whether the credit risk of trade receivables had been significantly increased after initial recognition, and measured the ECL through applying a lifetime expected loss allowance for all trade receivables. In making such assessment, management has considered the credit default history in prior years and exercised judgement in developing its expectation on the credibility of debtors and economic indicators for forward-looking measurement.

How our audit addressed the Key Audit Matter

We evaluated and validated the Group's control procedures over the measurement of ECL.

We evaluated the modelling methodologies for ECL measurement, and assessed the reasonableness of the portfolio segmentation, key parameters estimation and significant judgements and assumptions as adopted by management in the assessment of ECL.

We assessed the appropriateness of management's identification of any trade receivables with significant increase in credit risk or trade receivables being defaulted or impaired by examining the financial and non-financial information of the major debtors. We checked the accuracy of the aging profile of trade receivables on a sample basis. Regarding the information of the major debtors as obtained, we have examined the underlying relevant supporting documents such as historical payment records, subsequent settlements, settlement plan and other correspondence documents.

For forward-looking measurement, we reviewed management's model analysis of their selection of economic indicators, economic scenarios and weightings employed; assessed the reasonableness of the prediction of economic indicators and performed sensitivity analysis of economic indicators, economic scenarios and weightings.

PwC ZT Shen Zi (2020) No. 10031 (Page 3 of 6)

KEY AUDIT MATTERS (Continued)

Key Audit Matter (Continued)

Measurement of expected credit losses for trade receivables (Continued)

The measurement of ECL involves significant management judgments and assumptions, mainly including the following:

- Segmentation of debtors sharing similar credit risk characteristics and determination of relevant key measurement parameters;
- (2) Criteria for determining whether or not there was a significant increase in credit risk, or a default or impairment loss was incurred;
- (3) Selection of economic indicators for forward-looking measurement, and application of economic scenarios and weightings.

We focused on this area due to the significance of the trade receivables balance and significant management judgements and assumptions were involved in the assessment of ECL.

How our audit addressed the Key Audit Matter (Continued) We examined major data inputs to the ECL models on selected

samples, including historical data and data at the measurement date, to assess their accuracy and completeness.

We considered that management's judgements and estimates on the ECL of trade receivables are supportable by the evidence as obtained from our procedures performed.

OTHER INFORMATION

Management of Capital Environmental Protection is responsible for the other information. The other information comprises all of the information included in 2019 annual report of Capital Environmental Protection other than the financial statements and our auditor's report thereon.

Our opinion on the financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

11. Report of the Auditors

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RESPONSIBILITIES OF MANAGEMENT AND THOSE CHARGED WITH GOVERNANCE FOR THE FINANCIAL STATEMENTS

Management of Capital Environmental Protection is responsible for the preparation and fair presentation of these financial statements in accordance with the CASs, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing these financial statements, management is responsible for assessing the ability of Capital Environmental Protection to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intend to liquidate Capital Environmental Protection or to cease operations, or have no realistic alternative but to do so.

Those charged with governance are responsible for overseeing Capital Environmental Protection's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether these financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with CSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with CSAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances.

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AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS (Continued)

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of Capital Environmental Protection to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in these financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause Capital Environmental Protection to cease to continue as a going concern.
- Evaluate the overall presentation (including the disclosures), structure and content of the financial statements and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within Capital Environmental Protection to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

PwC ZT Shen Zi (2020) No. 10031 (Page 6 of 6)

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE FINANCIAL STATEMENTS (Continued)

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

PricewaterhouseCoopers Zhong Tian LLP

Signing CPA Li Jun

Shanghai, the People's Republic of China

(Engagement Partner)

26 March 2020

Signing CPA Song Yijing

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated and Company Balance Sheet

As at 31 December 2019

(All amounts in RMB thousand unless otherwise stated)

4.005770	N	31 December 2019	31 December 2018	31 December 2019	31 December 2018
ASSETS	Note	Consolidated	Consolidated	Company	Company
Current assets					
Cash at bank and on hand	4(1)	2,079,613	1,826,201	741,257	595,990
Notes receivable	4(2)	16,131	10,295	_	_
Trade receivables	4(3)/14(1)	2,492,764	2,081,465	1,958,081	1,687,179
Advances to suppliers	4(4)	38,583	23,531	1,916	822
Other receivables	4(5)/14(2)	65,156	36,162	86,125	134,560
Inventories	4(6)	14,805	13,991	4,811	3,992
Current portion of non-current assets	4(8)	17,224	22,789	17,224	22,789
Other current assets	4(7)	72,504	156,688	478,566	824,650
Dividends receivable		_	_	1,820	_
Total current assets		4,796,780	4,171,122	3,289,800	3,269,982
Non-current assets					
Long-term receivables	4(8)	236,450	253,686	236,450	253,686
Long-term equity investments	4(9)/14(3)	195,000	195,000	4,067,052	3,520,705
Other equity instruments investment	4(10)	2,000	2,000	2,000	2,000
Investment properties	4(11)	-	84,052	-	63,289
Fixed assets	4(12)	641,793	346,641	160,912	107,316
Construction in progress	4(12)	159,214	150,939	699	-
Intangible assets	4(13)	11,759,442	10,374,827	4,021,934	4,092,295
Defered income tax assets	4(20)	4,209	-	-	-
Other non-current assets	4(7)	195,919	109,181	115,332	190,519
Total non-current assets		13,194,027	11,516,326	8,604,379	8,229,810
TOTAL ASSETS		17,990,807	15,687,448	11,894,179	11,499,792

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated and Company Balance Sheet

As at 31 December 2019

(All amounts in	RMB	thousand	unless	otherwise s	tated)
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LIABILITIES AND OWNERS' EQUITY	Note	31 December 2019 Consolidated	31 December 2018 Consolidated	31 December 2019	31 December 2018
OWNERS EQUIT	INOLE	Consolidated	Consolidated	Company	Company
Current liabilities					
Short-term borrowings	4(17)	200,000	200,000	200,000	200,000
Trade payables	4(15)	231,293	176,398	65,904	46,500
Contract liabilities	4(15)	558,472	469,185	4,950	4,541
Taxes payable	4(15)	86,188	68,893	31,101	250
Other payables	4(15)	1,534,014	1,458,045	417,707	961,291
Accrued payroll	4(16)	66,100	53,942	30,463	24,868
Current portion of non-current liabilities	4(17)	852,552	243,369	582,872	81,417
Other current liabilities	4(17)	20,250			
Total current liabilities		3,548,869	2,669,832	1,332,997	1,318,867
Non-current liabilities					
Long-term borrowings	4(17)	3,006,756	2,051,953	1,135,632	1,318,713
Debentures payable	4(17)	1,797,389	1,796,363	1,797,389	1,796,363
Long-term payables	4(17)	262,652	266,367	262,652	266,367
Provisions	4(18)	11,665	10,069	11,665	10,069
Deferred income	4(19)	2,059,702	2,101,085	1,593,830	1,662,338
Deferred tax liabilities	4(20)	125,587	138,812	60,642	67,841
Other non-current liabilities	4(17)	36,000	38,000	670,000	290,000
Total non-current liabilities		7,299,751	6,402,649	5,531,810	5,411,691
Total liabilities		10,848,620	9,072,481	6,864,807	6,730,558
Shareholder's equity					
Share capital	4(21)	1,427,228	1,427,228	1,427,228	1,427,228
Capital surplus	4(22)(a)	431,024	431,024	380,788	380,788
Surplus reserve	4(22)(b)	558,250	517,107	558,250	517,107
Undistributed profits	4(22)(c)	3,757,523	3,442,844	2,663,106	2,444,111
Total equity attributable to					
equity owners of the parent		6,174,025	5,818,203	5,029,372	4,769,234
Minority interests		968,162	796,764		_
Total owners' equity		7,142,187	6,614,967	5,029,372	4,769,234
TOTAL LIABILITIES AND					
SHAREHOLDER'S EQUITY		17,990,807	15,687,448	11,894,179	11,499,792

The accompanying notes form an integral part of these financial statements.

Liu Yujun Company representative Peng Yilin Person in charge of accounting function

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated and Company Income Statements

For the year ended 31 December 2019

(All amounts in RMB thousand unless otherwise stated)

T	N	2019	2018	2019	2018
Item	Note	Consolidated	Consolidated	Company	Company
1. Revenue	4(23)/14(4)	2,851,453	2,447,515	1,315,292	1,024,217
Less: Cost of sales	4(23)/14(4)	(1,939,804)	(1,558,556)	(853,193)	(596,526)
Taxes and surcharges	4(24)	(45,716)	(49,688)	(15,977)	(18,225)
Selling and distribution expenses	4(25)	(7,075)	(5,417)	(1),)//)	(10,22))
General and administrative	1(2j)	(7,07)	(),117)		
expenses	4(25)	(168,661)	(129,096)	(93,500)	(72,622)
Research and development	1(2))	(100,001)	(12),0)0)	()),)00)	(72,022)
expenses	4(26)	(17,925)	(10,439)	(5,911)	_
Financial expenses-net	4(27)	(199,396)	(161,986)	(181,342)	(161,371)
Including: interest expense	1(27)	(213,982)	(198,774)	(184,965)	(158,872)
interest income		23,951	53,779	12,589	14,055
Add: Other income	4(29)	166,989	172,823	110,181	96,256
Investment gains	4(30)/14(5)	-	200	219,397	174,809
Including: Share of profit of	1(50)/11(5)		200	=17,577	1, 1,009
associates		_	_	_	_
Assets impairment losses	4(31)	(26,808)	_	(7,973)	_
Credit impairment losses	4(32)	(31,383)	(12,973)	(35,968)	(1,200)
Gains/(Losses) on disposals of	1(52)	(51,505)	(12,) / 3)	(5),500)	(1,200)
assets	4(33)	49,997	(373)	40	(373)
	-(00)		(070)		(0,0)
2. Operating profit		631,671	692,010	451,046	444,965
Add: Non-operating income	4(34)	2,469	6,884	132	1,736
Less: Non-operating expenses	4(35)	(4,591)	(4,050)	(2,476)	(1,824)
Less. Hon operating expenses	1(55)		(1,0)0)	(2,1/0)	(1,021)
3. Total profit		629,549	694.844	448,702	444,877
Less: Income tax expenses	4(36)	(100,587)	(168,064)	(37,279)	(72,868)
Less. meome tax expenses	1(50)	(100,907)	(100,001)	(57,277)	(72,000)
4 Nut much		528.0(2	526 700	411 402	272.000
4. Net profit Classified by continuity of operations		528,962	526,780	411,423	372,009
Net profit from continuing operations		528,962	526,780	411,423	372,009
Net profit from discontinued operations)28,902)20,780	411,423	3/2,009
Net profit from discontinued operations		-	—	-	—
Classified by ownership of the equity					
Minority interests		21,855	25,612	_	_
Attributable to equity owners		21,099	29,012		
of the Company		507,107	501,168	411,423	372,009
or the company					372,007
5. Other comprehensive income after					
deduction of impact of income tax		_	_	_	_
deduction of impact of meonic tax					
		520.0(2	52(700	(11 (22	272.000
6. Total comprehensive income		528,962	526,780	411,423	372,009
Attributable to equity owners					
of the Company		507,107	501,168	411,423	372,009
Attributable to minority shareholders		21,855	25,612		5/2,007
Autoutable to minority shareholders			29,012		
Fornings per share (:= DMR Vyer)					
Earnings per share (in RMB Yuan) Basic	4(37)	0.36	0.35		
Diluted	4(37)	0.36	0.35	_	—
Diuttu	т(J/)	0.00	0.57		

The accompanying notes form an integral part of these financial statements.

Liu YujunPeng YilinLiu TaoCompany representativePerson in charge of accounting functionPerson in charge of accounting department

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated and Company Cash Flow Statements

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

			× ×		,
Item	Note	2019 Consolidated	2018 Consolidated	2019 Company	2018 Company
Item	INOLE	Consolidated	Consolidated	Company	Company
1. Cash flows from operating activities					
Cash received from sales of goods or					
rendering of services		2,876,833	2,628,476	1,226,904	1,199,555
Refund of taxes and surcharges		37,583	98,829	14,519	42,751
Cash received relating to other operating	((20)(1)	02 500	100 201	10.027	00 (0)
activities	4(38)(d)	93,598	180,281	10,837	88,484
Sub-total of cash inflows		3,008,014	2,907,586	1,252,260	1,330,790
Sub-total of cash millows			2,707,700		1,550,750
Cash paid for goods and services		(1,354,251)	(1,166,271)	(688,794)	(503,401)
Cash paid to and on behalf of employees		(337,860)	(291,716)	(135,146)	(126,426)
Payments of taxes and surcharges		(364,715)	(646,414)	(37,081)	(200,671)
Cash paid relating to other operating activities	4(38)(e)	(66,255)	(68,934)	(35,841)	(53,448)
Sub-total of cash outflows		(2,123,081)	(2,173,335)	(896,862)	(883,946)
	4(38)(a)	004 022	726 251	255 200	446 044
Net cash flows from operating activities	4(38)(a)	884,933	734,251	355,398	446,844
2. Cash flows from investing activities					
Cash received from disposal of investments		_	_	_	99,330
Cash received from returns on investments		_	200	217,577	171,787
Net cash received from disposal of fixed assets	4(38)(f)	55,136	743	40	1,096
Cash received from subsidiaries		_	_	1,643,041	410,061
Cash received from restricted bank deposits		19,791	5,901	14,171	-
Sub-total of cash inflows		74,927	6,844	1,874,829	682,274
Cash paid to acquire fixed assets, intangible		(2.050 (15)		(2(0, 715))	
assets and other long-term assets		(2,058,617)	(1,867,624)	(249,715)	(493,662)
Cash paid to acquire investments Cash paid for restricted bank deposits		(15 445)	(591,957)	(554,320) (10,145)	(1,145,863) (3,950)
Cash paid to subsidiaries		(15,445)	(11,570)	(10,143) (1,251,155)	(1,024,554)
Cash paid to subsidiaries				(1,2)1,1))	(1,024,))4)
Sub-total of cash outflows		(2,074,062)	(2,471,151)	(2,065,335)	(2,668,029)
Net cash flows from investing activities		(1,999,135)	(2,464,307)	(190,506)	(1,985,755)
The cash nows from investing activities		(1,777,137)	(2,101,507)	(1)0,000	(1,707,777)

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated and Company Cash Flow Statements

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

Item	Note	2019 Consolidated	2018 Consolidated	2019 Company	2018 Company
3. Cash flows from financing activities					
Cash received from borrowings		2,403,553	2,085,288	956,619	1,770,713
Cash received from issuance of debentures		-	1,100,000	-	1,100,000
Cash received from capital contributions		150,715	174,273	-	-
Including: Cash received from capital					
contributions by minority shareholders of subsidiaries		150,715	174,273		
minority shareholders of subsidiaries		1)0,/1)	1/4,2/3		
Sub-total of cash inflows		2,554,268	3,359,561	956,619	2,870,713
Cash repayments of borrowings		(831,072)	(1,550,440)	(650,000)	(1,399,000)
Cash payments for distribution of interest					
expenses		(198,039)	(163,282)	(169,020)	(125,722)
Payments for distribution of dividends or			()		
profits		(153,197)	(929)	(153,197)	_
Including: Dividends and profits paid to minority shareholders by subsidiaries			(929)		
Sub-total of cash outflows		(1,182,308)	(1,714,651)	(972,217)	(1,524,722)
Net cash flows from financing activities		1,371,960	1,644,910	(15,598)	1,345,991
4. Effect of foreign exchange rate changes on					
cash					
5. Net increase/(decrease) in cash		257,758	(85,146)	149,294	(192,920)
Add: Cash at beginning of year		1,808,543	1,893,689	586,888	779,808
6. Cash at end of year	4(38)(c)	2,066,301	1,808,543	736,182	586,888

The accompanying notes form an integral part of these financial statements.

Liu Yujun Company representative Peng Yilin Person in charge of accounting function

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Consolidated Statement of Changes in Owners' Equity

For the six months ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

		Att	ributable to ov				
Item	Note	Share capital	Capital surplus	Surplus reserve	Undistributed profits	Minority interests	Total shareholders' equity
Balance at 1 January 2018		1,427,228	399,115	479,907	2,978,876	296,736	5,581,862
Movements for the period ended 31 December 2018 Total comprehensive income Net profit					501,168	25,612	526,780
Total comprehensive income for the year		_	_	_	501,168	25,612	526,780
Capital contribution by shareholders		_	31,909	_	-	475,345	507,254
Profit distribution Appropriation to surplus reserves Dividend distribution to		_	_	37,200	(37,200)	-	-
shareholders						(929)	(929)
Balance at 31 December 2018		1,427,228	431,024	517,107	3,442,844	796,764	6,614,967
Movements for the period ended 31 December 2019 Total comprehensive income							
Net profit					507,107	21,855	528,962
Total comprehensive income for the year		_	_	_	507,107	21,855	528,962
Capital contribution by shareholders		_	_	_	_	150,715	150,715
Profit distribution Appropriation to surplus reserves		_	_	41,143	(41,143)	_	-
Dividend distribution to shareholders	4(22)(c)				(151,285)	(1,172)	(152,457)
Balance at 31 December 2019		1,427,228	431,024	558,250	3,757,523	968,162	7,142,187

The accompanying notes form an integral part of these financial statements.

Liu Yujun Company representative Peng Yilin Person in charge of accounting function

12. Financial Statements prepared in accordance with PRC Accounting Standards for Business Enterprises Company Statement of Changes in Owners' Equity

For the six months ended 31 December 2019

(All amounts in RMB thousand unless otherwise stated)

Item	Share capital	Capital surplus	Surplus reserve	Undistributed profits	Total shareholders' equity
Balance at 1 January 2018	1,427,228	380,788	479,907	2,109,302	4,397,225
Movements for the period ended 31 December 2018 Total comprehensive income					
Net profit				372,009	372,009
Total comprehensive income for the year Profit distribution	_	_	-	372,009	372,009
Appropriation to surplus reserves Dividend distribution to shareholders			37,200	(37,200)	
Balance at 31 December 2018	1,427,228	380,788	517,107	2,444,111	4,769,234
Movements for the period ended 31 December 2019 Total comprehensive income					
Net profit				411,423	411,423
Total comprehensive income for the year Profit distribution	_	_	_	411,423	411,423
Appropriation to surplus reserves Dividend distribution to shareholders			41,143	(41,143) (151,285)	(151,285)
Balance at 31 December 2019	1,427,228	380,788	558,250	2,663,106	5,029,372

The accompanying notes form an integral part of these financial statements.

Liu Yujun Company representative Peng Yilin Person in charge of accounting function

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 GENERAL INFORMATION

Tianjin Capital Environmental Protection Group Company Limited (the "Company") was established on the basis of Tianjin Bohai chemical industry (Group) Company Limited ("Bohai Chemical Industry"). Bohai Chemical Industry was established on 8 June 1993 in Tianjin, the People's Republic of China (the 'PRC'), listed in Hong Kong Stock Exchange ("H share") in May 1994 and Shanghai Stock Exchange ("A share") in June 1995. Bohai Chemical Industry appeared significant losses in 1998 and 1999. Approved by Tianjin Government, the Company had completed the equity and assets reorganization of Bohai Chemical Industry at the end of year 2000. The address of the Company's registered office is No.45 Guizhou Road, Heping District, Tianjin. The parent company and ultimate holding company of the Company are Tianjin Municipal Investment Company Limited ("Municipal Investment") and Tianjin City Infrastructure Construction and Investment Group Company Limited ("City Infrastructure Construction and Investment"), respectively. As at 31 December 2019, the Company's total share capital is RMB1,427 million with a par value of RMB1 per share.

The principal activities of the Company and its subsidiaries (the "Group") include processing of sewage water, supply of tap water and recycled water, supply of heating and cooling, hazardous waste treatment and construction and management of related facilities as described below:

(a) Processing of sewage water

Pursuant to relevant agreements ("Service concession right agreements"), the Group currently provides sewage water processing services via the following plants:

Location	Agreement date	Authorized by
Guiyang, Guizhou	16 September 2004	Guiyang City Administration Bureau
Baoying, Jiangsu	13 June 2005	Baoying Construction Bureau
Chibi, Hubei	15 July 2005	Chibi Construction Bureau
Fuyang, Anhui	18 December 2005	Fuyang Construction Committee
Qujing, Yunnan	25 December 2005	Qujing Construction Bureau
		(Renamed Qujing Housing and Urban Construction Bureau)
Honghu, Hubei	29 December 2005	Honghu Construction Bureau
Hangzhou,Zhejiang	20 November 2006	Hangzhou Sewage Company
		(Changed to Hangzhou Municipal Facilities Supervision Center)
Jinghai, Tianjin	12 September 2007	Tianjin Tianyu Science Technology Park
Wendeng, Shandong	19 December 2007	Wendeng Construction Bureau
Xi'an, Shaanxi	18 March 2008	Xi'an Infrastructure Investment Group
Anguo, Hebei	14 October 2008	AnGuo Municipal Government
Xianning, Hubei	16 October 2008	Xianning Construction Committee
Yingdong, Anhui	10 August 2009	Fuyang Yingdong Construction Bureau
Qujing, Yunnan	16 August 2011	QuJing Housing and Urban Construction Bureau
Chaohu, Anhui	25 August 2011	Hanshan Housing and Urban Construction Bureau
Jingu, Tianjin	18 February 2014	Tianjin Urban-rural Construction Commission ("TUCC") and
		Tianjin Water Authority Bureau ("TWAB")
Xianyanglu, Tianjin	18 February 2014	TUCC and TWAB

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 **GENERAL INFORMATION** (Continued)

(a) **Processing of sewage water** (Continued)

Pursuant to relevant agreements ("Service concession right agreements"), the Group currently provides sewage water processing services via the following plants (Continued):

Location	Agreement date	Authorized by
Dongjiao, Tianjin	18 February 2014	TUCC and TWAB
Beicang, Tianjin	18 February 2014	TUCC and TWAB
Yingshang, Anhui	16 June 2016	Yingshang Housing and Urban Construction Bureau
Karamay, Xinjiang	4 November 2016	Karamay Construction Bureau
Linxia, Gansu	13 May 2017	Linxia Housing and Urban Construction Bureau
Ningxiang, Changsha	5 June 2017	Ningxiang Economic and Technological Development Zone
		Management Committee
Hefei, Anhui	16 June 2017	Hefei Urban Construction Committee
Dalian, Liaoning	1 November 2017	Dalian Urban Construction Bureau
Bayannur, Inner Mongolia	12 December 2017	Bayannur Water Bureau and Bayannur Hetao Water
		Group Company, Ltd
Ningxiang, Changsha	27 April 2018	Ningxiang Economic and Technological Development Zone
		Management Committee
Honghu, Hubei	9 June 2018	Honghu Housing and Urban Construction Bureau
Shibing, Guizhou	12 July 2018	Shibing Water Bureau
Hefei, Anhui	28 November 2018	Hefei Urban Construction Committee
Deqing, Zhejiang	1 January 2019	Deqing Qianyuan Municipal Government
Gaocheng,Hebei	2 April 2019	Hebei Gaocheng Economic and Technological Development Zone
		Management Committee
Jiuquan, Gansu	22 June 2019	Jiuquan Suzhou Municipal Government
Yingdong, Fuyang	26 August 2019	Fuyang Urban-rural Construction Commission

The Group provides sewage treatment services in accordance with the Concession Agreements and is entitled to charge for the service based on a pre-determined rate.

(b) Supply of tap water

Pursuant to relevant agreements, the Group provides tap water supply service initially at the pre-determined rate and the price as pre-determined may be revised subsequently taking into account various cost factors.

(c) Recycled water business

The Group's recycled water business includes developing, constructing and operating of recycled water projects, production and sale of recycled water, and provision of related research and development and technical consultation services.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 **GENERAL INFORMATION** (Continued)

(d) Heating and cooling supply services

The heating and cooling supply services include design, construction, operations and transfer of centralized heating and cooling infrastructures, and provision of heating and cooling services.

(e) Hazardous waste treatment

Hazardous treatment include hazardous and solid waste treatment. Currently, the Group conducts the disposal by way of incineration, landfill, physicochemical and curing treatment. Adoption of treatment method tailored to the local help to realize the aim of harmless, resource and reduction.

- (f) Subsidiaries included in the scope of consolidation for the year and newly consolidated subsidiaries are set out in Note 5 and Note 6.
- (g) These financial statements were approved by the Company's Board of Directors on 26 March 2020.

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES

The Group determines the specific accounting policies and accounting estimates according to the production management characteristics, which are mainly reflected in the measurement of expected credit losses of receivables and contract assets (Note 2(8)), depreciation and amortization of fixed assets and intangible assets (Note 2(12) and (15)), recognition and amortization of concession rights (Note 2(15) (b)), timing of revenue recognition (Note 2(21)) and so on.

Key assumption adopted by the Group in determining significant accounting policies are set out in Note 2(26).

(1) Basis of preparation

The financial statements are prepared in accordance with the Accounting Standard for Business Enterprises – Basic Standard, and the specific accounting standards and other relevant regulations issued by the Ministry of Finance on 15 February 2006 and in subsequent periods (hereafter collectively referred to as "the Accounting Standards for Business Enterprises" or "CAS") and Circular of the China Securities Regulatory Commission on the Issuing of the Rules for the Information Disclosure and Compilation of Companies Publicly Issuing Securities No. 15 – General Provisions on Financial Statements.

The financial statements are prepared on a going concern basis.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(2) Statement of compliance with Accounting Standard for Business Enterprise

The financial statements of the Company for the year ended 31 December 2019 are in compliance with the Accounting Standard for Business Enterprise and truly and completely present the consolidated and the Company's financial position of the Company as of 31 December 2019 and of their financial performance, cash flows and other information for the year then ended.

(3) Accounting year

The Company's accounting year starts on 1 January and ends on 31 December.

(4) Recording currency

The Company's recording currency is Renminbi (RMB). The recording currency of the Company's subsidiaries is determined based on the primary economic environment in which they operate, and except the recording currency of Tianjin Capital Environmental Protection (Hong Kong) Co., Ltd. which is HK dollar, the remaining subsidiary companies' recording currency is RMB. The financial statements are presented in RMB.

(5) Preparation of consolidated financial statements

The consolidated financial statements comprise the financial statements of the Company and all its subsidiaries.

Subsidiaries are consolidated from the date on which the Group obtains control and are deconsolidated from the date that such control ceases.

In preparing the consolidated financial statements, the financial statements of subsidiaries are adjusted in accordance with the accounting policies and accounting period of the Company during the preparation of the consolidated financial statements, where the accounting policies and the accounting periods are inconsistent between the Company and subsidiaries. For subsidiaries acquired from business combinations not under common control, the financial statements are adjusted based on the fair value of the identifiable net assets at the acquisition date.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(5) Preparation of consolidated financial statements (Continued)

All significant intra-group balances, transactions and unrealized profits are eliminated in the consolidated financial statements. The portion of subsidiaries' equity and the portion of a subsidiaries' net profits and losses and comprehensive incomes for the period not attributable to Company are recognised as minority interests and presented separately in the consolidated financial statements under equity, net profits and total comprehensive income respectively. Unrealized profits and losses resulting from the sale of assets by the Company to its subsidiaries are fully eliminated against net profit attributable to owners of the parent. Unrealized profits and losses resulting from the sale of assets by a subsidiary to the Company are eliminated and allocated between net profit attributable to owners of the parent and minority interests in accordance with the allocation proportion of the parent in the subsidiary. Unrealized profits and losses resulting from the sale of assets by one subsidiary to another are eliminated and allocated between net profit attributable to owners of the parent and minority interests in accordance with the allocation proportion of the parent in the subsidiary. Unrealized profits and losses resulting from the sale of assets by one subsidiary to another are eliminated and allocated between net profit attributable to owners of the parent and minority interests in accordance with the allocation proportion of the parent in the subsidiary. Unrealized profits and losses resulting from the sale of assets by one subsidiary to another are eliminated and allocated between net profit attributable to owners of the parent and minority interests in accordance with the allocation proportion of the parent in the subsidiary. Unrealized profits and losses resulting from the sale of assets by one subsidiary to another are eliminated and allocated between net profit attributable to owners of the parent in the subsidiary to another are eliminated and allocated between net profit attributable to owners of th

If the accounting treatment of a transaction which considers the Group as an accounting entity is different from that considers the Company or its subsidiaries as an accounting entity, it is adjusted from the perspective of the Group.

(6) Cash

Cash comprise cash on hand and deposits that can be readily drawn on demand.

(7) Foreign currency translation

(a) Foreign currency transactions

Foreign currency transactions are translated into recording currency using the exchange rates prevailing at the dates of the transactions.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (7) Foreign currency translation (Continued)
 - (a) Foreign currency transactions (Continued)

At the balance sheet date, monetary items denominated in foreign currencies are translated into recording currency using the spot exchange rates on the balance sheet date. Exchange differences arising from these translations are recognised in profit or loss for the current year, except for those attributable to foreign currency borrowings that have been taken out specifically for the acquisition or construction of qualifying assets, which are capitalized as part of the cost of those assets. Non-monetary items denominated in foreign currencies that are measured at historical costs are translated at the balance sheet date using the spot exchange rates at the date of the transactions. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(b) Translation of foreign currency financial statements

The asset and liability items in the balance sheets for overseas operations are translated at the spot exchange rates on the balance sheet date. Among the shareholders' equity items, the items other than "undistributed profits" are translated at the spot exchange rates of the transaction dates. The income and expense items in the income statements of overseas operations are translated at the spot exchange rates of the transaction dates. The differences arising from the above translation are presented in other comprehensive income. The cash flows of overseas operations are translated at the spot exchange rates on the dates of the cash flows. The effect of exchange rate changes on cash is presented separately in the cash flow statement.

(8) Financial instruments

Financial instruments refer to the contracts that form one party's financial assets and form other parties' financial liabilities or equity instruments. The Group recognise financial assets or financial liabilities when become one party of the financial instruments contracts.

(a) Financial assets

(i) Classification and measurement

Based on the business model for financial asset management and the contractual cash flow characteristics of financial assets, the Group classifies the financial assets into: (1) financial assets measured at amortised cost; (2) financial assets measured at fair value and through other comprehensive income; (3) financial assets measured at fair value and through profit or loss.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (8) Financial instruments (Continued)
 - (a) Financial assets (Continued)
 - (i) Classification and measurement (Continued)

Financial assets are initially recognised at fair value. For financial assets at fair value through profit and loss, the related transaction costs are directly recognised in profit or loss. For other financial assets, the related transaction costs are included in initially recognised amounts. Notes or trade receivables arising from sales of products or rendering of services (excluding or without regard to significant financing components) are initially recognised at the consideration that is entitled to be charged by the Group as expected.

Debt instruments

Debt instruments held by the Group are those meet the definition of a financial liability from the issuer's perspective and are measured at the following methods:

Measured at amortised cost:

The Group's business model for financial asset management aims to receive contractual cash flows. The contractual cash flow characteristics of such financial assets are consistent with basic loan arrangement, which means the cash flow generated at certain date is only the payment for the principal and the corresponding interest based on unpaid principal. The interest income of such financial assets is recognised using the effective interest method. The Group's financial assets mainly include cash at bank and on hand, Notes receivable, trade receivables, other receivables, and long-term receivables long-term receivables with maturities no more than one year (inclusive) at the balance sheet date are included in the current portion of non-current assets.

Equity instruments

The Group designates non-traded investments in equity instrument as financial assets at FVOCI, and present as other investments in equity instrument. Relevant dividend income of these financial assets are recognised in profit or loss.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (8) Financial instruments (Continued)
 - (a) Financial assets (Continued)
 - (ii) Impairment of financial assets

The Group recognises the loss provision based on expected credit losses ("ECL") for financial assets and contract assets measured at amortised cost.

The Group calculates the probability weighted amount of the present value of differences between the cash flows receivable by the contract and the cash flows expected to be received, and recognises the ECL by considering the reasonable and well-founded information on past events, current conditions and forecasts of future economic conditions, taking the risk of default as a weight.

As at each balance sheet date, the Group measures the ECL of financial instruments at different stages respectively. Financial instrument that had no significant increase in credit risk since initial recognition belongs to "Stage 1", and the Group makes loss provision based on the ECL in the following 12 months. Financial instrument that had a significant increase but with no credit impairment since initial recognition belongs to "Stage 2", and the Group makes the loss provision based on the lifetime ECL. Financial instrument that suffered credit impairment since initial recognition belongs to "Stage 3", and the Group makes the loss provision based on the lifetime ECL.

For the financial instrument with lower credit risk on the balance sheet date, the Group assumes that its credit risk had no significant increase since initial recognition, and makes the loss provision based on the ECL in the following 12 months.

For financial instruments belonging to "Stage 1", "Stage 2" and those with lower credit risk, the interest income is calculated based on its carrying amount (including impairment provision) and effective interest rate. For the financial instrument belonging to "Stage 3", the interest income is calculated based on the amortised cost (which is made after carrying amount less the impairment provision) and effective interest rate.

For notes receivable, trade receivables and contract assets, regardless of existence of the significant financing component, the Group makes the loss provision according to the lifetime ECL. For lease receivables, the Group makes the loss provision according to the lifetime ECL as well.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (8) Financial instruments (Continued)
 - (a) Financial assets (Continued)
 - (ii) Impairment of financial assets (Continued)

When the expected credit loss cannot be assessed at a reasonable cost for an individual financial asset, the Group divides receivables into certain groupings based on credit risk characteristics, then pursuant to which, calculates the ECL. Basis for grouping is as follows:

Banker's acceptance notes group	Banker's acceptance from bank under low risk
Government clients group	Government clients except those in provincial capitals and municipalities
Other clients group	Other clients
Project deposit group	Project deposits
Others group	Other receivables excluding VAT refund and project deposits

For trade receivables, lease receivables that are classified into above groupings and notes receivables arising from sale of goods or rendering of services,, the Group calculates ECL using exposure at default ("EAD") and lifetime ECL rate with reference to historical credit loss experience, in combination with the current situation and forecasts of future economic conditions. Other types of notes receivables and other receivables that are classified into above groupings, the Group calculates ECL using EAD and lifetime ECL rate or ECL rate in the following 12 months with reference to historical loss experience, in combination with the current situation and forecasts of future economic conditions.

The Group included the provision for or reversal of loss provision into profit or loss.

(iii) Derecognition of financial assets

A financial asset is derecognised when any of the below criteria is met: (1) the contractual rights to receive the cash flows from the financial asset expire; (2) the financial asset has been transferred and the Group transfers substantially all the risks and rewards of ownership of the financial asset to the transferee; (3) the financial asset has been transferred and the Group has not retained control of the financial asset, although the Group neither transfers nor retains substantially all the risks and rewards of ownership of the financial asset.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (8) Financial instruments (Continued)
 - (a) Financial assets (Continued)
 - (iii) Derecognition of financial assets (Continued)

On derecognition of other investments in equity instrument, the difference between the carrying amount and the sum of the consideration received and the cumulative changes in fair value that had been recognised directly in other comprehensive income, is recognised in retained earnings; on derecognition of other financial assets, the difference between the carrying amount and the sum of the consideration received and the cumulative changes in fair value that had been recognised directly in other comprehensive income, is recognised in profit or loss.

(b) Financial liabilities

Financial liabilities are classified into the following categories at initial recognition: financial liabilities measured at amortised cost and financial liabilities at fair value through profit or loss.

The Group's financial liabilities mainly refer to financial liabilities measured at amortised cost, including trade payables, other payables, borrowings and debentures payable. Such financial liabilities are initially recognised at fair value, net of transaction costs incurred, and subsequently measured using effective interest method. Financial liabilities of which the period is within one year (inclusive) are classified as the current liabilities; the period is over one year while will be due within one year (inclusive) since the balance sheet date are classified as current portion of non-current liabilities; and the others are classified as non-current liabilities.

A financial liability is derecognised when all or part of the obligation is extinguished. The difference between the carrying amount of a financial liability extinguished and the consideration paid, shall be recognised in profit or loss.

(c) Determination of fair value of financial instruments

The fair value of a financial instrument that is traded in an active market is determined at the quoted price in the active market. The fair value of a financial instrument that is not traded in an active market is determined by using a valuation technique. In valuation, the Group adopts valuation techniques applicable in the current situation and supported by adequate available data and other information, selects inputs with the same characteristics as those of assets or liabilities considered in relevant transactions of assets or liabilities by market participants, and gives priority to the use of relevant observable inputs. When relevant observable inputs are not available or feasible, unobservable inputs are adopted.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(9) Inventories

(a) Classification

Inventories include raw materials, finished goods, spare parts and low cost consumables, and are measured at the lower of cost and net realizable value.

(b) Costing of inventories

Costs for raw materials, finished goods and low cost consumables are determined using the weighted average method. The cost of finished goods comprises raw materials, direct labor and systematically allocated production overhead based on the normal production capacity.

(c) Basis for determining net realizable values of inventories and method for making provision for decline in the value of inventories

Provision for decline in the value of inventories is determined at the excess amount of the carrying amounts of the inventories over their net realizable value. Net realizable value is determined based on the estimated selling price in the ordinary course of business, less the estimated costs to completion and estimated costs necessary to make the sale and related taxes.

- (d) The Group adopts the perpetual inventory system.
- (e) Spare parts and low cost consumables are expensed when used.

(10) Long-term equity investments

Long-term equity investments comprise the Company's long-term equity investments in its subsidiaries, and the Group's long-term equity investments in its joint ventures and associates.

Subsidiaries are the investees over which the Company is able to exercise control. Associate are the investee over which the Group has significant influence on their financial and operating policy decisions.

Investments in subsidiaries are presented in the Company's financial statements using the cost method, and are adjusted to the equity method when preparing the consolidated financial statements. Investments in joint ventures and associates are accounted for using the equity method.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (10) Long-term equity investments (Continued)
 - (a) Determination of investment cost

For long-term equity investment acquired from business combinations not under common control, the cost of the combination is the investment cost of the long-term equity investment.

For long-term equity investment acquired by payment in cash, the initial investment cost shall be the purchase price actually paid.

(b) Subsequent measurement and recognition of related profit and loss

Long-term equity investments accounted for using the cost method, are measured at the initial investment costs. Cash dividends or profit distribution declared by the investees are recognised as investment income in profit or loss.

Long-term equity investments accounted for using the equity method, where the initial investment cost exceeds the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, the investment is initially measured at cost; where the initial investment cost is less than the Group's share of the fair value of the investee's identifiable net assets at the time of acquisition, the difference is included in profit or loss for the current year and the cost of the long-term equity investment is adjusted upwards accordingly.

Under the equity method of accounting, the Group recognises the investment income according to its share of net profit or loss of the investee. The Group does not recognise further losses when the carrying amounts of the long-term equity investment together with any long-term interests that, in substance, form part of the Group's net investment in investees are reduced to zero. However, if the Group has obligations for additional losses and the criteria with respect to recognision of provisions under the accounting standards on contingencies are satisfied, the Group continues recognising the investment losses and the provisions at the amount it expects to undertake. The Group's share of the changes in investee's owner's equity other than those arising from the net profit or loss, other comprehensive income and profit distribution is recognised in capital surplus with a corresponding adjustment to the carrying amounts of the long-term equity investment. The carrying amount of the investment is reduced by the Group's share of the profit distribution or cash dividends declared by the investees. Unrealised gains or losses on transactions between the Group and its investees are eliminated to the extent of the Group's equity interest in the investees, based on which the investment income or losses are recognised. Any losses resulting from transactions between the Group and its investees, which are attributable to asset impairment losses are not eliminated.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(10) Long-term equity investments (Continued)

(c) Basis for determination of control, joint control and significant influence over investees

Control is the right over the investee that entitles enjoy variable returns from their involvement in the investee and the ability to exert the right to affect those returns.

Joint control is agreed sharing of control over an arrangement, and a decision relating to any activity under the arrangement can be made only when the parties sharing the control reach the unanimous agreement.

Significant influence is the power to participate in the financial and operating policy decisions of the investee, but is not control or joint control over those policies.

(d) Impairment of long-term equity investments

The carrying amounts of long-term equity investments in subsidiaries, joint ventures and associates are reduced to the recoverable amounts when the recoverable amounts are below their carrying amounts (Note 2(17)).

(11) Investment properties

Investment properties, including buildings that are held for the purpose of leasing, are measured initially at cost. Subsequent expenditures incurred in relation to an investment property are included in the cost of the investment property when it is probable that the associated economic benefits will flow to the Group and their costs can be reliably measured; otherwise, the expenditures are recognised in profit or loss in the year in which they are incurred.

The Group adopts the cost model for subsequent measurement of investment properties. Buildings are depreciated or amortized to their estimated net residual values over their estimated useful lives. The estimated useful lives, the estimated net residual values that are expressed as a percentage of cost and the annual depreciation rates of investment properties are as follows:

	Estimated useful lives	Estimated net residual values	Annual depreciation rates
Buildings	40-50 years	5%	1.9%-2.4%

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(11) Investment properties (Continued)

When an investment property is transferred to owner-occupied properties, it is reclassified as fixed asset at the date of the transfer. When an owner-occupied property is transferred out for earning rentals or for capital appreciation, the fixed asset is reclassified as investment properties at its carrying amount at the date of the transfer.

The investment property's estimated useful life, net residual value and depreciation method applied are reviewed and adjusted as appropriate at each year-end.

An investment property is derecognised on disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from its disposal. The net amount of proceeds from sale, transfer, retirement or damage of an investment property after its carrying amount and related taxes and expenses is recognised in profit or loss for the current year.

The carrying amount of an investment property is reduced to the recoverable amount if the recoverable amount is below the carrying amount (Note 2(17)).

(12) Fixed assets

(a) Recognition and initial measurement of fixed assets

Fixed assets comprise buildings and structures, machinery and equipment, motor vehicles and others.

Fixed assets are recognised when it is probable that the related economic benefits will flow to the Group and the costs can be reliably measured. Fixed assets purchased or constructed by the Group are initially measured at cost at the acquisition date.

Subsequent expenditures incurred for a fixed asset are included in the cost of the fixed asset when it is probable that the associated economic benefits will flow to the Group and the related cost can be reliably measured. The carrying amount of the replaced part is derecognised. All the other subsequent expenditures are recognised in profit or loss in the year in which they are incurred.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(12) Fixed assets (Continued)

(b) Depreciation methods of fixed assets

Fixed assets are depreciated using the straight-line method to allocate the cost of the assets to their estimated residual values over their estimated useful lives. For the fixed assets that have been provided for impairment loss, the related depreciation charge is prospectively determined based upon the adjusted carrying amounts over their remaining useful lives.

The estimated useful lives, the estimated net residual values expressed as a percentage of cost and the annual depreciation rates of fixed assets are as follows:

	Estimated useful lives	Estimated net residual values	Annual depreciation rates
Buildings and structures	10-50 years	0%-5%	1.9%-10%
Machinery and equipment	10-20 years	0%-5%	4.8%-10%
Motor vehicles and others	5-10 years	0%-5%	9.5%-20%

Plants and pipelines network are included in buildings with estimated useful lives of 25 years.

The estimated useful life and the estimated net residual value of a fixed asset and the depreciation method applied to the asset are reviewed, and adjusted as appropriate at each year-end.

(c) The carrying amount of a fixed asset is reduced to the recoverable amount when the recoverable amount is below the carrying amount (Note 2(17)).

(d) Disposal of fixed assets

A fixed asset is derecognised on disposal or when no future economic benefits are expected from its use or disposal. The amount of proceeds from disposals on sale, transfer, retirement or damage of a fixed asset net of its carrying amount and related taxes and expenses is recognised in profit or loss for the current year.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(13) Construction in progress

Construction in progress is measured at actual cost. Actual cost comprises construction costs, installation costs, borrowing costs that are eligible for capitalisation and other costs necessary to bring the fixed assets ready for their intended use. Construction in progress is transferred to fixed assets when the assets are ready for their intended use, and depreciation begins from the following month. The carrying amount of construction in progress is reduced to the recoverable amount when the recoverable amount is below the carrying amount (Note 2(17)).

(14) Borrowing costs

The borrowing costs that are directly attributable to the acquisition and construction of an asset that needs a substantially long period of time for its intended use commence to be capitalized and recorded as part of the cost of the asset when expenditures for the asset and borrowing costs have been incurred, and the activities relating to the acquisition and construction that are necessary to prepare the asset for its intended use have commenced. The capitalisation of borrowing costs ceases when the asset under acquisition or construction becomes ready for its intended use and the borrowing costs incurred thereafter are recognised in profit or loss for the current year. Capitalisation of borrowing costs is suspended during periods in which the acquisition or construction of a fixed asset is interrupted abnormally and the interruption lasts for more than 3 months, until the acquisition or construction is resumed.

For the specific borrowings obtained for the acquisition or construction of an asset qualifying for capitalisation, the amount of borrowing costs eligible for capitalisation is determined by deducting any interest income earned from depositing the unused specific borrowings in the banks or any investment income arising on the temporary investment of those borrowings during the capitalisation period.

For the general borrowings obtained for the acquisition or construction of an asset qualifying for capitalisation, the amount of borrowing costs eligible for capitalisation is determined by applying the weighted average effective interest rate of general borrowings, to the weighted average of the excess amount of cumulative expenditures on the asset over the amount of specific borrowings. The effective interest rate is the rate at which the estimated future cash flows during the period of expected duration of the borrowings or applicable shorter period are discounted to the initial amount of the borrowings.
For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(15) Intangible assets

Intangible assets include land use rights, concession rights, technical know-how and software, and are measured at cost.

(a) Land use rights

Land use rights are amortized on the straight-line basis over their approved use period of 25-50 years. If the acquisition costs of the land use rights and the buildings and structures located thereon cannot be reasonably allocated between the land use rights and the buildings, all of the acquisition costs are recognised as fixed assets.

(b) Concession rights

As described in Note 1(a) and (d), the Group cooperates with government or its subsidiaries in the development, financing, operation and maintenance of facilities for public services (concession services) over a specified period of time (concession service period). The Group has access to operating the facilities and providing concession services in accordance with the terms specified in the arrangement, and transfers the facilities to the government at the end of the concession service period.

The Service concession right agreement sets out performance standards and price adjustment mechanism to clarify the scope of concession services of the Group. The concession service arrangement is within the scope of *Interpretations of Accounting Standards for Business Enterprises No.2*, such assets under the concession arrangement can be recognised as intangible assets or financial assets. The operator shall recognise an intangible asset to the extent that it receives a right (concession) to charge users of the public service and shall recognise a financial asset to the extent that it receives unconditional payments or guarantee for minimum charge from the approving authority. Rights in relation to concession services are recognised as intangible assets- concession rights by the Group, which are amortized on a straight-line basis over the terms of operation ranging from 20 to 30 years.

(c) Technical know-how and software

Separately acquired technical know-how and software are shown at historical cost. Technical know-how and software has a finite useful life and is carried at cost less accumulated amortization. Amortization is calculated using the straight-line method to allocate the cost of technical know-how and software over their useful lives.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(15) Intangible assets (Continued)

(d) Periodical review of useful life and amortisation method

For an intangible asset with a finite useful life, review of its useful life and amortisation method is performed at each year-end, with adjustment made as appropriate.

(e) Research and development

Expenditures for internal research and development projects are classified into research phase expenditures and development phase expenditures according to their nature and whether the intangible assets ultimately formed by research and development activities have greater uncertainty.

Expenditures for the planned investigation, evaluation and selection phases for the study of the production process are expenditures for the research phase, which are included in the current profit and loss when incurred; prior to mass production, expenditure in the relevant design and testing phases for the final application of the environmental protection equipment production process is capitalized during the development phase, while meeting the following conditions:

- The development of the environmental protection equipment production has been fully demonstrated by the technical team;
- Management has approved the budget for environmental protection equipment production development;
- Research and analysis of previous market research indicates that the products produced by the environmental protection equipment production have marketing capabilities;
- Adequate technical and financial support for the development of the environmental protection equipment production and subsequent mass production; and
- Expenditure on environmental protection equipment production development can be reliably collected.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (15) Intangible assets (Continued)
 - (e) Research and development (Continued)

Expenditure in the development phase that does not meet the above conditions is recognised in profit or loss in the period in which it is incurred. Development expenditures that have been charged to profit or loss in the previous period are not reconfirmed as assets in subsequent periods. Expenditures that have been capitalized during the development phase are listed as development expenditures on the balance sheet and are converted to intangible assets from the date the project reaches its intended use.

(f) Impairment of intangible assets

The carrying amount of intangible assets is reduced to the recoverable amount when the recoverable amount is below the carrying amount (Note 2(17)).

(16) Non-monetary asset exchange

Non-monetary asset exchange refers to the exchange of non-monetary assets, such as fixed assets, intangible assets, investment properties, and long-term equity investments. The exchange does not involve or only involves a small amount of monetary assets (i.e. premiums). The exchange of non-monetary assets without commercial substance shall be measured on the basis of book value. For the assets to be swapped in, the enterprise shall use the book value of the assets to be swapped out and the relevant taxes and fees payable as the initial measurement amount of the assets to be swapped in; for the swapped out assets, no profit or loss is recognized when the assets are derecognized. For non-monetary asset exchanges that are measured on the basis of book value, and multiple assets are exchanged in or out at the same time, for multiple assets that are exchanged at the same time, the assets will be exchanged in accordance with the relative proportion of the fair value of each asset being exchanged. The total book value (involving the premium, plus the book value of the premium paid or the fair value of the premium received) is apportioned to the assets transferred, plus the relevant taxes and fees payable, as the initial measurement amount of the asset swapped in. If the fair value of the assets to be exchanged cannot be measured reliably, the book value of the assets to be exchanged or other reasonable proportions. For multiple assets that are swapped out at the same time, no profit or loss is recognized when the same time, no profit or loss is recognized when the swapped out assets are derecognized.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(17) Impairment of long-term assets

Fixed assets, construction in progress, intangible assets with finite useful lives, investment properties measured using the cost model and long-term equity investments in subsidiaries, joint ventures and associates are tested for impairment if there is any indication that the assets may be impaired at the balance sheet date; intangible assets which are not available for their intended use are tested at least annually for impairment, irrespective of whether there is any indication that it may be impaired. If the result of the impairment test indicates that the recoverable amount of an asset is less than its carrying amount, a provision for impairment and an impairment loss are recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and the present value of the future cash flows expected to be derived from the asset. Provision for asset impairment is determined and recognised on the individual asset basis. If it is not possible to estimate the recoverable amount of an individual asset, the recoverable amount of a group of assets to which the asset belongs is determined. A group of assets is the smallest group of assets that is able to generate independent cash inflows.

Once the above asset impairment loss is recognised, it will not be reversed for the value recovered in the subsequent periods.

(18) Employee benefits

Employee benefits refer to all forms of consideration or compensation given by the Group in exchange for service rendered by employees or for termination of employment relationship, which include short-term employee benefits and post-employment benefits.

(a) Short-term employee benefits

Short-term employee benefits include wages or salaries, bonus, allowances and subsidies, staff welfare, premiums or contributions on medical insurance, work injury insurance and maternity insurance, housing funds, union running costs and employee education costs, short-term paid absences. The Short-term employee benefit liabilities are recognised in the accounting period in which the service is rendered by the employees, with a corresponding charge to the profit or loss for the current year or the cost of relevant assets. Non-monetary benefits are measured at their fair value.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(18) Employee benefits (Continued)

(b) Post-employment benefits

The Group classifies post-employment benefit plans as either defined contribution plans or defined benefit plans. Defined contribution plans are post-employment benefit plans under which the Group pays fixed contributions into a separate fund and will have no obligation to pay further contributions; and defined benefit plans are post-employment benefit plans other than defined contribution plans. During the reporting period, the Group's post-employment benefits mainly include basic pensions and unemployment insurance, both of which belong to the defined contribution plans.

Basic pensions

The Group's employees participate in the basic pension plan set up and administered by local authorities of Ministry of Human Resource and Social Security. Monthly payments of premiums on the basic pensions are calculated according to the bases and percentage prescribed by the relevant local authorities. When employees retire, the relevant local authorities are obliged to pay the basic pensions to them. The amounts based on the above calculations are recognised as liabilities in the accounting period in which the service has been rendered by the employees, with a corresponding charge to the profit or loss for the current year or the cost of relevant assets.

(19) Dividends distribution

Cash dividends are recognised as liabilities for the period in which the dividends are approved by the shareholders' meeting.

(20) Provisions

Provisions for maintenance of the sewage water processing facilities are recognised when the Group has a present obligation, it is probable that an outflow of economic benefits will be required to settle the obligation, and the amount of the obligation can be measured reliably.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(20) Provisions (Continued)

A provision is initially measured at the best estimate of the expenditure required to settle the related present obligation. Factors surrounding a contingency, such as the risks, uncertainties and the time value of money, are taken into account as a whole in reaching the best estimate of a provision. Where the effect of the time value of money is material, the best estimate is determined by discounting the related future cash outflows. The increase in the discounted amount of the provision arising from passage of time is recognised as interest expense.

The carrying amount of provisions is reviewed at each balance sheet date and adjusted to reflect the current best estimate.

The provisions expected to be settled within one year since the balance sheet date are classified as other current liabilities.

(21) Revenue

The sales are recognised when control of the products or services has been transferred, and the amount is determined in accordance with the consideration received or receivables by authority. Revenue is stated net of discounts, rebates and returns.

(a) Processing of sewage water and heating and cooling supply services

Revenues from processing of sewage water and heating and cooling supply services are recognised when services are rendered.

(b) Sales of tap water and recycled water

Sales of tap water and recycled water is single obligation which is substantially the same which can be clearly distincted recognised on the transfer of risks and rewards of ownership, which generally coincides with the time when the tap water and recycled water are delivered to customers.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(21) Revenue (Continued)

(c) Sales of pipeline connection for recycled water

The Group provides the pipeline connection for recycled water services, and recognises the income within a period of time according to the proportion of completed achievements to the total results agreed in the contract. On the balance sheet date, the Group reestimates the proportion of completed achievements to enable it to reflect changes in performance.

When the Group recognises its income in accordance with the progress of completing projects, the part of the Group's obtained unconditional collection right is confirmed as receivables, the rest is confirmed as contract assets, and the impairment loss provision is confirmed on the basis of ECL for receivables and contract assets (Note 2(8)). If the amount received or receivable by the Group exceeds the amount of completed works, the excess shall be recognised as contract liabilities and the Group shall list the assets and liabilities under the same contract on a net basis.

Contract costs include the performance cost and acquisition cost. The cost of providing pipeline connection identified as the contract implementation costs and the cost is recognised as operating cost according to the completing schedule included in the carrying forward cost of labor when recognise income. The incremental cost incurred by the Group to obtain the contract for the connection of water pipes is recognised as the contract acquisition cost. For the cost obtained in the contract with the amortization period of less than one year, the cost obtained by the contract shall be recorded into the current profit and loss when it occurs; for the cost obtained in the contract with the amortization period of more than one year, the Group shall, in accordance with the relevant contract, recognise the same basic amortization as the income of the project connected to the recycled water pipeline into profit and loss. If the Book Value of the contract cost is higher than the residual consideration expected to be obtained by providing the project minus the estimated cost to be incurred, the Group shall prepare the impairment provision for the excess part and recognise it as the impairment loss of assets. On the balance sheet date, the Group shall list the inventory and other non-current assets respectively according to whether the amortization period of the contract performance cost exceeds one year when it is initially recognised, so as to reduce the net amount after the relevant asset impairment provision. For the contract acquisition cost whose amortization period is longer than one year when the initial recognition is made, the net amount after the relevant asset impairment provision is deducted and listed as other non-current assets.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (21) Revenue (Continued)
 - (d) Sales of environmental protection equipment

If the stage of completion can be measured reliably, revenue and cost are recognised by reference to the percentage of completion of the contract activity at the balance sheet date. The stage of completion is measured by reference to the contract costs incurred up to the end of the reporting period as a percentage of total estimated costs of each contract. Variations in contract work, claims and incentive payments are included to the extent that it is probable that they will result in revenue and they are capable of being reliably measured. The environmental protection equipment is mainly the achievement of technology research.

(e) Hazardous waste processing income

The Group provides hazardous and general solid waste treatment, and recognises the income when service is provided according to the actual processing amount of waste and the price agreed on the contract.

(f) Contract operation income

Revenue from contract operation is recognised on the accrual basis according to the service agreement.

(g) Technical services income

For sales of technical services, the related revenue is recognised using the percentage of completion method, with the stage of completion being determined based on proportion of costs incurred to date to the estimated total costs.

(22) Government grants

Government grants refer to the monetary assets obtained by the Group from the government, including tax return, financial subsidy and etc.

Government grants are recognised when the grants can be received and the Group can comply with all attached conditions. If a government grant is a monetary asset, it will be measured at the amount received or receivable.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(22) Government grants (Continued)

Government grants related to assets refer to government grants which are obtained by the Group for the purposes of purchase, construction or acquisition of the long-term assets. Government grants related to income refer to the government grants other than those related to assets.

The Group recognises government grants related to assets as deferred income and amortizes in profit or loss in a reasonable and systematic manner over the useful lives of related assets. Government grants related to income that compensate the future costs, expenses or losses are recorded as deferred income and recognised in profit or loss, or deducted against related costs, expenses or losses in reporting the related expenses; government grants related to income that compensate the incurred costs, expenses or losses are recognised in profit or loss, or deducted against related costs, expenses or losses or losses are recognised in profit or loss, or deducted against related costs, expenses or losses are recognised in profit or loss, or deducted against related costs, expenses or losses are recognised in profit or loss, or deducted against related costs, expenses or losses are recognised in profit or loss, or deducted against related costs, expenses or losses directly in current year.

The Group applies the presentation method consistently to the similar government grants in the financial statements.

Government grants that are related to ordinary activities are included in operating profit, otherwise, they are recorded in non-operating income or expenses.

For the policy loans with favorable interest rates, the Group records the loans at the actual amounts and calculates the interests by loan principals and the favorable interest rates. The interest subsidies directly received from government are recorded as a reduction of interest expenses.

(23) Deferred tax assets and deferred tax liabilities

Deferred tax assets and deferred tax liabilities are calculated and recognised based on the differences arising between the tax bases of assets and liabilities and their carrying amounts (temporary differences). Deferred tax asset is recognised for the deductible losses that can be carried forward to subsequent years for deduction of the taxable profit in accordance with the tax laws. No deferred tax liability is recognised for a temporary difference arising from the initial recognition of goodwill. No deferred tax asset or deferred tax liability is recognised for the temporary differences resulting from the initial recognition of assets or liabilities due to a transaction other than a business combination, which affects neither accounting profit nor taxable profit (or deductible loss). At the balance sheet date, deferred tax assets and deferred tax liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(23) Deferred tax assets and deferred tax liabilities (Continued)

Deferred tax assets are only recognised for deductible temporary differences, deductible losses and tax credits to the extent that it is probable that taxable profit will be available in the future against which the deductible temporary differences, deductible losses and tax credits can be utilized.

Deferred tax liabilities are recognised for temporary differences arising from investments in subsidiaries, associates and joint ventures, except where the Group is able to control the timing of reversal of the temporary difference, and it is probable that the temporary difference will not reverse in the foreseeable future. When it is probable that the temporary differences arising from investments in subsidiaries, associates and joint ventures will be reversed in the foreseeable future and that the taxable profit will be available in the future against which the temporary differences can be utilized, the corresponding deferred tax assets are recognised.

Deferred tax assets and liabilities are offset when:

- The deferred taxes are related to the same tax payer within the Group and the same taxation authority; and,
- That tax payer within the Group has a legally enforceable right to offset current tax assets against current tax liabilities.
- (24) Leases

A lease is a contract whereby the lessor assigns the right to use the asset to the lessee for consideration within a certain period of time.

The Group Acts as a lessor

A lease that transfers substantially all the risks and rewards incidental to ownership of an asset is a finance lease. An operating lease is a lease other than a finance lease.

(a) Operating leases

While the Group leases buildings and structures out, rental income under an operating lease is recognised on a straight-line basis over the period of the lease. Variable rental income that depend on sales are recognised in profit or loss in the period in which the condition that triggers those payments occurs.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(25) Segment information

The Group identifies operating segments based on the internal organisation structure, management requirements and internal reporting system, and discloses segment information of reportable segments which is determined on the basis of operating segments.

An operating segment is a component of the Group that satisfies all of the following conditions: (1) the component is able to earn revenues and incur expenses from its ordinary activities; (2) whose operating results are regularly reviewed by the Group's management to make decisions about resources to be allocated to the segment and to assess its performance, and (3) for which the information on financial position, operating results and cash flows is available to the Group. If two or more operating segments have similar economic characteristics and satisfy certain conditions, they are aggregated into one single operating segment.

(26) Critical accounting estimates and judgements

The Group continually evaluates the critical accounting estimates and key judgements applied based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

(a) Critical judgments in applying the accounting policies

(i) Classification of financial assets

Significant judgements involved in determining the classification of financial assets include analysis of business model and contractual cash flow characteristics.

Factors considered by the Group in determining the business model for financial asset management at the level of portfolio of financial assets include how the financial asset's performance is evaluated and reported to key management personnel, risks affect the performance of financial assets and how they are managed and how management personnel is compensated.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (26) Critical accounting estimates and judgements (Continued)
 - (a) Critical judgments in applying the accounting policies (Continued)
 - (i) Classification of financial assets (Continued)

The following major judgments exist when assessing whether the contractual cash flow of financial assets is consistent with the basic loan arrangement: whether the principal may change in time distribution during the duration or change in amount due to reasons such as early repayment; whether interest includes only the time value of currency, credit risk, other basic loan risks and considerations for costs and profits. For example, whether the amount paid in advance reflects only the unpaid principal and interest based on unpaid principal and reasonable compensation paid for early termination of the contract.

(ii) Judgement on significant increase in credit risk

The main criteria for the Group to judge the significant increase in credit risk of government clients group is that the overdue days exceed 90 days, or one or more of the following indicators have changed significantly: business environment of the debtor, internal and external credit rating, dramatic changes in actual or expected operating results, and significantly decline in the value of collateral or credit rating of the guarantee provider.

The Group's main criteria for determining that credit impairment of government clients group has occurred is that the overdue days exceed 180 days (i.e., a default has occurred) or one or more of the following conditions are met: the debtor is exposed to significant financial difficulties, enters other debt restructuring or bankruptcy.

The debtors of the government clients group is the local government or the functional department under its jurisdiction, whose fund allocation needs to go through the prescribed approval procedures of budget allocation. Compared with the ordinary debtors, the fund allocation cycle is relatively long, so the Group makes above judgment.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (26) Critical accounting estimates and judgements (Continued)
 - (a) Critical judgments in applying the accounting policies (Continued)
 - (ii) Judgement on significant increase in credit risk (Continued)

The main criteria for the Group to judge the significant increase in credit risk of groups other than government clients group is that the overdue days exceed 30 days, or one or more of the following indicators have changed significantly: business environment of the debtor, internal and external credit rating, dramatic changes in actual or expected operating results, and significantly decline in the value of collateral or credit rating of the guarantee provider.

The Group's main criteria for determining that credit impairment of groups other than government clients group has occurred is that the overdue days exceed 90 days (i.e., a default has occurred) or one or more of the following conditions are met: the debtor is exposed to significant financial difficulties, enters other debt restructuring or bankruptcy.

(b) Critical accounting estimates and key assumptions

The critical accounting estimates and key judgement that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next accounting year are outlined below:

(i) The measurement of ECL

The ECL is calculated based on the EAD and ECL rate, and the ECL rate is determined based on probability of default ("PD") and loss given default ("LGD"). When determining the ECL rate, the Group adjusts its historical data by referring to historical credit loss experience and combining current situation and forward-looking information. When considering the forward-looking information, indicators used by the Group include the risk of economic downturn, external market environment and changes in customers and technology environment. The assumptions relating to the ECL calculation are monitored and reviewed by the Group on a regularly basis. There have been no significant changes in estimation techniques and significant assumptions mentioned above in 2019.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

- (26) Critical accounting estimates and judgements (Continued)
 - (b) Critical accounting estimates and key assumptions (Continued)
 - (ii) Income tax

The Group is subject to income taxes in numerous jurisdictions. There are some transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgment is required from the Group in determining the provision for income taxes in each of these jurisdictions. Where the final identified outcome of these tax matters is different from the initiallyrecorded amount, such difference will impact the income tax expenses and deferred income tax in the period in which such determination is finally made.

(iii) Estimated provision for non-current assets

The Group determines at each balance sheet date whether there is any indication that assets may be impaired. When the current market price of assets decreases significantly compared with the expected significant decline due to the passage of time or normal use and the economic, technological, or legal environment in which the Group operates has undergone major adverse changes recently; market interest rates or other market investment returns increase which affects the discount rate of the present value of future cash flows and the assets are obsolete or has been damaged or has become idle, the Group considers that there are signs of asset impairment. At each balance sheet date, the Group will evaluate the recoverable amount of the long-term assets that have shown signs of impairment. The assessment of the recoverable amount requires the Group to estimate the future cash flow and other conditions. When accounting estimates change, the book value of long-term assets and the amount included in asset impairment losses will also change. Once the impairment provision is accrued, it cannot be reversed.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SIGNIFICANT ACCOUNTING POLICIES AND ACCOUNTING ESTIMATES (Continued)

(27) Significant changes in accounting policies

In 2018, the Ministry of Finance issued the revised 'Accounting Standards for Business Enterprises No. 21 – Leases' ('New Leases Standards') and in 2019, the Ministry of Finance issued the 'Circular on the A to the formats of Corporate Financial Statements for the Year of 2019' (CaiKuai [2019]), the revised Accounting Standards for Business Enterprises No. 7-Non-Monetary Assets Exchange (hereinafter referred to as "Non-Monetary Assets Exchange Standards") and the revised "Enterprise Accounting Standards No. 12-Debt Restructuring" (hereinafter referred to as "Debt Restructuring Standards"). The Group has adopted the above standards and circular to prepare the 2019 financial statements. The revised non-monetary asset exchange standards, debt restructuring standards and new lease standards have no significant impact on financial statements of the Group and the Company. The impact of circular is shown as below:

(a) General enterprise report format modification

(i) The impact on the consolidated and company balance sheets as follows:

	Amount affected					
The nature and the reasons of the changes in accounting policies	Line items affected	December The Group	31 2018 The Company	January The Group	1 2018 The Company	
The Group and the Company splited the account of notes and trade receivables to notes receivable and trade receivables.	Trade receivables Notes receivable Notes and trade receivable	2,081,465 10,295 (2,091,760)	1,687,179 - (1,687,179)	1,930,158 1,900 (1,932,058)	1,663,178 (1,663,178)	

3 TAXATION

(1) The main categories and rates of taxes applicable to the Group are set out below:

Category	Tax base	Tax rate
Enterprise income tax Value added tax ("VAT") (Note(a))	Taxable income Taxable value added amount (Tax payable is calculated using the taxable sales amount multiplied by the applicable tax rate less deductible VAT input of the current year)	0%-25% 3%-16%
City maintenance and construction tax	The payment amount of VAT	5%-7%
Educational surcharge	The payment amount of VAT	3%

(a) Pursuant to the '2019 Circular on Deeply Reform of Adjustment of Tax Rate of Value Added Tax' (The General Administration of Customs of the State Administration of Taxation [2019] 39) jointly issued by the Ministry of Finance, the State Administration of Taxation and the General Administration of Customs, the applicable tax rate of revenue arising from VAT-taxable sales is 13% from 1 April 2019, while it was 16% before then. The applicable tax rate of the Group's VAT taxable income is adjusted accordingly.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 TAXATION (Continued)

(2) Preferential tax policies for enterprise income tax

The information of preferential tax policies granted to the subsidiaries is as below:

Name of subsidiaries	Enterprise income tax rate for 2019	Reason for the preferential tax policy
The Company	15%	According to The Corporate Income Tax Policy of Third-party Enterprises Engaged in Pollution Prevention and Control issued on April 13, 2019(Announcement No.60, 2019, issued by the Ministry of finance, the Taxation Administration, the National Development and Reform Commission and the Ministry of Ecology and Environment), enterprise income tax shall be levied at a reduced rate of 15% for qualified third-party enterprises engaged in pollution prevention and control.
Fuyang Capital Water Co., Ltd.	12.5%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2014 for the first 3 years and reduction half for the next 3 years.
Gui Zhou Capital Water Co., Ltd.	15 %	According to Notice of Guizhou Provincial SAT on Implementation of Preferential Tax Policy Relating to Development of Western Regions, (Qian Guo shui Han [2011] No.19) from 2011 to 2020.
Xi'an Capital Water Co., Ltd.	15 %	According to Notice of Shaanxi Provincial SAT on Issuing Measures for Review and Management of Preferential Tax Policy of Enterprises Relating to Development of Western Regions, (Notice [2010] No. 3) from 2011 to 2020.
Hangzhou Tianchuang Capital Water Co., Ltd.	12.5%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 1 July 2016 for the first 3 years and reduction half for the next 3 years.
Tianjin Caring Technology Development Co., Ltd	15 %	High-tech enterprise entitled to preferential tax policy from 2013 to 2019.
Tianjin Water Recycling Co., Ltd.	income is 90%	According to Cai Shui [2008] No. 47, since 1 January 2008, for revenues generated from products which were in line with national or industry standards, the taxable income amount is 90% of the total revenue.
Karamay Tianchuang Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2017 for the first 3 years and reduction half for the next 3 years.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 TAXATION (Continued)

(2) Preferential tax policies for enterprise income tax (Continued)

The information of preferential tax policies granted to the subsidiaries is as below: (Continued)

Name of subsidiaries	Enterprise income tax rate for 2019	Reason for the preferential tax policy
Linxia Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Bayannur Capital Water Co., Ltd.	Sewage water: 0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
	The taxable	According to Cai Shui [2008] No. 47, since 1 January 2008, for revenues generated from products which were in line with national or industry standards, the taxable income amount is 90% of the total revenue.
Yingshang Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Dalian Oriental Chunliuhe Water Quality Purification Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Shandong Capital Environmental Protection Technology Consultant Co., Ltd.	0%	According to Cai Shui [2009] No. 166, income from engagement in qualified industrial solid waste treatment projects and hazardous waste treatment projects is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.
Hanshou Tianchuang Capital Water Co., Ltd.	0%	According to Cai Shui [2019] No. 67, income from rural drinking water safety projects is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.
Jiuquan Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 TAXATION (Continued)

(3) Preferential tax policies for value-added tax

On 12 June 2015, the Ministry of Finance and the State Administration of Taxation issued the preferential valueadded tax catalogue of products and services which comprehensively utilize resources Caishui [2015] No.78 (hereinafter referred to as the No. 78). According to the No.78, the sewage water processing and recycled water business are required to pay value-added tax since July 1, 2015. 70% of value-added tax paid by the sewage water processing business and 50% value-added tax paid by recycled water business will be refunded. On April 15, 2019, the Ministry of Finance and the State Administration of Taxation issued the "Announcement on Continued Implementation of Tax Preferential Policies for Rural Drinking Water Safety Projects" Caishui [2019] No. 67, stipulating that from January 1, 2019 to December 31, 2020, in the tap water supply business of the Group, the tap water sales income obtained by providing rural residents with domestic water is exempt from value-added tax.

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(1) Cash at bank and on hand

	31 December 2019	31 December 2018
Cash on hand	37	61
Cash at bank	2,066,264	1,808,482
Other cash balances	13,312	17,658
	2,079,613	1,826,201
Including: Bank deposits overseas	8,420	8,499
(a) Cash listed in the cash flow statement comprises:		
	31 December 2019	31 December 2018
Cash at bank and on hand	2,079,613	1,826,201
Less: Restricted bank deposits (Note (i))	(13,312)	(17,658)

Cash listed in cash flow statement (Note 4(38))

 The restricted bank deposits represent the deposit for the purpose of applying for unconditional, irrevocable bank letters of guarantee.

2,066,301

1,808,543

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(2) Notes receivable

	31 December 2019	31 December 2018
Bank acceptance notes Less: Provision for bad debts		10,295
-	16,131	10,295

(a) As at 31 December 2019, the Group has no pledged notes receivable.

(b) As of December 31, 2019, the Group had no endorsements or discounted notes receivable that were not yet due.

(c) Provision for bad debts:

As at 31 December 2019, provision for bad debts by group is analyzed as below:

As at 31 December 2019, the Group measures bad debt provision in accordance with the lifetime expected credit loss for the entire duration, and no provision is deemed necessary. The Group considers that there is no significant credit risk in banker's acceptance and no major loss will be caused by bank default.

(3) Trade receivables

	31 December 2019	31 December 2018
Trade receivables Less: Provision for bad debts	2,573,720 (80,956)	2,131,049 (49,584)
	2,492,764	2,081,465

(a) The ageing analysis of trade receivable is as follows:

	31 December 2019	31 December 2018
Within 1 year	1,854,529	1,457,744
1 to 2 years	641,788	649,268
2 to 3 years	52,987	15,464
3 to 4 years	15,037	7,024
4 to 5 years	7,947	1,549
Over 5 years	1,432	
	2,573,720	2,131,049

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (3) Trade receivables (Continued)
 - (b) As at 31 December 2019, the trade receivables from the top five debtors in respect of outstanding balance are analyzed as below:

	Amount	Provision for bad debts	% of total balance
Trade receivables from the top five debtors	2,139,403	(37,589)	83%

(c) Provision for bad debts:

For the Group's trade receivables, regardless of whether there is a significant financing component, the Group measures the loss according to the expected credit loss for the entire life.

(i) As at 31 December 2019, provision for bad debts by individual is analyzed as below:

	Carrying amount	ECL rate	Provision	Reasons
Tianjin Water Authority Bureau	1,809,061	0.05%	(990)	1)
Qujing Sewage Company	163,735	18.40%	(30,120)	2)
Hangzhou Municipal Facilities				
Development Center	56,757	0.05%	(31)	1)
Guiyang Water Authority Bureau	52,612	0.05%	(29)	1)
Jinghai Development Area Management				
Committee	21,723	24.88%	(5,405)	3)
Xi'an Infrastructure Investment Group	18,424	0.05%	(10)	1)
Tianjin Ziya Environmental Protection				
Industrial Park Co. Ltd	16,797	15.97%	(2,682)	4)
Tianjin City Appearance Sanitation				
Construction Development Co. Ltd	14,513	15.73%	(2,283)	5)
Tianjin Shuangkou Municipal Solid				
Waste Landfill	14,208	36.98%	(5,254)	5)
Zhejiang Xinsanyin Dyeing Co.Ltd	5,731	65.03%	(3,727)	6)
Tianjin Tianbao Municipal				
Administration Co. Ltd	5,174	28.91%	(1,496)	4)
Total	2,178,735		(52,027)	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (3) Trade receivables (Continued)
 - (c) Provision for bad debts: (Continued)
 - (i) As at 31 December 2019, provision for bad debts by individual is analyzed as below: (Continued)
 - 1) As these clients are provincial and municipal governments or their representatives, whose ability to meet their contractual cash flow obligations may not be weakened even if there are adverse changes in the economic and business situation over a long period, the receivables of the Company from Tianjin Water Authority Bureau, Xi'an Capital Water Co., Ltd. from Xi'an Urban Infrastructure Construction Investment Group Co., Ltd., Hangzhou Tianchuang Capital Water Co., Ltd. from Hangzhou Municipal Facilities Development Center, and Guizhou Capital Water Co., Ltd. from Guiyang Water Authority Bureau have a lower credit risk. Based on the historical experience of operation, the Group maintains continuous receipts. Therefore, the Group estimates that the lifetime ECL rate of the receivables is 0.05%.
 - 2) Receivables of Qujing Capital Water Co., Ltd. from Qujing City Water General Company comprise regular sewage treatment fee, tap water fee and price compensation. As the receivables of regular sewage treatment fee and tap water fee have a longer collection period than ordinary government clients and they have higher credit risk, the Group estimates that the lifetime ECL rate is 2%. Considering the debtor's actual performance capacity, historical collection experience and the ageing of the receivables, the Group concludes that the receivables of price compensation have been defaulted and estimates that the lifetime ECL rate is 100%. In summary, the Group expects that the expected credit loss rate of receivables from Qujing City Water General Company in the whole period is 18.40%.
 - 3) Receivables of Tianjin Jinghai Capital Water Co., Ltd from Jinhai Development Area Management Committee comprise conventional sewage treatment fees, whose repayment period is longer than that of general government customers, and are under high credit risk. Taking into account factors such as the debtor's actual performance ability, historical repayment experience, and aging, the Group presumes that it has defaulted and estimates that the lifetime ECL rate is 24.88%.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (3) Trade receivables (Continued)
 - (c) Provision for bad debts: (Continued)
 - (i) As at 31 December 2019, provision for bad debts by individual is analyzed as below: (Continued)
 - 4) Receivables of the Company from Tianjin Tianbao Municipal Administration Co. Ltd and Tianjin Ziya Environmental Protection Industrial Park Co. Ltd comprise contract operation fees, whose repayment period is longer than that of general government customers, and are under high credit risk. Taking into account factors such as the debtor's actual performance ability, historical repayment experience, and aging, the Group presumes that they have defaulted and estimates that the lifetime ECL rate are respectively 28.91% and 15.97%.
 - 5) Receivables of the Company from Tianjin Shuangkou Municipal Solid Waste Landfill and Tianjin City Appearance Sanitation Construction Development Co. Ltd comprise technical services fees, whose repayment period is longer than that of general government customers, and are under high credit risk. Taking into account factors such as the debtor's actual performance ability, historical repayment experience, and aging, the Group presumes that they have defaulted and estimates that the lifetime ECL rate are respectively 36.98% and 15.73%.
 - 6) Receivables of Tianjin Caring Technology Development Co., Ltd. from Zhejiang Xinsanyin Dyeing Co.Ltd comprise construction of related facility and contract operation fees, whose repayment period is longer than that of general customers, and are under high credit risk. Taking into account factors such as the debtor's actual performance ability, historical repayment experience, and aging, the Group presumes that it has defaulted and estimates that the lifetime ECL rate is 65.03%.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (3) Trade receivables (Continued)
 - (c) Provision for bad debts: (Continued)
 - (ii) provision for bad debts by group is analyzed as below:

Group - Government clients except those in provincial capitals and municipalities

	31 December 2019			31		
	Carrying amount	Provision		Carrying amount	Provision	
	Amount	ECL rate	Amount	Amount	ECL rate	Amount
Undue	102,406	5.31%	(5,438)	42,605	0.01%	(4)
1-180 days overdue	107,386	5.31%	(5,702)	63,698	0.11%	(71)
>180 days overdue	57,014	7.46%	(4,255)	64,790	0.50%	(324)
	266,806		(15,395)	171,093	:	(399)

Group – other client

	31 December 2019			31 December 2018		
	Carrying			Carrying		
	amount	Provision		amount	Provision	
	Amount	ECL rate	Amount	Amount	ECL rate	Amount
Undue	41,844	6.70%	(2,804)	34,821	0.10%	(35)
1-90 days overdue	27,352	6.70%	(1,833)	48,523	1.13%	(546)
>90 days overdue	58,983	15.08%	(8,897)	28,572	5.00%	(5,500)
	128,179		(13,534)	111,916	:	(6,081)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (3) Trade receivables (Continued)
 - (c) Provision for bad debts: (Continued)
 - (iii) The bad debts provision accrued in this year is RMB41 million, and bad debts provision collected or reversed is RMB10 million and the carrying amount is RMB10 million. The main collected or reversed amounts are as follow:

	Reason for collection or reversal	Basis and rationality of bad debts provision	Amount collected or reversed	Method of collection or reversal
Tianjin Qudong Culture Media Co. Ltd.	Trade receivables collected	Long Aging	5,291	Collected by cash
Qujing Sewage Company	Trade receivables collected	Long Aging	4,238	Collected by cash
			9,529	

In 2019, the amount of bad debt provision reversed of Tianjin Qudong Culture Media Co. Ltd. is RMB5 million, and the corresponding book balance is RMB5 million. The amount of bad debt provision reversed of Qujing Sewage Company is RMB4 million and the corresponding book balance is RMB4 million.

(4) Advances to suppliers

(a) The ageing of advances to suppliers is analyzed as follows:

	31 December 2019		31 Decem	ber 2018
	Amount	% of total balance	Amount	% of total balance
Within 1 year	37,407	97%	22,431	95%
1 to 2 years	428	1%	202	1%
Over 2 years	748	2%	898	4%
	38,583	100%	23,531	100%

As at 31 December 2019, advances to suppliers of RMB1.2 million (31 December 2018: RMB1.1 million) with aging over one year were mainly for prepaid electricity deposit.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(4) Advances to suppliers (Continued)

(b) As at 31 December 2019, the top five advances to suppliers in respect of outstanding balance of the Group are analyzed as follows:

	Amount	% of total balance
Total amounts of advances to suppliers to the top five debtors in		
respect of outstanding balance	15,179	39%

(5) Other receivables

	31 December 2019	31 December 2018
VAT refund	31,670	10,379
Project deposits	26,847	18,922
Others	6,660	6,871
	65,177	36,172
Less: Provision for bad debts	(21)	(10)
	65,156	36,162

(a) The ageing analysis of other receivables is as follows:

	31 December 2019	31 December 2018
Within 1 year	48,815	19,267
1 to 2 years	4,626	13,177
2 to 3 years	9,046	51
Over 3 years	2,690	3,677
Total	65,177	36,172

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (5) Other receivables (Continued)
 - (b) As at 31 December 2019 and 31 December 2018, other receivables provisioned bad debts by group all belong to stage 1. The analysis is as below:

	31 December 2019			31 December 2018		
	Carrying amount	Provisio	n	Carrying amount	Provisio	n
	Amount	Amount	%	Amount	Amount	%
Project deposit Group:						
Within 1 year	12,688	(7)	0.05%	5,346	(2)	0.05%
1-2 years	2,985	(2)	0.05%	10,362	(4)	0.05%
2 to 3 years	8,950	(5)	0.05%	32	-	0.05%
Over 3 years	2,224	(1)	0.05%	3,182	(1)	0.05%
subtotal	26,847	(15)		18,922	(7)	
Other Group :						
Within 1 year	4,457	(4)	0.10%	3,542	(2)	0.10%
1-2 years	1,641	(2)	0.10%	2,815	(1)	0.10%
2 to 3 years	96	-	0.10%	19	-	0.10%
Over 3 years	466		0.10%	495		0.10%
subtotal	6,660	(6)		6,871	(3)	
total	33,507	(21)		25,793	(10)	

- (c) In 2019, the changes of other receivables' provision of the Group is not significant.
- (d) As of 31 December, 2019, the Group had no other receivables that were past due but not impaired (31 December 2018: Nil).
- (e) As at 31 December 2019, other receivables from the top five debtors in respect of outstanding balance are analyzed as below:

	Nature	Amount	Aging	% of total balance	Provision for bad debts
Tianjin State Taxation Bureau	VAT receivable	24,004	Within 1 year	37%	_
Shijiazhuang Gaocheng District	Project deposits	10,000	Within 1 year	15%	(5)
Construction Investment Co. Ltd.					
Linxia City Water Supply and	Project deposits	8,000	2 to 3 years	12%	(4)
Sewerage Company					
Bayannur City Linhe District State Taxation Bureau	VAT receivable	2,337	Within 1 year	4%	-
Guiyang City Nanming District State	VAT receivable	2,183	Within 1 year	3%	_
Taxation Bureau					
total		46,524		71%	(9)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(5) Other receivables (Continued)

(f) As at 31 December 2019, the Group's analysis of government grants confirmed by the amount receivables is as follows :

	Government grants program	Amount	Aging
The Company	VAT refund	24,004	Within 1 year
Inner Mongolia Bayannur Capital Water Co., Ltd.	VAT refund	2,337	Within 1 year
Guizhou Capital Water Co., Ltd.	VAT refund	2,183	Within 1 year
Xi'an Capital Water Co., Ltd.	VAT refund	1,333	Within 1 year
Tianjin Water Recycling Co., Ltd.	VAT refund	921	Within 1 year
Fuyang Capital Water Co., Ltd.	VAT refund	311	Within 1 year
Baoying Capital Water Co., Ltd.	VAT refund	229	Within 1 year
Wendeng Capital Water Co., Ltd.	VAT refund	196	Within 1 year
Anguo Capital Water Co., Ltd.	VAT refund	96	Within 1 year
Wuhan Tianchuang Capital Water Co.,Ltd.	VAT refund	60	Within 1 year
	_	31,670	

Based on the previous year's collection situation, the VAT refund is expected to be fully collected in 2020.

(6) Inventories

(a) The Group's inventory is classified as follows:

		1 December 2019 Provision for decline in the value of			31 December 2018 Provision for decline in the value of	
	Ending balance	inventories	Carrying amount	Ending balance	inventories	Carrying amount
Raw materials	10,888	_	10,888	9,897	_	9,897
Finished goods	3,529	-	3,529	3,746	-	3,746
Spare parts and low cost consumables	388		388	348		348
	14,805	_	14,805	13,991		13,991

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(7) Other current and non-current assets

	31 December 2019	31 December 2018
Other current assets:		
Input VAT to be deducted	52,605	98,605
Input VAT to be verified	13,642	10,572
Anguo Sewage Assets(a)	6,257	33,065
Anguo Tap Water Assets(b)	_	3,848
Income tax prepaid		10,598
	72,504	156,688

(a) As at 31 December, 2019, the Group conducted an impairment assessment of the relevant assets of Anguo Sewage Treatment Plant and made provision for asset impairment of RMB27 million.

(b) In July 2019, the Group received RMB53 million in compensation for Anguo Tap Water Assets and recognized asset disposal gain of RMB49 million (Note 4(33)).

	31 December 2019	31 December 2018
Other non-current assets:		
Input VAT to be deducted	169,965	49,122
Prepayments of construction	18,221	50,927
Others	7,733	9,132
	195,919	109,181

(8) Long-term receivables and non-current assets due within one year

	31 December 2019	31 December 2018
Toll road concession	253,812	276,613
Less: Bad debt provision	(138)	(138)
	253,674	276,475
Less: Listed in non-current assets due within one year	(17,224)	(22,789)
	236,450	253,686

Receivables from toll road concession represent the amortized cost, using effective interest method, calculated with reference to a guaranteed minimum future traffic flow over the concession period.

Tianjin Municipal Transportation Commission is a public institution under the Tianjin municipal government, which has low credit risk. According to historical experience, the Company can collect the receivables within the agreed period. Therefore, the Company estimates that the ECL rate of this receivable item is 0.05%.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(9) Long-term equity investments

	31 December 2019	31 December 2018
Investment in an associate (a) Less: Impairment of Long-term equity investments (c)	217,358 (22,358)	217,358 (22,358)
	195,000	195,000

(a) Investment in associate

	Туре	Place of registration	Registered capital	Shareholding/ Voting rights (%)
Tianjin International Machinery Co., Ltd. (i)	Limited company	Tianjin	120,000	27.50%
Tianjin Bihai Sponge City Co., Ltd. (ii)	Limited company	Tianjin	650,000	30.00%

(i) Tianjin International Machinery Co., Ltd. ("International Machinery") is a Sino-foreign joint venture registered in the Tianjin Economics Development Area. The businesses of International Machinery include research and development, production and sale of valve and actuating device, heater exchanger and the whole set, environment protection equipment, and general mechanical equipment.

The movements of the Group's investment in International Machinery are as follows:

	Initial investment cost	31 December 2018	New investment	Share of net loss under equity method	Cash dividends or profit declared	Provision for impairment accrued	31 December 2019	Provision for impairment at the end of the year
International Machinery	33,000							(22,358)

The Group fully provided provision of impairment of RMB22 million for long-term equity investment in International Machinery in 2016.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (9) Long-term equity investments (Continued)
 - (a) Investment in associate (Continued)
 - (ii) Tianjin Bihai Sponge City Co., Ltd. ("Bihai Sponge City ") is a limited liability company registered in Tianjin. The businesses of Bihai Sponge City include construction and operation of water treatment projects; procurement and maintenance of water treatment equipment; ecological maintenance; tourism development; ecological management; construction, operation and management of sponge city project; construction and operation of municipal engineering. Bihai Sponge City was registered and established on 30 July 2018 and is still in the initial construction period.

The movements of the Group's investment in Bihai Sponge City are as follows:

	Initial investment cost	31 December 2018	New investment	Share of net loss under equity method	Cash dividends or profit declared	Provision for impairment accrued	31 December 2019	Provision for impairment at the end of the year
Bihai Sponge City	195,000	195,000					195,000	

(b) Excess losses incurred by joint ventures and associated associates:

	Accumulated unrecognised losses at the beginning of the year	Unrecognised income in the current year	Accumulated unrecognised losses at the end of the year
International Machinery	480	(480)	

(c) Provision for impairment of long-term equity investments

	31 December 2018	Additions	Disposals	31 December 2019
International Machinery	22,358	_		22,358

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(10) Other equity instruments investment

	31 December 2019	31 December 2018
Equity of unlisted company – Tianjin Beifang Rencaigang Company Ltd.	2,000	2,000
	31 December 2019	31 December 2018
Tianjin Beifang Rencaigang Company Ltd. – Cost – Accumulated fair value changes	2,000	2,000
	2,000	2,000

Other equity instruments investment is the unlisted equity investments of Tianjin Beifang Rencaigang Company Limited held by the Group and the shareholding ratio is 6.10%. The Group does not participate in or influence the financial and operational decisions of Tianjin Beifang Rencaigang Company Limited in any way. Therefore, the Group has no significant influence on the above-mentioned invested company and accounts for it as other equity instruments.

(11) Investment properties

	Buildings
Cost 31 December 2018 Transfer to fixed assets	118,408 (118,408)
31 December 2019	
Accumulated depreciation 31 December 2018 Charge for the year Transfer to fixed assets	(34,356) (378) 34,734
31 December 2019	
Net Book Value	
31 December 2019	
31 December 2018	84,052

The Group changed the Tianjin Ningfa Building and canteen originally used for external rental to its own use on January 1, 2019. The Tianjin Zhongshui Company's house in Tianjin originally used for external rental was changed to its own use in September 2019. All of above have been fully transferred into fixed assets.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(12) Fixed assets and construction in progress

(a) Fixed assets

	Buildings and structures (note (i))	Machinery and equipment	Motor vehicles & others	Total
	Self-use	Self-use	Self-use	
Cost –				
31 December 2018	312,739	299,585	69,933	682,257
Transfers from construction in progress	97,363	136,751	530	234,644
Transfers from investment properties	118,408	-	-	118,408
Other additions in the current year	4,236	7,924	10,417	22,577
Disposals in the current year	(1,285)	(1,080)	(3,273)	(5,638)
31 December 2019	531,461	443,180	77,607	1,052,248
Accumulated depreciation –				
31 December 2018	(101,369)	(183,760)	(50,487)	(335,616)
Charge for the year (note ii)	(13,436)	(26,426)	(4,000)	(43,862)
Transfers from investment properties	(34,734)	-	-	(34,734)
Disposals in the current year		606	3,151	3,757
31 December 2019	(149,539)	(209,580)	(51,336)	(410,455)
Carrying Amount –				
31 December 2019	381,922	233,600	26,271	641,793
31 December 2018	211,370	115,825	19,446	346,641

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (12) Fixed assets and construction in progress (Continued)
 - (a) Fixed assets (Continued)
 - (i) According to the policies of the Tianjin Municipal Government (the "Tianjin Government"), the Company is mandated to improve the quality standards of the effluent from two of its sewage treatment plants in Tianjin. As a result, the operations of the Company's Xianyang Road Sewage Plant and Dongjiao Water Plant (include matched recycling water plant) have to be relocated and conducted in another new plants to be constructed by the Tianjin Government (namely the "New Xianyang Road Sewage Plant and the New Dongjiao Water Plant"). All of the construction costs for the new plants (together with the associated land costs) and relocation costs will be borne by the Tianjin Government.

The New Xianyang Road Water Plant as freely provided by the Tianjin Government becomes ready for use on 1 August 2019 and all of the operations of the Xianyang Road Sewage Plant has been relocated to the New Xianyang Road Sewage Plant and the Group has transferred its entire interests in the Xianyang Road Sewage Plant (including the land) to the Tianjin Government on the same date (the "Assets Transfer Date") (the "Relocation and Non-monetary Assets Exchange Arrangement"). All of the key terms of the service concession right agreement governing the operations of the Xianyang Road Water Plant (the "Concession Right Agreement") remains unchanged and continued to be applicable to the Company's operations of the New Xianyang Road Sewage Plant till the end of the Concession Right Agreement. The Tianjin Government has also approved that the Company can increase the tariff rates for its sewage processing services (to certain extent) so as to compensate the higher operating costs for maintaining the improved quality standards of the effluent from the New Xianyang Road Sewage Plant.

As of the Assets Transfer Date, the assets and concession right as recognised by the Group in connection with operations of the Xianyang Road Sewage Plant were included in property, plant and equipment, right-of use assets (representing the land use rights) and intangible assets with the carrying amounts of RMB19 million (with cost amounts and accumulated depreciation amounts of RMB96 million and RMB76 million respectively), RMB4 million (with cost amounts and accumulated depreciation amounts of RMB5 million and RMB1 million respectively) and RMB685 million(with cost amounts and accumulated amounts of RMB10 million respectively).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (12) Fixed assets and construction in progress (Continued)
 - (a) Fixed assets (Continued)

The entire Relocation and Non-monetary Assets Exchange Arrangement is conducted based on the instructions of the Tianjin Government and the Group has not been exposed to or benefit from any significant changes in risks and rewards as a result of that arrangement. In view of this, the Directors of the Company are of the view that the Relocation and Non-monetary Assets Exchange Arrangement will not have any impact on the carrying amounts of property, plant and equipment, right of use assets and intangible assets as previously recognised by the Group and the related assets (including the concession right) will continue to be depreciated or amortised on the consistent straight-line basis over their respective remaining useful lives or concession right period (as applicable).

The relocation of the Dongjiao Water Plant under similar arrangement as mentioned above is expected to be commenced and completed in 2020.

- (ii) The Group's depreciation expenses of RMB35 million (2018: RMB37 million) have been included in cost of sales and RMB9 million (2018: RMB5 million) in general and administrative expenses.
- (iii) As at 31 December 2019, the certificate of title to outsourced assets included in fixed assets, land use rights and non-monetary exchange assets with cost of RMB184 million and carrying amount of RMB120 million (31 December 2018: cost of RMB173 million and carrying amount of RMB117 million) has yet to be or is in the process of being transferred to the Group. As these assets are supported by legal sale and purchase agreements, the management of the Company believes that the titles will be received in due course without any legal barrier or additional significant cost.
- (iv) As at 31 December 2019, fixed assets with cost of RMB206 million (31 December 2018: Nil) and a carrying amount of approximately RMB204 million were used as collateral for long-term borrowings of RMB194 million (Note 4(17) (a)).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(12) Fixed assets and construction in progress (Continued)

(b) Construction in progress

Name	Budgeted amount	31 December 2018	Increase in the current year	Transfer to fixed assets	Transfer to intangible assets	31 December 2019	Proportion of expenditures incurred to budgeted amount	Progress	The accumulated balance of capitalization of requested fee	Including: borrowing costs capitalized in current year	Capitalisation rate	Source of funds
Vienne Deed Common Plane 150	02 020		94,120		(94,120)		100%	1000/	47	47	6 610/	C
Xianyang Road Sewage Plant 150 thousand tons emergency project	93,930	-		-	,	-		100%			4.41%	Special Ioan and Self-raised fund
Fuyang-yindong sewage water processing plant project	175,421	-	59,075	-	(59,075)	-	34%	34%	479	479	4.90%	Special loan and Self-raised fund
Fuyang-jieshou city sewage operation project II	487,249	-	151,347	-	(151,347)	-	31%	31%	5,190	5,190	5.15%	Special loan and Self-raised fund
Tianjin-Zhongshui Jizhuangzi Relocation Pipeline Maintenance Project	28,101	-	26,029	(26,029)	-	-	93%	100%	-	-	-	Special loan and Self-raised fund
Hefei-Heifei Taochong sewage water processing plant PPP project	585,895	-	202,014	-	(202,014)	-	33%	33%	8,166	8,166	4.41%	Special Ioan and Self-raised fund
Honghu-Honghu township sewage water	437,770	-	201,414	-	(201,414)	-	92%	92%	5,368	3,508	4.41%	Special loan and Self-raised fund
processing plant PPP project Baoying-xianhe sewage water processing	99,806	-	41,373	-	(41,373)	-	41%	41%	1,140	1,027	5.10%	Special loan and
plant project Xinjiang-Karamay PPP Project of sewage	269,980	-	10,247	-	(10,247)	-	84%	100%	3,970	-	-	Self-raised fund Special loan and
operation Shandong-Yishui&Tancheng City Solid Waste Treatment project	640,000	148,954	214,493	(205,889)	-	157,558	57%	57%	8,957	8,328	5.15%	Self-raised fund Special loan and Self-raised fund
Anhui-Hefei Yuwan sewage treatment	175,100	-	14,060	-	(14,060)	-	81%	100%	4,003	-	-	Special loan and
project Dalian-Dalian Chunliuhe sewage	220,730	-	33,012	-	(33,012)	-	88%	88%	5,355	3,563	4.81%	Self-raised fund Special loan and
operation project Changsha-Ningxiang sewage water processing and recycling project	95,730	-	9,794	-	(9,794)	-	91%	100%	1,050	-	-	Self-raised fund Special loan and Self-raised fund
Tianjin-Jiayuan Tianchuang Heiniucheng Roads energy station project	209,975	-	32,167	-	(32,167)	-	77%	100%	167	-	-	Special loan and Self-raised fund
JiuQuan Suzhou Sewage Treatment Plant PPP Project	594,120	-	33,168	-	(33,168)	-	5%	5%	781	781	4.44%	Special loan and Self-raised fund
Chibi sewage water processing plant upgrading project	214,680	-	122,568	-	(122,568)	-	56%	56%	2,240	2,239	4.44%	Special loan and Self-raised fund
Guizhou-Shibing PPP Project	99,500	-	42,876	-	(42,876)	-	51%	51%	731	607	4.44%	Special loan and Self-raised fund
Jiayuan Shenchuang- Houtai Scenic Area Energy Station Project	117,380	-	11,015	-	(11,015)	-	15%	15%	272	235	4.44%	Special loan and Self-raised fund
Jinghai-Tianyu sewage water processing plant upgrading project	85,583	-	15,636	-	(15,636)	-	35%	35%	354	-	-	Special loan and Self-raised fund
Jinning-Ninghe sewage water processing plant upgrading project	25,649	-	8,557	-	(8,557)	-	86%	86%	354	80	4.90%	Special loan and Self-raised fund
Others		1,985	12,255	(2,726)	(9,858)	1,656			14,866	2,109	4.44%	Special loan and Self-raised fund
		150,939	1,335,220	(234,644)	(1,092,301)	159,214			63,490	36,359		

As at 31 December 2019, bank borrowing of RMB194 million (31 December 2018: RMB80 million) is secured by property and equipment under construction with original cost of RMB13 million (31 December 2018: RMB149 million) (note 4(17) (a)).

As at 31 December 2019, the Group has no provision for construction in progress (31 December 2018: Nil).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(13) Intangible assets

	31 December 2019	31 December 2018
Concession rights (a) Land use rights (b) Technical know-how and computer software (c)	11,697,244 58,080 4,118	10,309,775 60,358 4,694
	11,759,442	10,374,827

(a) The movements of concession rights are as follows:

Cost 1 January 2018 Transfers from construction in progress Business combination Other additions	8,649,998 2,170,036 1,124,058 495,049
31 December 2018 Transfers from construction in progress Other additions	12,439,141 1,092,301 757,320
31 December 2019	14,288,762
Accumulated amortisation 1 January 2018 Charge for the year	(1,733,319) (343,964)
31 December 2018 Charge for the year	(2,077,283) (462,152)
31 December 2019	(2,539,435)
Provision for impairment 31 December 2018 and 31 December 2019	(52,083)
Net Book Value 31 December 2019	11,697,244
31 December 2018	10,309,775

 ⁽i) As at 31 December 2019, certain concession right with carrying amount of approximately RMB3,323 million (cost of RMB2,646 million) (31 December 2018: carrying amount of RMB2,758 million with cost of RMB3,323 million) has been used as collateral for the loan of RMB527 million (31 December 2018: RMB321 million) (Note 4(17) (a)).

(ii) The remaining amortization period of concession rights range from 10 to 30 years.
For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(13) Intangible assets (Continued)

(b) The movements of land use rights are as follows:

Cost 31 December 2018 and 31 December 2019	65,445
Accumulated amortisation 31 December 2018 Charge for the year	(5,087) (2,278)
31 December 2019	(7,365)
Net Book Value 31 December 2019	58,080
31 December 2018	60,358

- (i) As at 31 December 2019, bank borrowing of RMB194 million (31 December 2018: RMB80 million) is secured by land use right with carrying amount of RMB26 million and original cost of RMB28 million (31 December 2018: carrying amount of RMB27 million and original cost of RMB28 million).
- (ii) As at 31 December 2019, the land use right includes assets exchanged for non-monetary assets with an original cost of RMB5 million and a carrying amount of approximately RMB4 million (31 December 2018: Nil). Whose certificate of title to outsourced assets included has yet to be or is in the process of being transferred to the Group. As these assets are supported by legal sale and purchase agreements, the management of the Company believes that the titles will be received in due course without any legal barrier or additional significant cost.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(13) Intangible assets (Continued)

(c) The movements of technical know-how and software are as follows:

Cost 31 December 2018 Increase in the current year	11,946
31 December 2019	12,183
Accumulated amortisation 31 December 2018 Charge for the year	(7,252) (813)
31 December 2019	(8,065)
Net Book Value 31 December 2019	4,118
31 December 2018	4,694

(d) In 2019, the amounts of amortization charged to cost of sales and general and administrative expenses were RMB462 million (2018: RMB345 million) and RMB3 million (2018: RMB1 million), respectively.

(e) The Research and development expenses of the Group in 2019 are all related to the Research and development of the production process of environmental protection equipment, which are all included in profit or loss when incurred.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(14) Provision for asset impairment and loss

	31 December 2018	1 January 2019	Increase in the current year	Decrease in the c	urrent vear	31 December 2019
		,		Reversal	Write-off	
Provision for trade receivables (Notes(i))	49,584	49,584	40,901	(9,529)	-	80,956
Including: Individual provision for bad debts	43,104	43,104	18,452	(9,529)	-	52,027
Combined provision for bad debts	6,480	6,480	22,449	_	-	28,929
Provision for other receivables Provision for long-term receivables (including	10	10	11	-	-	21
other non-current assets due with one year)	138	138				138
Subtotal	49,732	49,732	40,912	(9,529)		81,115
Provision for intangible assets	52,083	52,083	-	_	_	52,083
Provision for other current assets	39,435	39,435	26,808	-	-	66,243
Provision for Long-term equity investments	22,358	22,358				22,358
Subtotal	113,876	113,876	26,808			140,684
Total	163,608	163,608	67,720	(9,529)	_	221,799

 (i) In 2019, the Company's subsidiary Tianjin Capital Alternative Energy Technology Co., Ltd and Qujing Capital Water Co., Ltd has collected part of the trade receivables which had been recognised bad debt provision.

(15) Trade payables, other payables, taxes payable and contract liabilities

	31 December 2019	31 December 2018
Trade payables (a)	231,293	176,398
Other payables	1,534,014	1,458,045
Taxes payable	86,188	68,893
Contract liabilities	558,472	469,185
	2,409,967	2,172,521

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(15) Trade payables, other payables, taxes payable and contract liabilities (Continued)

(a) Ageing of Trade payables is analyzed as below:

	31 December 2019	31 December 2018
Within 1 year Over 1 year (i)	164,526 66,767	143,620 32,778
Total	231,293	176,398

- (i) As at 31 December 2019, trade payables are mainly for inventory purchase. Trade payables aged over one year are RMB67 million (31 December 2018: RMB33 million), mainly representing payables for source water of RMB34 million from the subsidiary Qujing Capital Water Co., Ltd, and the subsidiary Tianjin Zhongshui Co., Ltd.'s project payable of RMB21 million. Since such amount has not been received from Qujing City Water General Company and the pipeline connection project of Zhongshui Company has not been completed, so the payment has not been finalized.
- (b) Other payables comprise:

	31 December 2019	31 December 2018
Construction costs payable and deposits	1,224,453	1,328,505
Payable for purchase of fixed assets and concession rights	171,392	13,892
Interests payable for debentures payable	42,974	43,768
Dividends payable	1,172	1,912
Others	94,023	69,968
	1,224,453	1,458,045

As at 31 December 2019, other payables of RMB665 million (31 December 2018: RMB453 million) are aged over one year, which mainly represent construction costs payable and guarantee deposits for Jieshou Sewage operation PPP project, Karamay Sewage processing PPP project and Linxia upgrading projects and etc. The balance is yet to be settled as the projects have not been completed.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(15) Trade payables, other payables, taxes payable and contract liabilities (Continued)

(c) Balances of taxes payable

	31 December 2019	31 December 2018
Unpaid VAT Enterprise income tax payable	37,256 32,083	26,213 34,658
Others	16,849	8,022
	86,188	68,893

(d) Contract Liabilities

	31 December 2019	31 December 2018
For pipeline connection service	508,138	453,602
For Sewage processing service fee	12,071	-
For sale of equipment	11,263	-
For cooling and heating service	8,014	4,074
For hazard waste treatment	6,197	-
Received from project of Han Gu	4,876	4,467
Others	7,913	7,042
	558,472	469,185

As the year ended 2019, the amount of RMB173 million (2018: RMB257 million) which is included in the beginning balance of contract liabilities has realized to income. The Group expects that contract liabilities will be carried forward to recognize revenue through normal operating processes, and therefore will be recognized as current liabilities.

(16) Accrued payroll

	31 December 2019	31 December 2018
Short-term employee benefits payable (a) Defined contribution plans payable (b)	65,891 209	53,724
	66,100	53,942

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(16) Accrued payroll (Continued)

(a) Short-term employee benefits payable

	31 December 2018	Increase in the current year	Decrease in the current year	31 December 2019
Wages and salaries, bonuses,				
allowances and subsidies	46,947	243,423	(232,158)	58,212
Staff welfare	-	13,052	(12,951)	101
Social security contributions	91	17,991	(17,961)	121
Including: Medical insurance	82	16,337	(16,311)	108
Work injury insurance	1	548	(547)	2
Maternity insurance	8	1,106	(1,103)	11
Housing funds	19	39,582	(39,537)	64
Labor union funds and employee				
education funds	6,667	6,502	(5,776)	7,393
Others		200	(200)	
	53,724	320,750	(308,583)	65,891

(b) Defined contribution plans payable

	31 December 2018	Increase in the current year	Decrease in the current year	31 December 2019
Basic pensions	211	29,325	(29,344)	192
Annuity	-	9,717	(9,708)	9
Unemployment	7	860	(859)	8
	218	39,902	(39,911)	209

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued) 4

(17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities

	Note	31 December 2019	31 December 2018
Non-current:			
Long-term borrowings	(a)	3,818,136	2,265,905
Less: Current portion due within one year	(a)	(811,380)	(213,952)
		3,006,756	2,051,953
Debentures payable	(b)	1,797,389	1,796,363
Long-term payables	(c)	290,891	295,784
Less: Current portion due within one year	(c)	(28,239)	(29,417)
		262,652	266,367
Other non-current liabilities	(e)	36,000	38,000
Current:			
Current portion of long-term borrowings	(a)	811,380	213,952
Current portion of long-term payables	(c)	28,239	29,417
Current portion of provision (Note 4(18))		12,933	
Current portion of non-current liabilities		852,552	243,369
Short-term borrowings	(d)	200,000	200,000
Other current liabilities	(e)	20,250	

(a) Long-term borrowings

Summary of current portion of long-term borrowings by terms:

	Note	31 December 2019	31 December 2018
Secured	(i)	22,221	2,220
Guaranteed	(ii)	247,459	37,000
Unsecured		504,000	174,732
Pledged	(iii)	37,700	
		811,380	213,952

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities (Continued)

(a) Long-term borrowings (Continued)

Summary of non-current portion of long-term borrowings by terms:

	Note	31 December 2019	31 December 2018
Secured	(iv)	172,210	77,700
Guaranteed	(v)	1,656,915	110,000
Unsecured		646,000	1,543,540
Pledged	(vi)	531,631	320,713
		3,006,756	2,051,953

- (i) As at 31 December 2019, the current portion of bank borrowings of RMB22 million (31 December 2018: RMB2 million) is mortgaged by land use right (Note 4(13) (b)), property and equipment under construction (Note 4(12) (b)) and fixed assets (Note 4(12) (a)) of Shandong Capital Environmental Protection Technology Development Co., Ltd..
- (ii) As at 31 December 2019, the current portion of bank borrowings of RMB39 million (31 December 2018: RMB37 million) is guaranteed by City Infrastructure Construction and Investment for Xi'an Capital Water Co., Ltd., the subsidiary of the Company (Note 8(5) (b)). The current portion of bank borrowings of RMB208 million (2018: Nil) is guaranteed by the company for its subsidiaries.
- (iii) As at 31 December 2019, the current portion of bank borrowings of RMB38 million (2018: Nil) is pledged by all earnings and equity of Jingu and Beicang upgrading project under the Group's concession right (Note 4(13) (a)).
- (iv) As at 31 December 2019, the non-current portion of bank borrowings of RMB172 million (31 December 2018: RMB78 million) is mortgaged by land use right (Note 4(13) (b)), property and equipment under construction (Note 4(12) (b)) and fixed assets (Note 4(12) (a)) of Shandong Capital Environmental Protection Technology Development Co., Ltd..
- (v) As at 31 December 2019, the non-current portion of bank borrowings of RMB71 million (31 December 2018: RMB110 million) is guaranteed by City Infrastructure Construction and Investment for Xi'an Capital Water Co., Ltd, the subsidiary of the Company (Note 8(5) (b)), the non-current portion of bank borrowings of RMB1,586 million (31 December 2018: Nil) is guaranteed by the company for its subsidiaries.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities (Continued)
 - (a) Long-term borrowings (Continued)
 - (vi) As at 31 December 2019, the non-current portion of bank borrowing of RMB489 million (31 December 2018: RMB321 million) is pledged by all earnings and equity of Jingu and Beicang upgrading project under the Group's concession right (Note 4(13) (a)). The non-current portion of bank borrowing of RMB43 million (2018: Nil) is secured by account receivables of Hebei Gaocheng Economic Development Zone Management Committee under the concession service agreement.
 - (vii) As at 31 December 2019, these long-term borrowings bear interest rates between 4.275% and 5.463%(31 December 2018: between 4.275% and 5.463%).

(b) Debentures payable

	31 December 2018 (including due within 1 year)	Issue	Payment	Amortization	31 December 2019
Debentures payable					
– Par value	1,800,000	_	_	_	1,800,000
- Transaction cost	(3,637)			1,026	(2,611)
	1,796,363			1,026	1,797,389

General information of debentures payable are as follows:

	Per Value	Issuance date	Maturity	Issuance amount
Corporate Debenture (note (i))	700,000	2016-10-25	5 years	700,000
Corporate Debenture (note (ii))	1,100,000	2018-04-26	5 years	1,100,000

Interests payable of debentures are analyzed as follows:

		Interest Accrued			
		Interest accrued	Interest paid		
	31 December 2018	in the current year	in the current year	31 December 2019	
Corporate Debenture (note (i))	4,021	21,911	(21,910)	4,022	
Corporate Debenture (note (ii))	38,952	56,870	(56,870)	38,952	
	42,973	78,781	(78,780)	42,974	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities (Continued)
 - *(b) Debentures payable* (Continued)
 - (i) On 25 October 2016, the Company issued a debenture at par value of RMB700 million on The Shanghai Stock Exchange as approved by the Securities Regulatory Commission of China [2016]1896. The fixed interest rate of 3.13% has been accrued and settled per annum. The debenture will be due for repayment on 25 October 2021. The principal will be repaid on maturity. As at 31 December 2019, the interest accrued on debentures payable to be paid within one year is RMB4 million, which is listed in other payables.
 - (ii) On 26 April 2018, the Company issued a debenture at par value of RMB1,100 million on The Shanghai Stock Exchange as approved by the Securities Regulatory Commission of China [2016]1896. The fixed interest rate of 5.17% has been accrued and settled per annum. The debenture will be due for repayment on 26 April 2023. The principal will be repaid on maturity. As at 31 December 2019, the interest accrued on debentures payable to be paid within one year is RMB39 million, which is listed in other payables.
 - (c) Long-term payables

	Payables	31 December 2019 Unrecognised financial charges	Total	Payables	31 December 2018 Unrecognised financial charges	Total
Payable for assets acquisition	445,444	(154,553)	290,891	462,321	(166,537)	295,784

(i) Information of long-term payables is as follows:

	Maturity date	Effective interest rate	Total	Current portion	Ending balance
Tianjin Sewage Company ("Sewage Company")	20 March 2041	5.94%	290,891	28,239	262,652

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities (Continued)
 - (c) Long-term payables (Continued)
 - (i) Information of long-term payables is as follows (Continued):

As at 31 December 2019, long-term payable to Sewage Company is the consideration payable in respect of the acquisition of sewage water processing assets from Sewage Company, net of unrecognised financing charges.

Pursuant to Assets Transfer Agreement From Foreign Banks Loans About Haihe River Tianjin Sewage Processing Project and Beicang Sewage Processing Project (the "Transfer Agreement"), Sewage Company sold to the Company certain sewage processing assets. The down payment is RMB261 million, and remaining payments will be settled in RMB translated at exchange rates prevailing on each repayment date over the remaining years. The fair value of the initial recognition of the payable balance is RMB430 million, which was calculated based on discounted future cash payments and discount rate of 5.94%.

(ii) The balance of long-term payable are denominated in the following currencies:

	31 December 2019	31 December 2018
JPY USD	205,685	205,116 90,668
	290,891	295,784

(iii) The amounts of long-term payables (including interest) are denominated in the following currencies:

	31 December 2019	31 December 2018
ЈРҮ	344,880	351,147
USD	100,564	111,174
	445,444	462,321

The balance denominated in USD bears an interest rate at 6-month LIBOR plus 0.6%, whilst the balance denominated in JPY bears fixed interest rates at 1% and 1.55% per annum respectively.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- (17) Long-term borrowings, debentures payable, long-term payables, short-term borrowings and other liabilities (Continued)
 - (c) Long-term payables (Continued)
 - (iv) The long-term payables mature as follows. As at 31 December 2019, the current portion of long-term payables of RMB28 million (31 December 2018: RMB29 million) was classified as current liabilities.

	31 December 2019	31 December 2018
Within 1 year	28,239	29,417
1-2 years	27,465	28,551
2-5 years	78,625	81,380
Over 5 years	156,562	156,436
	290,891	295,784

(d) Short-term borrowings

(e)

		31 December 2019	31 December 2018
	China Merchants Bank	200,000	200,000
	Summary of short-term borrowings by terms		
		31 December 2019	31 December 2018
		31 December 2019	51 December 2018
	Unsecured	200,000	200,000
)	Other liabilities		
		31 December 2019	31 December 2018
	Non-current:		
	– Cooling service fee	36,000	38,000
	0		
	Current:		
	– Entrusted loan to be paid within one year	20,250	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(18) Provisions

	31 December 2018	Increase in the current year	Decrease in the current year	31 December 2019
Maintenance cost of sewage water processing plants Less: Provisions expected to be paid within one year		16,010 (12,933)	(1,481)	24,598 (12,933)
	10,069	3,077	(1,481)	11,665

(19) Deferred income

Deferred revenue represents the subsidies received from governmental authorities with respects to Group's certain construction and research and development projects. Details of deferred revenue are as below:

	31 December 2018	Additions	Recognised in other income	31 December 2019	Relating to assets/costs
Sewage water processing project:					
– Jingu	1,258,545	-	(51,285)	1,207,260	assets
– Jingu upgrading project	163,000	-	(6,520)	156,480	assets
 Beichen upgrading project 	90,000	-	(3,600)	86,400	assets
 Xianyang Road-upgrading project 	59,079	-	(2,363)	56,716	assets
– Dongjiao upgrading project	41,456	-	(1,658)	39,798	assets
 Ningxiang upgrading project 	18,279	-	(931)	17,348	assets
– Beishiqiao upgrading project	10,354	-	(719)	9,635	assets
– Linxia reconstruction and extension project	7,600	2,000	(208)	9,392	assets
– Chibi upgrading project	-	5,500	-	5,500	assets
Water recycling project:					
– Jingu	206,393	-	(6,895)	199,498	assets
– Dongjiao	21,081	-	(675)	20,406	assets
– Beichen	18,112	_	(525)	17,587	assets
– Xianyanglu	13,200	-	(856)	12,344	assets
Heating and cooling supply service project	180,357	38,147	(8,235)	210,269	assets
Others	13,629	4,087	(6,647)	11,069	costs
Total	2,101,085	49,734	(91,117)	2,059,702	

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4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(20) Deferred tax assets and deferred tax liabilities

(a) Deferred income tax assets

(i) Deferred income tax assets before offsetting

	31 December 2019		31 Decemb	er 2018
	Deductible temporary difference	Deferred income tax assets	Deductible temporary difference	Deferred income tax assets
Provision for assets	69,322	17,330	_	_
Accrued liabilities	16,010	2,402	-	_
Accrued expenses	10,000	2,500		
	95,332	22,232		
Including: Expected to be recovered				
within one year (inclusive)		4,440		-
Expected to be recovered after one year		17,792		
		22,232		

(b) Unrecognised deferred income tax assets

 Deductible temporary differences and deductible losses that are not recognised as deferred tax assets are analyzed as follows:

	31 December 2019	31 December 2018
Deductible temporary difference – provision for assets	121,205	163,608
Deductible losses	58,667	43,950
Accrued liabilities	8,588	10,069
	188,460	217,627

(ii) Deductible losses that are not recognised as deferred tax assets will expire in the following years:

	31 December 2019	31 December 2018
2019	_	18,056
2020	6,243	6,243
2021	5,124	5,124
2022	3,466	3,466
2023	11,061	11,061
2024	32,773	
	58,667	43,950

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(20) Deferred tax assets and deferred tax liabilities (Continued)

(c) Deferred income tax liabilities before offsetting

	31 December 2019		31 December 2018	
	Taxable temporary differences	Deferred income tax liabilities	Taxable temporary differences	Deferred income tax liabilities
Amortization of intangible assets	521,412	130,353	500,328	125,082
Business combination	53,028	13,257	54,920	13,730
	574,440	143,610	555,248	138,812
Including:				
Expected to be recovered within one year (inclusive)		4,848		8,296
Expected to be recovered after one year		138,762		130,516
		143,610		138,812

(d) The net balances of deferred income tax assets and deferred income tax liabilities after offsetting are shown below:

	31 December 2019		31 Decembe	er 2018
	Set-off amount	After offsetting the balance	Set-off amount	After offsetting the balance
Deferred income tax assets	18,023	4,209	-	-
Deferred income tax liabilities	18,023	125,587	_	138,812

(21) Share capital

Movement of the Company's authorized, issued and fully paid up capital is set out below. All of the Company's shares are ordinary shares with par value of RMB1.

	Circulating A shares	Circulating H shares	Total
At 31 December 2019, 31 December 2018 and 31 December 2017	1,087,228	340,000	1,427,228

All the A-shares and H-shares rank pari passu in all respects.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(22) Capital surplus, surplus reserve and undistributed profits

(a) Capital surplus

	31 December 2018	Increase in the current year	Decrease in the current year	31 December 2019
Share premium A subsidiary reformed as a stock	382,311	-	-	382,311
limited company Capital Increase by minority shareholders	16,804 31,909			16,804 31,909
	431,024			431,024
	31 December 2017	Increase in the current year	Decrease in the current year	31 December 2018
Share premium A subsidiary reformed as a stock	382,311	-	-	382,311
limited company Capital Increase by minority shareholders(i)	16.004			16,804
1		31,909		31,909

(i) In 2018, a then wholly-owned subsidiary of the Group introduced an new strategic investor. The amount as contributed by the new strategic investors in excess of its proportionate share of the net assets of the subsidiary, which has been credited to capital reserve during the year ended 31 December 2018.

(b) Surplus reserve

	31 December 2018	Increase in the current year	Decrease in the current year	31 December 2019
Statutory surplus reserve	517,107	41,143		558,250
	31 December 2017	Increase in the current year	Decrease in the current year	31 December 2018
Statutory surplus reserve	479,907	37,200		517,107

Pursuant to the PRC Companies Law and the Company's Articles of Association, the Company is required to appropriate 10% of its net profit for the year to the statutory surplus reserve, which can be ceased till the reserve reaches 50% of the registered capital. The statutory surplus reserve can be used to make up for the loss or increase the paid in capital after approval from the appropriate authorities.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(22) Capital surplus, surplus reserve and undistributed profits (Continued)

(c) Undistributed profits

	2019	2018
Undistributed profits at the beginning of the year Add: Net profit attributable to owners of the parent for the current year Less: Appropriation for statutory surplus reserve Ordinary share dividends payable (note (i))	3,442,844 507,107 (41,143) (151,285)	2,810,790 501,168 (37,200)
Undistributed profits at the end of the year	3,757,523	3,442,844

- (i) As at 14 May 2019, the board of shareholders proposed a cash dividend in respect of year ended 31
 December 2019 of RMB1.06 (gross tax) for every 10 shares to all shareholders on the basis of 1,427
 million shares issued. Cash dividends to be distributed amounted to RMB151 million.
- (ii) As at 26 March 2020, the board of directors proposed that the Company shall distribute a cash dividend of RMB1.07 (gross tax) per share to all shareholders, a total of RMB153 million based on the issued shares. The above proposal is subject to the approval of the general meeting of shareholders (note 10 (1)).

(23) Revenue and cost of sales

	2019		2018	
	Revenue	Cost of sales	Revenue	Cost of sales
Principal operations Other operations	2,662,361 189,092	1,799,789 140,015	2,260,132 187,383	1,413,986 144,570
	2,851,453	1,939,804	2,447,515	1,558,556

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(23) Revenue and cost of sales (Continued)

(a) Revenue from principal operations and cost of sales

Analysis by the nature of services is as below:

	2019		2018	
	Revenue from		Revenue from	
	principal operations	Cost of sales	principal operations	Cost of sales
Processing of sewage water	2,025,026	1,387,280	1,626,375	1,046,667
Water recycling and connection project	283,813	211,365	349,860	219,724
Tap water supplying	105,374	76,523	93,261	62,377
Heating and cooling supply services	101,377	70,126	91,015	58,790
Sale of environmental protection equipment	44,386	19,374	35,282	18,418
Hazardous waste treatment	14,100	4,939	-	-
Others	88,285	30,182	64,339	8,010
	2,662,361	1,799,789	2,260,132	1,413,986

Analysis by locations is as follows:

	2019	2019		2018		
	Revenue from	Cost of sales	Revenue from principal operations	Cost of sales		
	principal operations	Cost of sales	principal operations	Cost of sales		
Tianjin	1,599,439	1,026,646	1,397,530	810,188		
Hangzhou	254,208	181,455	284,062	197,866		
Xi'an	146,976	110,642	120,122	89,835		
Qujing	112,855	79,868	106,997	74,814		
Others	548,883	401,178	351,421	241,283		
	2,662,361	1,799,789	2,260,132	1,413,986		

(b) Revenue from other operations and cost of sales

	2019		2018	2018		
	Revenue from		Revenue from			
	other operations	Cost of sales	other operations	Cost of sales		
Contract operation income	168,871	125,866	139,110	127,813		
Technical service fee	10,727	7,837	23,258	7,472		
Agent construction services	1,936	917	10,024	3,517		
Rental income(i)	1,013	2,260	7,071	3,716		
Others	6,545	3,135	7,920	2,052		
	189,092	140,015	187,383	144,570		

 (i) The Group's rental income comes from the rental of its own buildings and structures. For year ending 31 December 2019, there's no variable rental income based on a certain percentage of the lessee's sales.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS(Continued)

(23) Revenue and cost of sales (Continued)

(c) The Group's operating income listed as follows:

					2019				
	Pı Tianjin	ocessing of sewage Hangzhou	Others	Recycled water and pipeline connection	Heating and cooling supply	Tap water	Sale of environmental protection equipment	Others	Group
Revenue	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	102,385	2,662,361
Of which: confirm at a point in time	-	-	-	-	-	-	-	18,875	18,875
Confirm over time	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	83,510	2,643,486
Other operating income								189,092	189,092
	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	291,477	2,851,453

					2018				
	P: Tianjin	rocessing of sewage Hangzhou	Others	Recycled water and pipeline connection	Heating and cooling supply	Tap water	Sale of environmental protection equipment	Others	Group
Revenue Of which: confirm at a point in time	858,211	284,062	484,102	349,860	91,015	93,261	35,282	64,339	2,260,132
Confirm over time Other operating income	858,211	284,062	484,102	349,860	91,015	93,261	35,282	64,339 187,383	2,260,132 187,383
	858,211	284,062	484,102	349,860	91,015	93,261	35,282	251,722	2,447,515

As at 31 December 2019, the Group's main service includes sewage water processing service, recycled water operations service and tap water operations service. Service bills are regularly issued to customers, based on contract agreed price and actual sewage water treatment capacity, tap water and recycling water supply. And the amount of bills represent the entity's progress toward complete satisfaction of the performance obligation to transfer each distinct good or service in the series to customers. And there is no consideration amount which is not included in the transaction price, thus it's not included in the required information to be disclosed for the transaction price allocated to the remaining performance obligation.

As at 31 December 2019, the consideration for pipeline connection services of RMB556 million (31 December 2018: RMB454 million) of which the contracts were signed but the performance obligation is not yet fully completed, will be recognised by percentage of completion in following years.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS(Continued)

(23) Revenue and cost of sales (Continued)

(c) The Group's operating income listed as follows: (Continued)

As at 31 December 2019, the consideration for heating supply services of RMB8 million (31 December 2018: RMB8 million) of which the contracts were signed but the performance obligations is not yet fully completed, will be recognised in 2020; the consideration for contract operation services of RMB61 million (31 December 2018: RMB61 million) of which the contracts were signed but the performance obligations is not yet fully completed, RMB52 million, RMB8 million and RMB1 million will be recognised respectively in 2020, 2021 and 2022; the consideration for agent construction service of RMB13 million (31 December 2018: RMB14 million) of which the contracts were signed but the performance obligations is not yet fully completed, will be recognised in 2020; a contract of road tolls service fee of RMB571 million (31 December 2018: RMB633 million) was signed but the performance obligations is not yet fully completed, among which the Group expects to recognise RMB62 million as revenue in every year from 2020 to 2028, and RMB13 million as revenue in 2029.

(24) Taxes and surcharges

	2019	2018	Tax base
Land use tax	16,820	15,705	RMB1.5-30 per square meter
City maintenance and construction tax	10,740	12,828	7%/5%of the VAT paid
Property tax	7,591	7,365	Self-use: 1.2% (deducted 30% of the original value of the property) Rental: 12% of the rental income
Educational surcharge	4,956	7,087	2%/3% of the VAT paid
Local educational surcharge	2,958	3,126	2% of the VAT paid
Others	2,651	3,577	
	45,716	49,688	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

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5 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS(Continued)

(25) Selling expenses and general and administrative expenses

	2019		2018	
	General and administrative	C.II:	General and administrative	C.III:
	expenses	Selling expenses	expenses	Selling expenses
Employee benefits	114,069	3,660	85,244	4,864
Consulting service fees	10,786	2,054	9,931	-
Depreciation of fixed assets	8,564	17	4,506	15
General office expenses	6,114	23	3,794	12
Travelling, meeting and business				
entertainment expenses	5,874	611	5,709	503
Expenses of secretary of the board	4,789	-	4,475	-
Audit fees	3,300	-	3,300	-
Repair and maintenance expenses	3,358	-	3,107	-
Amortisation of intangible assets	2,884	-	1,492	-
Utilities	2,506	-	2,700	-
Other taxes	1,638	-	2,088	_
Others	4,779	710	2,750	23
	168,661	7,075	129,096	5,417

(26) Research and development expenses

	2019	2018
Raw materials consumption	7,680	350
Employee benefits	6,775	8,652
Repair and maintenance expenses	1,801	166
Travelling, meeting and business entertainment expenses	192	9
Utilities	136	-
Consulting service fees	70	321
Depreciation of fixed assets	8	359
General office expenses	7	7
Others	1,256	575
	17,925	10,439

(27) Financial expenses

	2019	2018
Loan Interest expenses	250,341	233,574
Less: Amount capitalized on qualifying assets	(36,359)	(34,800)
Interest expenses	213,982	198,774
Less: Interest income	(23,951)	(53,779)
Including: From long-term receivables	(9,405)	(10,029)
From bank deposits	(14,546)	(43,750)
Exchange losses	8,813	16,543
Others	552	448
	199,396	161,986

In 2019, the exchange loss on the long-term payables denominated in JPY and US dollar were RMB9 million (In 2018: RMB17 million of the exchange loss).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(28) Expenses listed by nature

The cost of sales, selling expenses, general and administrative expenses and research and development expenses in the income statement are listed as follows by nature:

	2019	2018
Amortisation of intangible assets	465,243	346,422
Raw materials consumption	352,215	190,667
Employee benefits	350,018	286,101
Utilities	342,274	314,546
Repair and maintenance expenses	181,978	105,194
Sewage mud processing expenses	93,930	97,018
Recycled water pipeline connection cost	92,234	152,892
Depreciation of fixed assets and investment properties	44,240	44,830
Factory environment, detection and fire prevention fee	36,759	29,355
Construction cost of environmental equipment	36,202	18,613
Travelling, meeting and business entertainment expenses	21,390	14,403
Consulting service fees	20,416	15,274
Network maintenance expenses	17,330	17,416
General office expenses	9,412	7,054
Toll road management fee	7,120	7,120
Expenses of secretary of the board	4,789	4,475
Audit fees	3,300	3,300
Other taxes	2,663	2,464
Others	51,952	46,364
	2,133,465	1,703,508

(29) Other Income

	2019	2018	Related to assets/incomes
Government Grants (a)	108,103	73,140	Assets/Incomes
VAT refund	58,874	99,512	Incomes
Withholding and paying individual income tax refund	12	171	Incomes
	166,989	172,823	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(29) Other Income (Continued)

Details of government grants (a)

			Related to
	2019	2018	assets/incomes
Compensation for construction of Jingu sewage processing plant	51,285	51,285	Assets
Capital Alternative cooling and heating subsidy	8,385	5,947	Assets/Incomes
Compensation for construction of Jingu recycling water plant	6,895	4,285	Assets
Allowance for Jingu-upgrading energy conservation	6,520	-	Incomes
Xianning Green Industry Support Fund	5,989	-	Incomes
Special funds for Research and development center projects	5,939	-	Incomes
Allowance for Beichen-upgrading energy conservation	3,600	-	Incomes
Electricity subsidy for sewage treatment in Hanzhou	3,392	-	Incomes
Special construction fund of Xianyanglu upgrading project	2,363	2,363	Assets
Special construction fund of Dongjiao sewage water processing plant	1,658	1,658	Assets
Operation subsidy for Bayannur Capital Water Co., Ltd.	1,547	-	Incomes
Municipal sludge allowance of Xi'an company	1,457	1,200	Incomes
Special allowance for sewage treatment in Qujing	752	1,045	Incomes
Special development fund of Caring's industry	_	1,500	Incomes
Others	8,321	3,857	Assets/Incomes
	108,103	73,140	

(30) Investment Income

		2019	2018
	Dividends income from other equity instruments investment		200
(31)	Assets impairment losses		
		2019	2018
	Provision for impairment of other current assets (note 4 (7)(a))	26,808	
(32)	Credit impairment losses		
		2019	2018
	Trade receivables losses	31,372	12,825
	Other receivables losses Long-term receivables losses	11	10 138
	0		
		31,383	12,973

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(33) Gains/(Losses) on disposals of assets

	2019	2018	Amount recognised in non-recurring profit or loss in 2019
Gains on disposals of other current assets (note 4(7)(b)) Gains/(losses) on disposals of fixed assets	48,703 1,294	(373)	48,703 1,294
	49,997	(373)	49,997

(34) Non-operating income

	2019	2018	Amount recognised in non-recurring profit or loss in 2019
Government Grants	-	5,341	-
Others	2,469	1,543	2,469
	2,469	6,884	2,469

(35) Non-operating expenses

	2019	2018	Amount recognised in non-recurring profit or loss in 2019
Donation	2,379	-	2,379
Losses on disposal of fixed assets	590	527	590
Jizhuangzi sewage treatment plant relocation expenditure	_	1,703	-
Others	1,622	1,820	1,622
	4,591	4,050	4,591

(36) Income tax expenses

	2019	2018
Current income tax calculated based on tax law and related regulations Deferred income tax	118,021 (17,434)	163,631 4,433
	100,587	168,064

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(36) Income tax expenses (Continued)

The reconciliation from income tax calculated based on the applicable tax rates and total profits presented in the consolidated financial statements to the income tax expenses is set below:

	2019	2018
Total profit	629,549	694,844
Calculated at applicable income tax rates (25%)	157,387	173,711
Effect of favorable tax rates	(33,195)	(3,552)
Income not subject to tax	(37,070)	(47,596)
Costs, expenses and losses not deductible for tax purposes	21,664	46,675
Utilization of previously tax temporary differences for which no deferred income tax asset was recognised	(7,818)	(3,423)
Recognition of previously unrecognized deductible temporary differences	(6,118)	_
Utilization of previously deductible tax losses for which no deferred income tax assets was recognised	(2,456)	(516)
Deductible losses for which no deferred income tax asset was recognised	8,193	2,765
Income tax expenses	100,587	168,064

(37) Earnings per share

(a) Basic earnings per share

Basic earnings per share is calculated based on the profit attributable to owners of the parent of RMB507 million (2018: RMB501 million) and weighted average number of ordinary shares of 1,427 million shares in issue during the year (2018: 1,427 million shares).

	2019	2018
Consolidated net profit attributable to ordinary shareholders of the Company Weighted average number of ordinary shares in issue (thousand shares)	507,107 1,427,228	501,168 1,427,228
Basic earnings per share (RMB Yuan)	0.36	0.35
Including: – Basic earnings per share for operations on a going concern – Basic earnings per share for discontinued operations	0.36	0.35

(b) Diluted earnings per share

Diluted earnings per share is calculated by dividing net profit attributable to ordinary shareholders of the Company adjusted based on the dilutive potential ordinary shares by the adjusted weighted average number of ordinary shares outstanding. As there were no dilutive potential ordinary shares in 2019 (2018: Nil), diluted earnings per share equal to basic earnings per share.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(38) Notes to the cash flow statements and supplementary information

(a) Reconciliation of net profit to cash flows from operating activities

	2019	2018
Net profit	528,962	526,780
Add:		
Provision for asset impairments	26,808	-
Credit impairment losses	31,383	12,973
Depreciation of fixed assets and investment properties	44,240	44,830
Amortisation of intangible assets	465,243	346,422
Net (gains)/losses from disposal of fixed assets	(49,407)	900
Net financial expenses	222,795	215,317
Investment gains	_	(200)
Increase in deferred income assets	(4,209)	-
Amortisation of deferred income	(91,117)	(70,278)
Decrease/(increase) in deferred tax liabilities	(13,225)	4,433
(Increase)/decrease in inventories	(814)	4,121
Decrease in operating receivables	(535,682)	(210,182)
Increase/(decrease) in operating payables	259,956	(140,865)
Net cash flows from operating activities	884,933	734,251
Net movement in cash		
Cash at the end of the year	2,066,301	1,808,543
Less: Cash at the beginning of the year	(1,808,543)	(1,893,689)
Net increase/(decrease) in cash	257,758	(85,146)

(b) Under the Restoration and Non-monetary Assets Exchange Arrangement as mentioned in Note 12(a) (i), the Company has transferred its entire interests in the Xianyang Road Sewage Plant (including the land) to the Tianjin Government on 1 August 2019 in exchange for the new operating plant as freely provided by the Tianjin Government to continue the related sewage processing operations till the end of the related concession right agreement.

(c) Cash listed in the cash flow statement comprises:

	2019	2018
Cash Including: Cash on hand Cash at bank	37 2,066,264	61 1,808,482
Cash listed in cash flow statement	2,066,301	1,808,543

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

(38) Notes to the cash flow statements and supplementary information (Continued)

(d) Cash received relating to other operating activities

	2019	2018
Government grants received	66,720	50,502
Interest income from bank deposits	14,546	43,750
Deposit on project bids received	9,865	84,495
Others	2,467	1,534
	93,598	180,281

(e) Cash paid relating to other operating activities

	2019	2018
Deposit on project bids paid	17,790	29,133
Consulting service fees	16,210	13,231
Travelling, meeting and business entertainment expenses	6,677	6,213
Repair and maintenance expenses	5,159	3,107
Expenses of secretary of the board	4,789	4,475
Financial expenses	552	-
Others	15,078	12,775
	66,255	68,934

(f) Net cash received from disposals of fixed assets

	2019	2018
Carrying amount of disposals of fixed assets	1,881	1,643
Carrying amount of disposals of other current assets	3,848	-
Net gains from disposal of other current assets	48,703	-
Net losses from disposal of fixed assets	(590)	(527)
Net gains/(losses) from disposal of fixed assets	1,294	(373)
Net cash received from disposals of fixed assets	55,136	743

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 CHANGE IN CONSOLIDATION SCOPE

In 2019, the Company contributed RMB128 million to set up Hebei Guojin Tianchuang Sewage Water Processing Co., Ltd.; RMB34 million to set up Hanshou Tianchuang Capital Water Co., Ltd. and RMB158 million to set up Jiuquan Capital Water Co., Ltd.. The shareholding ratio is 59%, 75% and 89% respectively.

6 EQUITY IN OTHER ENTITIES

(a) Subsidiaries

Name of subsidiaries	Type of subsidiary	Major business location	Place of registration	Nature of business and business activity	Shareholdi Direct	ng (%) Indirect	Establishment
Qujing Capital Water Co., Ltd.	А	Qujing	Qujing	Processing of sewage water, tap water supply	87	-	Capital contribution
Guizhou Capital Water Co., Ltd. Baoying Capital Water Co., Ltd. Hangzhou Tianchuang Capital Water Co., Ltd. Tianjin Capital New Materials Co., Ltd.	A A A A	Guizhou Baoying Hangzhou Tianjin	Guizhou Baoying Hangzhou Tianjin	Processing of sewage water Processing of sewage water Processing of sewage water Manufacturing and sale of new	95 70 70 71		Capital contribution Capital contribution Capital contribution Capital contribution
Fuyang Capital Water Co., Ltd.	В	Fuyang	Fuyang	building materials Processing of sewage water	100		Capital contribution
Tianjin Capital Water Co., Ltd. Tianjin Capital Environmental Protection (Hong Kong) Co., Ltd.	B	Hong Kong	Hong Kong	Processing of sewage water	100	-	Capital contribution
Wendeng Capital Water Co., Ltd. Tianjin Jing Hai Capital Water Co., Ltd.	B B	Wendeng Tianjin	Wendeng Tianjin	Processing of sewage water Processing of sewage water	100 100	-	Capital contribution Capital contribution
Tianjin Water Recycling Co., Ltd.	В	Tianjin	Tianjin	Production and sales of recycled water, development and construction of water recycling facilities, and technical consulting for water recycling business	100	-	Capital contribution
Xi'an Capital Water Co., Ltd. Tianjin Caring Technology Development Co., Ltd	B A	Xi'an Tianjin	Xi'an Tianjin	Processing of sewage water Environment governance, technical consulting, etc.	100 48	12	Capital contribution Capital contribution
Anguo Capital Water Co., Ltd. Wuhan Tianchuang Capital Water Co.,Ltd.	B B	Anguo Wuhan	Anguo Wuhan	Processing of sewage Processing of sewage water, tap water supply	100 100	-	Capital contribution Capital contribution
Tianjin Jinning Capital Water Co., Ltd.	В	Tianjin	Tianjin	Processing of sewage water	100	-	Capital contribution
Tianjin Capital Alternative Energy Technology Co., Ltd	В	Tianjin	Tianjin	Energy saving, innovative energy research, consulting and transfer services, property management	100	-	Capital contribution
Yingshang Capital Water Co., Ltd.	В	Yingshang	Yingshang	Processing of sewage water	100	-	Capital contribution
Shandong Capital Environmental Protection Technology Development Co., Ltd.	А	Shandong	Shandong	Investment in and construction of sewage water processing facilities	55	-	Capital contribution
Changsha Tianchuang Environmental Protection Co., Ltd.	А	Changsha	Changsha	Processing of sewage water	81	-	Capital contribution
Karamay Tianchuang Capital Water Co., Ltd. Anhui Tianchuang Capital Water Co., Ltd.	A B	Karamay Hefei	Karamay Hefei	Processing of sewage water Processing of sewage water	90 100	-	Capital contribution Capital contribution
Linxia Capital Water Co., Ltd	B	Linxia	Linxia	Processing of sewage water	100	_	Capital contribution
Dalian Oriental Chunliuhe Water Quality Purification Co., Ltd.	A	Dalian	Dalian	Processing of sewage water	64	-	Capital contribution
Changsha Tianchuang Capital Water Co., Ltd.	А	Changsha	Changsha	Processing of sewage water	80	-	Capital contribution
Inner Mongolia Bayannur Capital Water Co., Ltd.	A	Bayannur	Bayannur	Processing of sewage water, producing and sailing of recycled water, supplying tap water	70	-	Business combination
Honghu Tianchuang Capital Water Co., Ltd.	А	Honghu	Honghu	Processing of sewage water	85	-	Capital contribution
Hefei Capital Water Co., Ltd.	В	Hefei	Hefei	Processing of sewage water	100	-	Capital contribution
Deqing Capital Water Co., Ltd.	А	Deqing	Deqing	Processing of sewage water	90	-	Capital contribution
Hebei Guojin Tianchuang Sewage Water Processing Co., Ltd.	А	Gaocheng	Gaocheng	Processing of sewage water, producing and sailing of recycled water	59	-	Capital contribution
Hanshou Tianchuang Capital Water Co., Ltd.	A	Hanshou	Hanshou	Supplying tap water	75	-	Capital contribution
Jiuquan Capital Water Co., Ltd.	А	Jiuquan	Jiuquan	Processing of sewage water and reusing of reclaimed water	89	-	Capital contribution

A: Holding subsidiary

B: Wholly-owned subsidiary

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

6 EQUITY IN OTHER ENTITIES (Continued)

(b) Subsidiaries with significant minority interests

			Declared distribution of	Minority
	Minority	Minority	cash dividends	interests as at
Name	interests ratio	interests in 2019	in 2019	31 December 2019
Hangzhou Tianchuang Capital Water Co., Ltd.				
("Hangzhou Company")	30.00%	9,327	-	214,057
Qujing Capital Water Co., Ltd.				
("Qujing Company")	13.44%	4,263	-	40,287
Dalian Oriental Chunliuhe Water Quality				
Purification Co., Ltd. ("Dalian Company")	36.12%	1,345	-	25,333
Bayannur Capital Water Co., Ltd.				
("Bayannur Company")	30.00%	4,040	-	337,398
Baoying Capital Water Co., Ltd.				
("Baoying Company")	30.00%	1,202	780	33,525
Tianjin Caring Technology Development Co., Ltd.				
("Caring Company")	40.00%	3,514	-	49,650
Shandong Capital Environmental Protection				
Technology Development Co., Ltd.				
("Shandong Company")	45.00%	(2,066)	-	82,112
Hebei Guojin Tianchuang Sewage Water				
Processing Co., Ltd. ("Guojin Company")	41.00%	(25)	-	89,148

The major financial information of the significant holding subsidiaries of the Group is listed below:

Balance Sheet

			31 Decemb	er 2019		
	Current	Non-current	Total	Current	Non-current	Total
	assets	assets	assets	liabilities	liabilities	liabilities
Hangzhou Company	277,436	722,580	1,000,016	153,740	132,751	286,491
Qujing Company	150,284	251,500	401,784	87,197	19,350	106,547
Dalian Company	23,146	192,075	215,221	64,647	80,788	145,435
Bayannur Company	90,362	1,061,028	1,151,390	14,870	11,861	26,731
Baoying Company	43,553	117,614	161,167	3,705	51,396	55,101
Caring Company	146,105	8,032	154,137	29,747	266	30,013
Shandong Company	57,661	425,597	483,258	104,957	194,431	299,388
Guojin Company	58,759	200,676	259,435		42,000	42,000
	847,306	2,979,102	3,826,408	458,863	532,843	991,706
			31 Decemb	er 2018		
	Current	Non-current	Total	Current	Non-current	Total
	assets	assets	assets	liabilities	liabilities	liabilities
Hangzhou Company	325,273	784,561	1,109,834	158,784	268,617	427,401
Qujing Company	129,511	265,004	394,515	72,858	58,124	130,982
Dalian Company	12,294	171,341	183,635	61,879	55,692	117,571
Bayannur Company	36,593	1,095,010	1,131,603	6,680	13,728	20,408
Baoying Company	25,427	81,683	107,110	2,191	259	2,450
Caring Company	133,640	10,342	143,982	28,340	303	28,643
Shandong Company	35,503	207,963	243,466	42,705	77,700	120,405
	698,241	2,615,904	3,314,145	373,437	474,423	847,860

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

6 EQUITY IN OTHER ENTITIES (Continued)

(b) Subsidiaries with significant minority interests (Continued)

Income Statement

		2019		
	Revenue	Net profit	Total comprehensive income	Net cash flows from operating activities
Hangzhou Company	254,539	31,091	31,091	130,900
Qujing Company	116,868	31,703	31,703	27,157
Dalian Company	29,652	3,723	3,723	19,238
Bayannur Company	85,615	13,466	13,466	9,578
Baoying Company	20,154	4,006	4,006	7,865
Caring Company	122,493	8,785	8,785	12,899
Shandong Company	14,387	(4,590)	(4,590)	4,873
Guojin Company		(62)	(62)	(56)
	643,708	88,122	88,122	212,454

		2018		
	Revenue	Net profit	Total comprehensive income	Net cash flows from operating activities
Hangzhou Company	284,476	59,991	59,991	138,010
Qujing Company	110,327	8,414	8,414	24,941
Dalian Company	4,726	650	650	257
Bayannur Company	55,016	1,256	1,256	9,466
Baoying Company	19,189	4,262	4,262	11,309
Caring Company	114,129	9,453	9,453	7,803
Shandong Company	368	(3,623)	(3,623)	(2,260)
	588,231	80,403	80,403	189,526

The information above is the amount before offsetting between the companies in the Group.

(c) Non-essential information of associates

	2019	2018
Joint ventures: Total book value of investment The total of the following items calculated according to the shareholding ratio	195,000	195,000
Net profit (i)	-	-
Other comprehensive income (i)	-	-
Total comprehensive income	-	-

 Both net profit and other comprehensive income have considered the fair value of identifiable assets and liabilities at the time of investment and the adjustment effect of the unified accounting policies.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

7 SEGMENT INFORMATION

The reportable segments of the Group are the business units that provide different products or service, or operate in the different areas. Different businesses or areas require different technologies and marketing strategies, the Group, therefore, separately manages the production and operation of each reportable segment and evaluates their operating results respectively, in order to make decisions about resources to be allocated to these segments and to assess their performance.

The Group considers the business from both service and geographical perspective. From a service perspective, management assesses the performance of processing of sewage water, recycled water, pipeline connection, heating and cooling service, sales of tap water and sale of environmental protection equipment. Processing of sewage water is further evaluated on a geographical basis (Tianjin plants, Hangzhou plant and other plants). The environmental protection equipment sold by the Group is mainly the result of scientific research transformation of the technical know-how in the environment protection area. Other services include contract operation services, rental income and technical services etc. These are not separately presented within the reportable operating segments, but included in the 'all other segments' column. The assets are allocated based on the operations of the segment and the physical location of the asset. The liabilities are allocated based on the operations of the segment. Expenses indirectly attributable to each segment are allocated to the segments based on the proportion of each segment's revenue.

(a) Segment information as at and for the year ended 31 December 2019 is as follows:

	Pro Tianjin	ocessing of sewag Hangzhou	e Others	Recycled water and pipeline connection	Heating and cooling supply	Tap water	Sale of environ- mental protection equipment	All other segments	Group
)	8							
Revenue from external customers (Note 4(23))	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	291,477	2,851,453
Cost for operations	(731,946)	(181,455)	(473,879)	(211,365)	(70,126)	(76,523)	(19,374)	(175,136)	(1,939,804)
Interest income (Note 4(27))	12,498	1,820	2,874	4,463	855	(70,525)	1,186	(17),130) 227	23,951
Interest expenses (Note 4(27))	(126,783)	(11,077)	(69,493)	(56)	(3,197)	(1,712)	(9)	(1,655)	(213,982)
Results before share of	(120)/00)	(11)0777)	(0),1)0)	()))	(5,177)	(1)/ 1=)	())	(1)0)))	(215)502)
profits of an associate	244,286	43,250	137,120	84,287	38,342	24,583	16,219	41,462	629,549
Segment total profit	244,286	43,250	137,120	84,287	38,342	24,583	16,219	41,462	629,549
Income tax expenses	(31,569)	(12,410)	(15,234)	(23,099)	(7,753)	(920)	(374)	(9,228)	(100,587)
Segment net profit	212,717	30,840	121,886	61,188	30,589	23,663	15,845	32,234	528,962
Net profit									528,962
Depreciation expenses	(19,523)	_	(605)	(19,108)	(296)	(1,132)	(521)	(3,055)	(44,240)
Amortization	(170,702)	(62,648)	(177,327)	(7,996)	(23,186)	(17,330)	()21)	(6,053)	(465,243)
				(/ (/ / / / / / / / / / / / / / / / / /				(0,0)0)	
Segment assets Long-term equity investment	6,779,197	981,119	6,625,106	985,548	705,829	507,909	57,814	1,153,285	17,795,807
in associate									195,000
Total assets									17,990,807
Total liabilities	6,090,474	286,491	2,714,905	846,306	374,378	32,434	11,257	492,375	10,848,620
Non-current assets addition (i)	121,112		1,585,870	54,656	53,621	73,918		226,177	2,115,354

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

7 SEGMENT INFORMATION (Continued)

(b) Segment information as at and for the year ended 31 December 2018 is as follows:

	Pro	ocessing of sewage	e	Recycled water and pipeline connection	Heating and cooling supply	Tap water	Sale of environ- mental protection equipment	All other segments	Group
	Tianjin	Hangzhou	Others			*		Ũ	
Revenue from external									
customers (Note 4(22))	858,211	284,062	484,102	349,860	91,015	93,261	35,282	251,722	2,447,515
Cost for operations	(503,123)	(197,866)	(345,678)	(219,724)	(58,790)	(62,377)	(18,418)	(152,580)	(1,558,556)
Interest income (Note 4(27))	33,398	1,748	2,218	14,206	792	15	386	1,016	53,779
Interest expenses (Note 4(27))	(145,836)	(15,461)	(31,211)	(57)	(2,138)	(2,319)	(18)	(1,734)	(198,774)
Results before share of									
profits of an associate	250,901	82,976	107,125	136,315	33,110	16,842	6,238	61,337	694,844
Segment total profit	250,901	82,976	107,125	136,315	33,110	16,842	6,238	61,337	694,844
Income tax expenses	(60,718)	(23,281)	(17,708)	(37,366)	(8,366)	(4,619)	(163)	(15,843)	(168,064)
Segment net profit	190,183	59,695	89,417	98,949	24,744	12,223	6,075	45,494	526,780
Net profit									526,780
Depreciation expenses	(235)	_	(4,217)	(25,071)	(16)	(48)	(513)	(14,730)	(44,830)
Amortization	(131,095)	(60,781)	(114,353)	(5,157)	(18,310)	(14,061)	(1,026)	(1,639)	(346,422)
Timortization									
Segment assets Long-term equity investment	6,430,423	1,090,937	5,136,425	863,109	611,827	376,511	48,816	934,400	15,492,448
in associate									195,000
Total assets									15,687,448
Total liabilities	5,838,269	349,501	1,351,428	816,293	290,659	40,542	9,711	376,078	9,072,481
Non-current assets addition (i)	923,737		2,499,828	182,955	45,520	150,780	2,871	162,481	3,968,172

(i) Non-current assets do not include financial assets, long-term equity investments, or deferred tax assets.

The Group's revenue from external customers comes from China.

The Group's non-current assets are located within China.

The income from processing of sewage water segment of RMB1,100 million is derived from a single customer, accounting for 39% of the Group's total revenue (For the year ended 31 December 2018: RMB847 million, 35%).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

8 RELATED PARTY RELATIONSHIPS AND TRANSACTIONS

(1) Information of the parent of the Company

(a) General information of the parent company

Municipal Limited company Investment	Tianjin, China	Yu Zhongpeng	Development and management of municipal infrastructures

The Company's ultimate controlling party is City Infrastructure Construction and Investment.

(b) Registered capital and changes in registered capital of the parent company

	31 December 2018	Increase in the year	Decrease in the year	31 December 2019
Municipal Investment	1,820,000			1,820,000

(c) The percentages of shareholding and voting rights in the Company held by the parent company

	31 Decemb	per 2019	31 December 2018		
	Share holding (%)	Voting Rights (%)	Share holding (%)	Voting Rights (%)	
Municipal Investment	50.14%	50.14%	50.14%	50.14%	

(2) Information of subsidiaries

The general information and other related information of the subsidiaries is set out in Note 6.

(3) Information of associates

The general information and other related information of the associates is set out in Note 4(9) (a).

(4) Information of other related parties

Relationship with the Group

Tianjin Lecheng Properties Co., Ltd.Controlled by the same ultimate holding companyTianjin City Resource Operation Co., Ltd.Controlled by the same ultimate holding companyTianjin Haihe Construction Developing Investment Co., Ltd.Controlled by the same ultimate holding companyTianjin Jinrongcheng Property Management Co. Ltd.Controlled by the same ultimate holding company

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

8 RELATED PARTY RELATIONSHIPS AND TRANSACTIONS (Continued)

(5) Related party transactions

In addition to the related party information shown elsewhere in the financial statements, the following is a summary of significant related party transactions between the Group and its related parties during the year:

(a) Purchase or sale of goods, provide or receive of services

Purchase of goods, receive of services:

Related Party Name	Nature of Transaction	2019	2018
Tianjin Jinrongcheng Property Management Co. Ltd.	Property management services		2,682
Rendering of services			
Related party name	Nature of transaction	2019	2018
City Infrastructure Construction and Investment	Commission income from contract operation	84,738	56,296
Tianjin Lecheng Properties Co., Ltd. City Infrastructure Construction and	Income from heating and cooling supply Commission income from construction	33,165	38,639
Investment Tianjin Haihe Construction Developing	agent service Income from sewage plant construction	1,936	10,024
Investment Co., Ltd.			69
		119,839	105,028

Pricing on heating supply service with related parties is based on the reference price stipulated by government. Pricing on other services with related parties is negotiated by counter parties and referred to the market price.

(b) Guarantee:

(c)

The Group serves as guarantee.

Guarantor	Guarantee	Amount	Starting date	Due date	Fully performed or not
City Infrastructure Construction and Investment	Xi'an Capital Water Co., Ltd.	110,000	28 September 2008	27 September 2022	No
Key management comp	pensation				
				2019	2018
Key management compensat	ion		_	11,998	12,620

-

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

8 RELATED PARTY RELATIONSHIPS AND TRANSACTIONS (Continued)

(6) Receivables from and payables to related parties

Receivables from related parties

	Related party name	31 December 2019		31 December 2018	
		Carrying amount	Provision	Carrying amount	Provision
Trade receivable	City Infrastructure Construction and Investment	60,423	3,208	39,638	115
	Tianjin Lecheng Properties Co., Ltd.	4,650	312	9,640	10
	Tianjin City Resource Operation Co., Ltd.	401	136	401	20
		65,474	3,656	49,679	145

The receivables from related parties arise mainly from daily transactions and are due within one year after the date of sales. The receivables are unsecured in nature and bear no interest. RMB4 million provisions are held against receivables from related parties.

(7) Transactions/balances with other state owned enterprises in the PRC

The Group operates in an economic environment currently predominated by enterprises directly or indirectly owned or controlled by the PRC government (hereinafter collectively referred to as "state-owned entities").

During the year, the Group's significant transactions with these state controlled entities include treatment of sewage and construction and management of related facility, supply of tap water and recycled water, and supply of heating and cooling services. At the end of the year, the majority of the Group's cash and cash equivalents and borrowings are with state controlled banks.

9 COMMITMENTS

(1) Capital commitments

The Group's capital commitments at the balance sheet date are as follows:

	Contracted but n 31 December 2019 RMB million	not provided for 31 December 2018 RMB million	Authorised but no 31 December 2019 RMB million	ot contracted for 31 December 2018 RMB million
Intangible assets – Concession right				
 Sewage processing project 	1,312	187	908	974
– Tap water project	56	_	68	_
– Heating and cooling supply project	46	19	112	108
Property, plant and equipment	31	325	34	288
	1,445	531	1,122	1,370

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

9 **COMMITMENTS** (Continued)

(2)Investment commitments

According to the announcement of the 22nd meeting of the 24th Board of Directors of the Company in December 2019, the Company plans to set up Huoqiu Capital Water Co., Ltd. and Huize Capital Water Co., Ltd.. Huoqiu Capital Water Co., Ltd. has a registered capital of RMB41.28 million yuan, in which the Company invested RMB37.15 million yuan, accounting for 90.00% of the shares; Huize Capital Water Co., Ltd. has a registered capital of RMB41.24 million yuan, in which the Company invested RMB32.66 million yuan, accounting for 79.20% of the shares.

IMPACT OF EVENTS AFTER THE BALANCE SHEET DATE 10

(1)Profit distribution

	Amount
Proposed dividend (a)	152,713
Dividends declared	151,285

According to the resolution of the board of directors on 26 March 2020, the board of directors proposed that (a)the Company distribute a dividend of RMB153 million to all shareholders, which was not recognized as a liability in this financial statement (note 4 (22) (c)).

The effect of "COVID-19 outbreak" (2)

After the outbreak of Coronavirus Disease 2019 (the "COVID-19 outbreak") in early 2020, a series of precautionary and control measures have been and continued to be implemented across the country.

The directors of the Group have assessed that the COVID-19 outbreak may have the following possible impact to the Group:

The economic slowdown resulted from the COVID-19 outbreak may lead to a temporary reduction in the manufacturing or production activities of factories and the construction activities of property developers which may indirectly affect the financial performance of our sewage processing and recycled water and pipeline connection business segments.

The assessment of the recoverable amounts of the other current assets as mentioned in Note 22 is based on the conditions as at 31 December 2019. The COVID-19 outbreak and its impact on the recoverable amounts of the related assets will be considered in the impairment test to be performed in 2020.

The Group might have to experience longer turnover time for recovering its trade receivables which may increasing the associated credit risks.

The Group believes that the above factors may have a temporary impact on the Group's operations.
For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

11 FINANCIAL INSTRUMENTS AND THEIR RISKS

The Group's activities expose it to a variety of financial risks: market risk (primarily including currency risk, interest rate risk and price risk), credit risk and liquidity risk. Those financial risks and the Group's overall risk management program which focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the Group's financial performance are as below:

The board of directors is responsible for the planning and establishment of the risk management framework of the Group, the formulation of the risk management policies and related guidelines of the Group and the supervision of the implementation of risk management measures. The Group has developed risk management policies to identify and analyze the risks faced by the Group. These risk management policies have specified specific risks, covering many aspects such as market risk, credit risk and liquidity risk management etc. The Group regularly assesses the market environment and changes in the Group's business activities to determine whether the risk management policies and systems are updated. The risk management of the Group shall be conducted by the risk management committee in accordance with the policy approved by the board of directors. The risk management committee identifies and assesses and avoids risks through close cooperation with other business units of the Group. The internal audit department of the Group conducts regular audits on risk management control and procedures and reports the results to the audit committee of the Group.

(1) Market risk:

(a) Foreign exchange risk:

The Group has no significant foreign exchange risk as the operations and customers of the Group are located in the PRC with most of the operating assets and transactions denominated and settled in RMB. All of the Group's borrowings are denominated in RMB. The sole foreign exchange risk of the Group arises from fluctuation of USD and JPY pursuant to the long-term payment scheme set out in the asset transfer agreement of foreign loan financed assets from Sewage Company (Note 4(17)(c)(ii)).

At 31 December 2019, if RMB had strengthened/weakened by 5% against the USD with all other variables held constant, post-tax profit for the year would have been RMB4 million (31 December 2018: RMB3 million) higher/lower. Similarly, if RMB had strengthened/weakened by 5% against the JPY with all other variables held constant, post-tax profit for the year would have been RMB9 million (31 December 2018: RMB8 million) higher/lower.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

11 FINANCIAL INSTRUMENTS AND THEIR RISKS (Continued)

- (1) Market risk: (Continued)
 - (b) Interest rate risk:

The Group's interest rate risk arises mainly from interest-bearing liabilities including borrowings, long-term payables and debentures payable.

The Group has significant borrowings, long-term payables and debentures payable. Those taken at variable rates expose the Group to cash flow interest-rate risk, whilst those taken at fixed rates expose the Group to fair value interest-rate risk.

The Group's finance department at its headquarters continuously monitor the interest rate position of the Group. Increases in interest rates will increase the cost of new borrowing and the interest expenses with respect to the Group's outstanding floating rate borrowings, and therefore could have a material adverse effect on the Group's financial performance. The Group makes adjustments timely with reference to the latest market conditions and may enter into interest rate swap agreements to mitigate its exposure to interest rate risk. During 2019 and 2018, the Group did not enter into any interest rate swap agreements.

The tables below set out the Group's and the Company's exposure to interest rate risks. Included in the tables are the liabilities at carrying amounts, categorized by the maturity dates.

	Fixed	Floating	Total
At 31 December 2019			
Short-term borrowings	200,000	-	200,000
Other current liabilities	20,250	-	20,250
Non-current liabilities due within one year:			
Current portion of long-term borrowings	-	811,380	811,380
Current portion of long-term payables	16,427	11,812	28,239
Long-term borrowings	-	3,006,756	3,006,756
Long-term payables	189,258	73,394	262,652
Debentures payable	1,797,389	-	1,797,389
Total	2,223,324	3,903,342	6,126,666

11 FINANCIAL INSTRUMENTS AND THEIR RISKS (Continued)

(1) Market risk: (Continued)

(b) Interest rate risk: (Continued)

	Fixed	Floating	Total
At 31 December 2018			
Short-term borrowings	200,000	-	200,000
Non-current liabilities due within one year:			
Current portion of long-term borrowings	-	213,952	213,952
Current portion of long-term payables	17,615	11,802	29,417
Long-term borrowings	-	2,051,953	2,051,953
Long-term payables	187,501	78,866	266,367
Debentures payable	1,796,363		1,796,363
Total	2,201,479	2,356,573	4,558,052

At 31 December 2019, if interest rates on bank borrowings had been 1% higher/lower with all other variables held constant, post-tax profit for the year would have been lower/higher by RMB31 million (2018: RMB18 million).

The Group analyses its interest rate exposure by considering refinancing, renewal of existing positions and alternative financing resolution.

(2) Credit risk:

Credit risk arises from cash at bank, notes receivable, trade receivables, other receivables and contract assets. As at 31 December 2019, the book value of the Group's financial assets represents its maximum credit exposure.

The Group manages credit risk on cash at bank by placing the majority of its cash at state owned/listed banks in the PRC. The Group has not had any significant loss arising from non-performance by these parties in the past and management does not expect so in the future.

In addition, the Group has policies to limit the credit exposure on notes receivable, trade receivables, other receivables and contract assets. The Group assesses the credit quality of and sets credit limits on its customers by taking into account their financial position, the availability of guarantee from third parties, their credit history and other factors such as current market conditions. The credit history of the customers is regularly monitored by the Group. In respect of customers with a poor credit history, the Group will use written payment reminders, or shorten or cancel credit periods, to ensure the overall credit risk of the Group is limited to a controllable extent.

As at 31 December 2019, the Group has no significant collateral or other credit enhancements held as a result of the debtor's mortgage.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

11 FINANCIAL INSTRUMENTS AND THEIR RISKS (Continued)

(3) Liquidity risk:

Cash flow forecasting is performed by each subsidiary of the Group and aggregated by the Group's finance department in its headquarters. The Group monitors rolling forecasts of the Group's short-term and long-term liquidity requirements to ensure it has sufficient cash and securities that are readily convertible to cash to meet operational needs, while maintaining sufficient headroom on its undrawn committed borrowing facilities from major financial institutions so that the Group does not breach borrowing limits or covenants on any of its borrowing facilities to meet the short-term and long-term liquidity requirements.

The Group's financial liabilities are analyzed at the balance sheet date to the contractual maturity date, using the contracted undiscounted cash flows, as follows:

	31 December 2019					
						Carrying
	Within 1 year	1-2 years	2-5 years	Over 5 years	Total	amount
Short-term borrowings	205,738	_	_	-	205,738	200,000
Other current liabilities	21,131	-	-	-	21,131	20,250
Long-term borrowings	970,469	808,529	1,250,571	1,726,434	4,756,003	3,818,136
Long-term payables	32,058	33,037	106,222	274,126	445,443	290,891
Trade payables	231,293	-	-	-	231,293	231,293
Other payables	1,534,014	-	-	-	1,534,014	1,534,014
Debentures payable	78,780	775,128	1,175,827		2,029,735	1,797,389
	3,073,483	1,616,694	2,532,620	2,000,560	9,223,357	7,891,973
			31 Decem	ber 2018		
			0			Carrying
	Within 1 year	1-2 years	2-5 years	Over 5 years	Total	amount
Short-term borrowings	200,000	_	_	_	200,000	200,000
Long-term borrowings	311,457	839,253	1,068,843	419,156	2,638,709	2,265,906
Long-term payables	30,340	31,202	99,878	300,901	462,321	295,784
Trade payables	176,398	-	_	-	176,398	176,398
Other payables	1,458,045	-	-	-	1,458,045	1,458,045
Debentures payable	78,780	78,780	1,837,215		1,994,775	1,796,363
	2,255,020	949,235	3,005,936	720,057	6,930,248	6,192,496

12 FAIR VALUE ESTIMATION

The level in which fair value measurement is categorised is determined by the level of the fair value hierarchy of the lowest level input that is significant to the entire fair value measurement:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly.

Level 3: Inputs for the asset or liability that are not based on observable market data.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

12 FAIR VALUE ESTIMATION (Continued)

(1) Assets measured at fair value on a recurring basis:

As at 31 December 2019, the assets measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 3	Total
Other equity instruments investment – Unlisted equity instrument investments of Tianjin Beifang Rencaigang Co., Ltd	2,000	2,000
Total financial assets	2,000	2,000
Total assets	2,000	2,000

As at 31 December 2018, the assets measured at fair value on a recurring basis by the above three levels are analysed below:

	Level 3	Total
Other equity instruments investment – Unlisted equity instrument investments of Tianjin Beifang Rencaigang Co., Ltd	2,000	2,000
Total financial assets	2,000	2,000
Total assets	2,000	2,000
1 0141 455015	2,000	2,000

The fair value of financial instruments traded in an active market is determined at the quoted market price; and the fair value of those not traded in an active market is determined by the Group using valuation technique. The valuation models used mainly comprise discounted cash flow model and market comparable corporate model. The inputs of the valuation technique mainly include illiquidity discount.

Amounts of the Group's financial instruments not traded in an active market are of no significance.

(2) Assets and liabilities not measured at fair value but disclosed

Financial assets and liabilities of the Group measured at amortized cost mainly include notes receivable, trade receivables, other receivables, long-term receivables, payables, short-term borrowings, long-term borrowings, debenture payable and long-term payables.

The carrying amount of the financial assets and liabilities of the Group not measured at fair value is a reasonable approximation of their fair value.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

13 CAPITAL MANAGEMENT

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including current and noncurrent borrowings, debentures payable, long-term payables and government loan of the Group) less cash. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

The Group's strategy is to maintain a gearing ratio below 40%. The gearing ratio of the Group is as follows:

	31 December 2019	31 December 2018
Total borrowings	6,126,666	4,558,052
Short-term borrowings	200,000	200,000
Other current liabilities	20,250	-
Long-term borrowings	3,818,136	2,265,905
Debentures payable	1,797,389	1,796,363
Long-term payables	290,891	295,784
Less: Cash	(2,066,301)	(1,808,543)
Net debt	4,060,365	2,749,509
Total equity	7,142,187	6,614,967
Total capital	11,202,552	9,364,476
Gearing ratio	36%	29%

As at 31 December 2019, the gearing ratio of the Group is increased compared to last year, which was mainly due to the increase of borrowings for new and upgrading projects.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS

(1) Trade receivables

	31 December 2019	31 December 2018
Trade receivables Less: Provision for bad debts	1,977,087 (19,006)	1,689,143 (1,964)
	1,958,081	1,687,179

(a) The ageing analysis of trade receivable is as follows:

	31 December 2019	31 December 2018
Within 1 year	1,370,989	1,060,286
1 to 2 years	576,139	623,795
2 to 3 years	25,132	3,620
3 to 4 years	3,620	-
4 to 5 years	_	1,442
Over 5 years	1,207	
Total	1,977,087	1,689,143

(b) As at 31 December 2019, the trade receivables from the top five debtors in respect of outstanding balance are analyzed as below:

	Amount	Provision for bad debts	% of total balance
Trade receivables from the top five debtors	1,928,873	(9,179)	98%

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

- (1) Trade receivables (Continued)
 - (c) Provision for bad debts:

For the Company's trade receivables, regardless of whether there is a significant financing component, the Company measures the loss allowance according to the expected credit loss for the entire life.

(i) As at 31 December 2019, provision for bad debts by individual is analyzed as below:

	Carrying amount	ECL rate	Provision	Reasons
Tianjin Water Authority Bureau	1,809,061	0.05%	(990)	Note 4 (3)(c)(i)
Tianjin Water Recycling Co., Ltd.	28,081	0.06%	(16)	
Tianjin Ziya Environmental Protection				
Industrial Park Co. Ltd.	16,797	15.97%	(2,682)	Note 4 (3)(c)(i)
Tianjin City Appearance Sanitation				
Construction Development Co. Ltd.	14,513	15.73%	(2,283)	Note 4 (3)(c)(i)
Tianjin Shuangkou Municipal				
Solid Waste Landfill	14,208	36.98%	(5,254)	Note 4 (3)(c)(i)
Zhejiang Xinsanyin Dyeing Co.Ltd.	5,174	28.91%	(1,496)	Note 4 (3)(c)(i)
		_		
Total	1,887,834	_	(12,721)	

Tianjin Water Recycling Co., Ltd. is a subsidiary of the Company and has good operating conditions. The credit risk of receivables from Tianjin Water Recycling Co., Ltd. is low and the Company estimates that the lifetime ECL rate is 0.06%.

(ii) As at 31 December 2019, provision for bad debts by individual is analyzed as below:

Group - Government clients except those in provincial capitals and municipalities

	31 December 2019			31 December 2018		
	Carrying amount	Provis	on	Carrying amount	Provisi	on
	Amount	ECL rate	Amount	Amount	ECL rate	Amount
Undue	33,595	5.31%	(1,784)	8,044	0.10%	(1)
1-180 days overdue	16,645	5.31%	(884)	17,010	0.15%	(26)
>180 days overdue	10,475	5.68%	(595)	57,746	0.50%	(288)
	60,715		(3,263)	82,800		(315)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(1) Trade receivables (Continued)

(c) Provision for bad debts: (Continued)

(ii) As at 31 December 2019, provision for bad debts by individual is analyzed as below (Continued):

Group – other clients

	31 December 2019			31 December 2018			
	Carrying amount			Carrying amount	Provisi	Provision	
	Amount	ECL rate	Amount	Amount	ECL rate	Amount	
Undue	3,085	6.70%	(207)	1,004	0.10%	(1)	
1-90 days overdue	5,986	6.70%	(401)	2,742	1.50%	(40)	
>90 days overdue	19,467	12.40%	(2,414)	6,317	5.00%	(792)	
	28,538		(3,022)	10,063		(833)	

(2) Other receivables

	31 December 2019	31 December 2018
Receivables from subsidiaries	37,361	117,906
VAT refund receivable (note (e))	24,004	2,037
Project deposits	23,496	14,385
Others	1,299	330
	86,160	134,658
Less: Provision for bad debts	(35)	(98)
	86,125	134,560

As at 31 December 2019, there were no other receivables overdue but unimpaired (31 December 2018: Nil).

(a) The ageing analysis of other receivable is as follow:

	31 December 2019	31 December 2018
Within 1 year	73,888	124,869
1 to 2 years	2,968	8,263
2 to 3 years	8,112	-
Over 3 years	1,192	1,526
Total	86,160	134,658

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

- (2) Other receivables (Continued)
 - (b) As at 31 December 2019 and 2018, the Group has no other receivables belonging to stage 2 and stage 3. Provisions for bad debts of other receivables in stage 1 are analyzed as follows:

	31 Carrying	December 2019		31 Carrying	December 2018	
	amount	Provis	sion	amount	Provis	ion
	Amount	Amount	Percentage	Amount	Amount	Percentage
Project Deposits Group:						
Within 1 year	11,450	(6)	0.05%	4,920	(2)	0.05%
1-2 years	2,920	(2)	0.05%	8,066	(4)	0.05%
2-3 years	8,060	(4)	0.05%	-	-	0.05%
Over 3 years	1,066	(1)	0.05%	1,399	(1)	0.05%
Subtotal	23,496	(13)		14,385	(7)	
Others :						
Within 1 year	38,434	(22)	0.05%	117,912	(91)	0.05%
1-2 years	48	-	0.10%	197	-	0.10%
2-3 years	52	_	0.10%	-	-	-
Over 3 years	126		0.10%	127		0.10%
Subtotal	38,660	(22)		118,236	(91)	
Total	62,156	(35)		132,621	(98)	

- (c) In 2019, the changes of other receivables' provision of the Company is not significant.
- (d) As at 31 December 2019, other receivables from the top five debtors in respect of outstanding balance are analyzed as below:

	Nature	Balance	Aging	% of total balance	Provision for bad debts
Tianjin State Taxation Bureau	VAT refund receivable	24,004	Within 1 year	28%	_
Linxia Capital Water Co., Ltd.	Receivable due from subsidiaries	17,000	Within 1 year	20%	(9)
Shijiazhuang Gaocheng District	Project deposits	10.000	XV7: 1 + 1	120/	(5)
Construction Investment Co. Ltd. Tianjin Water Recycling Co., Ltd.	Receivable due from	10,000	Within 1 year	12%	(5)
)	subsidiaries	8,680	Within 1 year	10%	(5)
Linxia Water Supply and Drainage Co., Ltd.	Project deposit	8,000	2 to 3 years	9%	(4)
Total		67,684		79%	(23)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(2) Other receivables (Continued)

(e) As at 31 December 2019, government grants confirmed according to receivables are analyzed as below:

Name	Amount	Aging	Estimated time, amount and basis of collection
VAT refund	24,004	Within 1 year	It's expected to received fully in 2020 because the nature is VAT refund.

(3) Long-term equity investments

	31 December 2019	31 December 2018
Investment in subsidiaries (a) Associate (b) Less: Impairment of Long-term equity investments (c)	4,012,806 195,000 (140,754)	3,458,486 195,000 (132,781)
	4,067,052	3,520,705

(a) Subsidiaries

	Movement for the year							
								Cash dividends declared/ Investment
	Investment	31 December				31 December	Provision for	income in the
	cost	2018	Additions	Disposals	Provision	2019	impairment	current year
Xi'an Capital Water Co., Ltd.	334,000	334,000	-	_	_	334,000	-	-
Hangzhou Tianchuang Capital Water								
Co., Ltd.	264,212	264,212	-	-	-	264,212	-	-
Qujing Capital Water Co., Ltd.	154,918	154,918	-	-	-	154,918	-	-
Guizhou Capital Water Co., Ltd	114,000	114,000	-	-	-	114,000	-	-
Fuyang Capital Water Co., Ltd.(note(i))	390,111	191,302	198,809	-	-	390,111	-	32,770
Tianjin Water Recycling Co., Ltd.	100,436	100,436	-	-	-	100,436	-	150,000
Wuhan Tianchuang Capital Water								
Co., Ltd.	197,229	197,229	-	-	-	197,229	-	-
Tianjin Capital Environmental								
Protection (Hong Kong) Co., Ltd.	62,987	12,706	-	-	-	12,706	(50,281)	-
Wendeng Capital Water Co., Ltd.	61,400	61,400	-	-	-	61,400	-	-
Tianjin Capital Alternative Energy								
Technology Co., Ltd.	191,600	191,600	-	-	-	191,600	-	-
Anguo Capital Water Co., Ltd.	41,000	-	-	-	-	-	(41,000)	-
Baoying Capital Water Co., Ltd.	58,100	58,100	-	-	-	58,100	-	1,820
Tianjin Capital New Materials Co., Ltd.	26,500						(26,500)	
Subtotal	1,996,493	1,679,903	198,809			1,878,712	(117,781)	184,590

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(3) Long-term equity investments (Continued)

(a) Subsidiaries (Continued)

	Movement for the year							
	I			·			D · · · (Cash dividends declared/ Investment
	Investment	31 December 2018	Additions	D:l.	Provision	31 December 2019	Provision for	income in the
	cost	2018	Additions	Disposals	PTOVISION	2019	impairment	current year
Tianjin Caring Technology								
Development Co., Ltd	16,000	16,000	-	-	-	16,000	-	-
Tianjin Jinning Capital Water Co., Ltd.	22,560	7,560	-	-	-	7,560	(15,000)	-
Tianjin Jing Hai Capital Water Co., Ltd	37,553	37,553	-	-	(7,973)	29,580	(7,973)	-
Yingshang Capital Water Co., Ltd.	53,000	53,000	-	-	-	53,000	-	-
Shangdong Capital Environmental								
Protection Technology Development								
Co., Ltd.(note(ii))	105,600	70,400	35,200	-	-	105,600	-	-
Changsha Tianchuang Environmental								
Protection Co., Ltd.	32,775	32,775	-	-	-	32,775	-	-
Karamay Tianchuang Capital Water								
Co., Ltd.	108,000	108,000	-	-	-	108,000	-	-
Anhui Tianchuang Capital Water								
Co., Ltd.	63,670	63,670	-	-	-	63,670	-	-
Linxia Capital Water Co., Ltd.	45,000	45,000	-	-	-	45,000	-	-
Dalian Oriental Chunliuhe Water								
Quality Purification Co., Ltd.	47,981	47,981	-	-	-	47,981	-	-
Changsha Tianchuang Capital Water								
Co., Ltd.	15,318	15,318	-	-	-	15,318	-	-
Inner Mogolia Bayannur Capital Water								
Co.Ltd.	776,957	776,957	-	-	-	776,957	-	-
Honghu Tianchuang Capital Water								
Co., Ltd.	111,631	111,631	-	-	-	111,631	-	-
Hefei Capital Water Co., Ltd.	205,957	205,957	-	-	-	205,957	-	-
Deqing Capital Water Co., Ltd.	54,000	54,000	-	-	-	54,000	-	-
Hebei Guojin Tianchuang Sewage								
Water Processing Co., Ltd. (note(iii))	128,323	-	128,323	-	-	128,323	-	-
Hanshou Tianchuang Capital Water								
Co., Ltd.(note(iii))	33,750	-	33,750	-	-	33,750	-	-
Jiuquan Capital Water Co., Ltd.								
(note(iii))	158,238	-	158,238	-	-	158,238	-	-
Subtotal	2,016,313	1,645,802	355,511	_	(7,973)	1,993,340	(22,973)	_
							(
Total	4,012,806	3,325,705	554,320	_	(7,973)	3,872,052	(140,754)	184,590
Total	1,012,000	5,525,705))T,J20		(/,)/)	J ₁ 0/2,0)2	(10,/)4)	101,770

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

- (3) Long-term equity investments (Continued)
 - (a) Subsidiaries (Continued)
 - (i) In 2019, the Company increased capital of RM199 million to its subsidiary Fuyang Capital Water Co., Ltd. for the construction and operation of Jieshou sewage water treatment plant phase II upgrading project and Yindong sewage water treatment plant phase II.
 - (ii) In 2019, the Company invested RMB35 million yuan to Shangdong Capital Environmental Protection Technology Development Co., Ltd. (Shandong Company) for Tancheng Comprehensive Disposal Center Project of hazardous waste and future development of hazardous waste business and make up the residual registered capital of Tancheng Comprehensive Disposal Center Project.
 - (iii) In 2019, the Company contributed RMB128 million to set up Hebei Guojin Tianchuang Sewage Water Processing Co., Ltd. RMB34 million to set up Hanshou Tianchuang Capital Water Co., Ltd, And RMB158 million to set up Jiuquan Capital Water Co., Ltd.The shareholding ratio is 59%, 75% and 89% respectively.
 - (b) Associate

In 2018, the consortium formed by Bishuiyuan Technology Co., Ltd., Jiu 'an Investment Group Co., Ltd. and the Company won the bidding for the PPP project of sponge city construction in the Jiefang Nan road of Tianjin. After winning the bid, the parties jointly set up the project company Tianjin Bihai Sponge City Co., Ltd. The Company invested 195 million yuan, and the shareholding ratio is 30%.

(c) Provision for impairment of long-term equity investments

	31 December 2018	Additions	Disposals	31 December 2019
Tianjin Capital Environmental Protection				
(Hong Kong) Co., Ltd.	50,281	-	-	50,281
Anguo Capital Water Co., Ltd.	41,000	-	-	41,000
Tianjin Capital New Materials Co., Ltd.	26,500	-	-	26,500
Tianjin Jinning Capital Water Co., Ltd.	15,000	-	-	15,000
Tianjin Jing Hai Capital Water Co., Ltd	-	7,973	-	7,973
	132,781	7,973		140,754

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(4) Revenue and cost of sales

	2019	1	2018		
	Revenue	Cost of sales	Revenue	Cost of sales	
Principal operations	1,172,834	733,854	909,726	509,636	
Other operations	142,458	119,339	114,491	86,890	
	1,315,292	853,193	1,024,217	596,526	

(a) Revenue from principal operations and cost of sales

Analysis by the nature of services is as below:

	2019		2018		
	Revenue from		Revenue from		
	principal operations	Cost of sales	principal operations	Cost of sales	
Processing of sewage water	1,110,318	726,516	847,242	502,516	
Road tolls	62,302	7,120	62,484	7,120	
Others	214	218			
	1,172,834	733,854	909,726	509,636	

(b) Revenue from other operations and cost of sales

	2019		2018		
	Revenue from		Revenue from		
	other operations	Cost of sales	other operations	Cost of sales	
Contract operation income	120,254	101,459	77,049	77,352	
Rental (i)	12,452	14,040	18,175	3,168	
Construction services	7,816	2,923	6,741	1,028	
Technical service	1,936	917	10,503	3,517	
Others			2,023	1,825	
	142,458	119,339	114,491	86,890	

(i) The company gets its rental income from renting its buildings and structures, As of 2019, there's no rental income recognized based on a certain portion of the lessee' sales revenue.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(4) Revenue and cost of sales (Continued)

(c) The Company's operating income is analyzed as follows:

	D			2	019			
	Processing of sewage water Tianjin	Road tolls	Contract operation income	Rental	Construction services	Technical service	Others	Total
Revenue Of which: confirm at a	1,110,318	62,302	_	-	-	-	214	1,172,834
point in time Confirm over	_	_	-	-	_	_	_	-
time	1,110,318	62,302	_	-	-	_	214	1,172,834
Other operating income			120,254	12,452	1,936	7,816		142,458
	1,110,318	62,302	120,254	12,452	1,936	7,816	214	1,315,292

				2	018			
	Processing of sewage water Tianjin	Road tolls	Contract operation income	Rental	Construction services	Technical service	Others	Total
Revenue Of which: confirm at a point in time	847,242	62,484	-	-	-	-	-	909,726
Confirm over time Other operating income	847,242	62,484	77,049	18,175	10,503	6,741	2,023	909,726 114,491
	847,242	62,484	77,049	18,175	10,503	6,741	2,023	1,024,217

As at 31 December 2019, service bills of the Company's sewage water processing service are regularly issued to customers, based on contract agreed price and actual sewage water treatment capacity. And the amount of bills represent the entity's progress toward complete satisfaction of the performance obligation to transfer each distinct good or service in the series to customers. And there is no consideration amount which is not included in the transaction price, thus it's not included in the required information to be disclosed for the transaction price allocated to the remaining performance obligation.

As at 31 December 2019, the consideration for contract operation services of RMB37 million(31 December 2018: RMB61 million)of which the contracts were signed but the performance obligations is not yet fully completed, will be recognised in 2020; the consideration for agent construction service of RMB13 million(31 December 2018: RMB14 million) of which the contracts were signed but the performance obligations is not yet fully completed, will be recognised in 2020; a contract of road tolls service fee of RMB571 million (31 December 2018: RMB633 million) was signed but the performance obligations is not yet fully completed, among which the Group expects to recognise RMB62 million as revenue in every year from 2020 to 2028, and RMB13 million as revenue in 2029.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

14 NOTES TO THE COMPANY FINANCIAL STATEMENTS (Continued)

(5) Investment income

	2019	2018
Dividend income from other equity instruments investment	184,590	126,820
Interest income from entrusted loans	34,807	30,887
Investment income from the disposal of the equity of subsidiaries	_	13,205
Investment income from liquidation of subsidiaries	_	3,697
Dividend income from other equity instruments investment		200
	219,397	174,809

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 STATEMENT OF NON-RECURRING PROFIT OR LOSS

	2019	2018
Government Grants	108,103	78,481
Gains on disposal of other non-current assets	48,703	-
Losses on disposal of fixed assets	(590)	(527)
Net gains/(losses) on disposal of fixed assets	1,294	(373)
Other non-operating income and expenses – net	(1,520)	(1,809)
	155,990	75,772
Effect of income tax	(31,496)	(18,943)
Effect of minority interests (after tax)	(1,839)	(1,267)
Total	122,655	55,562

Basis for preparation of statement of non-recurring profit or loss

Under the requirements in Explanatory Announcement No. 1 on Information Disclosure by Companies Offering Securities to the Public – Non-recurring Profit or Loss [2008] from China Security Regulatory Commission("CSRC"), non-recurring profit or loss refers to those arises from transactions and events that are not directly relevant to ordinary activities, or that are relevant to ordinary activities, but are extraordinary and not expected to recur frequently that would have an influence on users of financial statements making economic decisions on the financial performance and profitability of an enterprise.

2 RECONCILIATION STATEMENT OF INLAND AND ABROAD FINANCIAL STATEMENT

There is no difference on inland and abroad financial statement of the Group.

3 RATE OF RETURN ON NET ASSETS AND EARNINGS PER SHARE

	Weighted average incom For the year ended 31 December 2019	e rate of net assets (%) For the year ended 31 December 2018	Basic/Diluted ear For the year ended 31 December 2019	rnings per share For the year ended 31 December 2018
Net profit attributable to ordinary shareholders of the Company Net profit attributable to ordinary shareholders	8.48	9.05	0.36	0.35
of the Company after deducting non-recurring profit or loss	6.43	8.05	0.27	0.31

13. Independent Auditor's Report

INDEPENDENT AUDITOR'S REPORT

To the Shareholders of Tianjin Capital Environmental Protection Group Company Limited (incorporated in the People's Republic of China with limited liability)

OPINION

What we have audited

The consolidated financial statements of Tianjin Capital Environmental Protection Group Company Limited (the "Company") and its subsidiaries (the "Group") set out on pages 238 to 331, which comprise:

- the consolidated balance sheet as at 31 December 2019;
- the consolidated statement of comprehensive income for the year then ended;
- the consolidated statement of changes in equity for the year then ended;
- the consolidated statement of cash flows for the year then ended; and
- the notes to the consolidated financial statements, which include a summary of significant accounting policies.

Our opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2019, and of its consolidated financial performance and its consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the disclosure requirements of the Hong Kong Companies Ordinance.

BASIS FOR OPINION

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

KEY AUDIT MATTERS

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matter identified in our audit is measurement of expected credit losses for trade receivables.

Key Audit Matter

Measurement of expected credit losses for trade receivables

Refer to Notes 3.1(b)(ii) and 24 to the consolidated financial statements

As at 31 December 2019, the Group's gross trade receivables amounted to RMB2,573,720 thousand and a loss allowance of RMB80,956 thousand was recognised on these trade receivables.

The balance of loss allowance for trade receivables represent the management's best estimates on the expected credit losses ("ECL") for these trade receivables as of the balance sheet date.

Management has assessed whether the credit risk of trade receivables had been significantly increased after initial recognition, and measured the ECL through applying a lifetime expected loss allowance for all trade receivables. In making such assessment, management has considered the credit default history in prior years and exercised judgement in developing its expectation on the credibility of debtors and economic indicators for forward-looking measurement. How our audit addressed the Key Audit Matter

We evaluated and validated the Group's control procedures over the measurement of ECL.

We evaluated the modelling methodologies for ECL measurement, and assessed the reasonableness of the portfolio segmentation, key parameters estimation and significant judgements and assumptions as adopted by management in the assessment of ECL.

We assessed the appropriateness of management's identification of any trade receivables with significant increase in credit risk or trade receivables being defaulted or impaired by examining the financial and non-financial information of the major debtors. We checked the accuracy of the aging profile of trade receivables on a sample basis. Regarding the information of the major debtors as obtained, we have examined the underlying relevant supporting documents such as historical payment records, subsequent settlements, settlement plan and other correspondence documents.

For forward-looking measurement, we reviewed management's model analysis of their selection of economic indicators, economic scenarios and weightings employed; assessed the reasonableness of the prediction of economic indicators and performed sensitivity analysis of economic indicators, economic scenarios and weightings.

KEY AUDIT MATTERS (Continued)

Key Audit Matter (Continued)

Measurement of expected credit losses for trade receivables (Continued)

The measurement of ECL involves significant management judgments and assumptions, mainly including the following:

- Segmentation of debtors sharing similar credit risk characteristics and determination of relevant key measurement parameters;
- (2) Criteria for determining whether or not there was a significant increase in credit risk, or a default or impairment loss was incurred;
- (3) Selection of economic indicators for forward-looking measurement, and application of economic scenarios and weightings.

We focused on this area due to the significance of the trade receivables balance and significant management judgements and assumptions were involved in the assessment of ECL.

How our audit addressed the Key Audit Matter (Continued)

We examined major data inputs to the ECL models on selected samples, including historical data and data at the measurement date, to assess their accuracy and completeness.

We considered that management's judgements and estimates on the ECL of trade receivables are supportable by the evidence as obtained from our procedures performed.

OTHER INFORMATION

The directors of the Company are responsible for the other information. The other information comprises all of the information included in the annual report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

RESPONSIBILITIES OF DIRECTORS AND AUDIT COMMITTEE FOR THE CONSOLIDATED FINANCIAL STATEMENTS

The directors of the Company are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the disclosure requirements of the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The audit committee is responsible for overseeing the Group's financial reporting process.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAs, we exercise professional judgment and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.

AUDITOR'S RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS (Continued)

- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the audit committee with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the audit committee, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

The engagement partner on the audit resulting in this independent auditor's report is Cheng Kwong On.

PricewaterhouseCoopers Certified Public Accountants Hong Kong, 26 March 2020

14. Financial Statements prepared in accordance with Hong Kong Financial Reporting Standards Consolidated Statement of Profit or Loss and Other Comprehensive Income

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

	Notes	2019 RMB'000	2018 RMB'000
Revenue from contracts with customers Cost of sales Tax expenses and surcharge	5 7	2,851,453 (1,984,537) (45,716)	2,447,515 (1,568,995) (49,688)
Gross profit		821,200	828,832
Distribution costs Administrative expenses Net impairment losses on financial assets Other income Other gains – net	7 7 3.1(b) 6 10	(7,075) (168,661) (31,383) 166,989 47,875	(5,417) (129,096) (12,973) 173,023 2,461
Operating profit		828,945	856,830
Finance income Finance costs	-	23,951 (223,347)	53,779 (215,765)
Finance costs – net	9	(199,396)	(161,986)
Profit before income tax Income tax expense	12	629,549 (100,587)	694,844 (168,064)
Profit for the year Other comprehensive income for the year, net of tax	-	528,962	526,780
Total comprehensive income for the year	_	528,962	526,780
Total comprehensive income for the year is attributable to: Owners of the Company Non-controlling interests	-	507,107 21,855 528,962	501,168 25,612 526,780
Earnings per share for profit attributable to the equity holders of the Company (in RMB Yuan):			
Basic earnings per share Diluted earnings per share	11 11	0.36	0.35 0.35

The above consolidated statement of profit or loss and other comprehensive income should be read in conjunction with the accompanying notes.

The financial statements on pages 238 to 242 were approved by the Board of Directors on 26 March 2020 and were signed on its behalf.

Liu Yujun Chairman Niu Bo Director

14. Financial Statements prepared in accordance with Hong Kong Financial Reporting Standards Consolidated Balance Sheet

As at 31 December 2019

(All amounts in RMB thousand unless otherwise stated)

	Notes	2019 RMB'000	2018 RMB'000
ASSETS			
Non-current assets			
Land use rights	14	_	60,358
Right-of-use assets	15	58,080	_
Property, plant and equipment	16	801,007	497,580
Intangible assets	17	11,701,362	10,314,469
Deferred income tax assets	33	4,209	-
Investment properties	18	-	84,052
Investments accounted for using the equity method	19b	195,000	195,000
Financial asset at fair value through other comprehensive income	20	2,000	2,000
Long-term receivables	21	236,450	253,686
Other non-current assets	22	195,919	109,181
Total non-current assets		13,194,027	11,516,326
Current assets			
Inventories	23	14,805	13,991
Trade receivables	24	2,508,895	2,091,760
Prepayments		38,583	23,531
Other receivables	25	65,156	36,162
Other current assets	22	89,728	179,477
Cash and cash equivalents	26	2,066,301	1,808,543
Restricted cash	26	13,312	17,658
Total current assets		4,796,780	4,171,122
Total assets		17,990,807	15,687,448

14. Financial Statements prepared in accordance with Hong Kong Financial Reporting Standards Consolidated Balance Sheet

	As at 31 December 2019 (All amounts in RMB thousand unless otherwise stated)		
	Notes	2019 RMB'000	2018 RMB'000
LIABILITIES			
Non-current liabilities			
Borrowings	30	5,066,797	4,114,683
Deferred revenue	32	2,059,702	2,101,085
Deferred income tax liabilities	33	125,587	138,812
Provisions for other liabilities and charges	34	11,665	10,069
Other non-current liabilities	31	36,000	38,000
Total non-current liabilities		7,299,751	6,402,649
Current liabilities			
Trade payables	35(a)	231,293	176,398
Contract liabilities	5(c)	558,472	469,185
Wages payables		66,100	53,942
Income tax and other taxes payables	35(c)	86,188	68,893
Dividend payable		1,172	1,912
Other payables	35(b)	1,532,842	1,456,133
Borrowings	30	1,059,869	443,369
Provisions for other liabilities and charges	34	12,933	
Total current liabilities		3,548,869	2,669,832
Total liabilities		10,848,620	9,072,481
Net assets		7,142,187	6,614,967
EQUITY			
Share capital	27	1,427,228	1,427,228
Other reserves	28	989,274	948,131
Retained earnings	29	3,757,523	3,442,844
		6,174,025	5,818,203
Non-controlling interests		968,162	796,764
Total equity		7,142,187	6,614,967

The above consolidated balance sheet should be read in conjunction with the accompanying notes.

14. Financial Statements prepared in accordance with Hong Kong Financial Reporting Standards Consolidated Statement of Changes in Equity

For the year ended 31 December 2019

(All amounts in RMB thousand unless otherwise stated)

	Attributable to owners of the Company					
	Share capital RMB'000	Other reserves RMB'000	Retained earnings RMB' 000	Total RMB'000	Non- controlling interests RMB'000	Total Equity RMB'000
At 1 January 2018	1,427,228	879,022	2,978,876	5,285,126	296,736	5,581,862
Comprehensive income Profit for the year Transactions with owners in their	-	-	501,168	501,168	25,612	526,780
 capacity as owners Capital contribution from non-controlling interests Profit appropriation to statutory reserves Dividends paid to non-controlling interests 		31,909 37,200	(37,200)	31,909	475,345 (929)	507,254
		69,109	463,968	533,077	500,028	1,033,105
Balance at 31 December 2018	1,427,228	948,131	3,442,844	5,818,203	796,764	6,614,967
Balance at 1 January 2019	1,427,228	948,131	3,442,844	5,818,203	796,764	6,614,967
Comprehensive income Profit for the year	_	_	507,107	507,107	21,855	528,962
Transactions with owners in their capacity as owners – Capital contribution from non-controlling interests – Profit appropriation to statutory reserves – Dividends declared	- - -	41,143	(41,143) (151,285)	(151,285)	150,715 (1,172)	150,715 (152,457)
		41,143	314,679	355,822	171,398	527,220
Balance at 31 December 2019	1,427,228	989,274	3,757,523	6,174,025	968,162	7,142,187

The above consolidated statement of changes in equity should be read in conjunction with the accompanying notes.

14. Financial Statements prepared in accordance with Hong Kong Financial Reporting Standards Consolidated Statement of Cash Flows

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

	Note	2019 RMB'000	2018 RMB'000
Cash flows from operating activities Cash generated from operations Income taxes paid Bank deposit interest received	36(a)	934,737 (109,998) 14,547	884,859 (235,963) 43,750
Net cash inflow from operating activities		839,286	692,646
Cash flows from investing activities Capital contribution to an associate Payment for acquisition of subsidiary, net of cash acquired Payments for property, plant and equipment, and intangible assets Proceeds from sale of property, plant and equipment and other current assets Interest received on financial assets held as investments Decrease/(increase) in restricted cash Government grants received	36(c)	- (2,058,617) 55,136 - 4,346 45,647	(195,000) (396,957) (1,867,624) 743 200 (5,669) 41,605
Net cash outflow from investing activities		(1,953,488)	(2,422,702)
Cash flows from financing activities Proceeds from borrowings Repayments of borrowings Dividends paid to Company's shareholders Interest paid Dividends paid to non-controlling interests in subsidiaries Capital contributions by non-controlling interests		2,403,553 (831,072) (153,197) (198,039) - 150,715	3,185,288 (1,550,440) - (163,282) (929) 174,273
Net cash inflow from financing activities		1,371,960	1,644,910
Net increase/(decrease) in cash and cash equivalents Cash and cash equivalents at beginning of the year		257,758 1,808,543	(85,146) 1,893,689
Cash and cash equivalents at end of the year	26	2,066,301	1,808,543

The above consolidated statement of cash flows should be read in conjunction with the accompanying notes.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 GENERAL INFORMATION

Tianjin Capital Environmental Protection Group Company Limited (the "Company") was established on 8 June 1993 in Tianjin, the People's Republic of China (the "PRC") as a joint stock limited liability Company. The immediate holding company and the ultimate holding company of the Company are Tianjin Municipal Investment Company Limited ("Municipal Investment") and Tianjin City Infrastructure Construction and Investment Group Company Limited ("City Infrastructure Construction and Investment") respectively. The address of the Company's registered office is No. 45 Guizhou Road, Heping District, Tianjin. The Company's H-shares are listed on The Stock Exchange of Hong Kong Limited and the Company A-shares are listed on The Shanghai Stock Exchange.

The principal activities of the Company and its subsidiaries (collectively the "Group") include processing of sewage water, supply of tap water and recycled water and supply of heating and cooling as described below:

(a) Processing of sewage water

Pursuant to relevant agreements ("Service concession right agreements"), the Group currently provides sewage water processing services via the following plants:

Plant	Location	Agreement date	Customer
Guiyang	Guizhou	16 September 2004	Guiyang City Administration Bureau
Baoying	Jiangsu	13 June 2005	Baoying Construction Bureau
Chibi	Hubei	15 July 2005	Chibi Construction Bureau
Fuyang	Anhui	18 December 2005	Anhui Fuyang Construction Committee
Qujing	Yunnan	25 December 2005	QuJing Construction Bureau
			(Renamed as "QuJing Housing and Urban Construction Bureau")
Honghu	Hubei	29 December 2005	Honghu Construction Bureau
Hangzhou	Zhejiang	20 November 2006	Hangzhou Sewage Company
			(Changed to Hangzhou Municipal Facilities Development Center)
Jinghai	Tianjin	12 September 2007	Tianjin Tianyu Science Technology Park
Wendeng	Shandong	19 December 2007	Wendeng Construction Bureau
Xi'an	Shaanxi	18 March 2008	Xi'an Infrastructure Investment Group
Anguo	Hebei	14 October 2008	An Guo Municipal Government
Xianning	Hubei	16 October 2008	Xianning Construction Committee
Yingdong	Anhui	10 August 2009	Fuyang Yingdong Construction Bureau
Qujing	Yunnan	16 August 2011	QuJing Housing and Urban Construction Bureau
Chaohu	Anhui	25 August 2011	Hanshan Housing and Urban Construction Bureau
Jingu	Tianjin	18 February 2014	Tianjin Urban-rural Construction Commission ("TUCC")
			and Tianjin Water Authority Bureau ("TWAB")
Xianyanglu	Tianjin	18 February 2014	TUCC and TWAB
Dongjiao	Tianjin	18 February 2014	TUCC and TWAB
Beicang	Tianjin	18 February 2014	TUCC and TWAB
Yingshang	Anhui	16 June 2016	Yingshang Housing and Urban Construction Bureau
Karamay	Xinjiang	4 November 2016	Karamay Construction Bureau
Linxia	Gansu	13 May 2017	Linxia Housing and Urban Construction Bureau
Changsha	Hunan	5 June 2017	Ningxiang Economic & Technology Development
			Zone Management Committee
Hefei	Anhui	16 June 2017	Hefei Urban Construction Committee

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 **GENERAL INFORMATION** (Continued)

(a) Processing of sewage water (Continued)

Plant	Location	Agreement date	Customer
Dalian	Liaoning	1 November 2017	Dalian Construction Bureau
Bayannur	Inner Mongolia	12 December 2017	Bayannur Water Authority Bureau and
			Bayannur River Water Group Company Limited
Changsha	Hunan	27 April 2018	Ningxiang Economic and Technological Development
			Zone Management Committee
Honghu	Hubei	9 June 2018	Honghu Housing and Urban Construction Bureau
Shibing	Guizhou	12 July 2018	Shibing Water Authority Bureau
Hefei	Anhui	28 November 2018	Hefei Urban-rural Construction Commission
Deqing	Zhehejiang	1 Jan 2019	Deqing Qianyuan Municipal Government
Gaocheng	Hebei	2 April 2019	Hebei Gaocheng Economic Development
			Zone Management Committee
Jiuquan	Gansu	22 June 2019	Jiuquan Suzhou Municipal Government
Yingdong	Fuyang	26 August 2019	Fuyang Urban-rural Construction Commission

Based on the sewage water processing agreements and the supplemental agreements, initial prices for sewage water processing are predetermined, thereafter processing prices may be revised taking into account various factors including renovation of equipment, additional investment, power and energy and labour force, and significant changes in government policy.

(b) Supply of tap water

Pursuant to the relevant agreements, the Group provides tap water supply service initially at pre-determined price and the prices as pre-determined may be revised subsequently taking into account various cost factors.

(c) Recycled water supply and pipeline connection

The Group's recycled water business includes developing, constructing and operating of recycled water projects, production and sale of recycled water, and provision of related research and development and technical consultation services.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

1 **GENERAL INFORMATION** (Continued)

(d) Heating and cooling supply services

The heating and cooling supply services include design, construction, operations and transfer of centralised heating and cooling infrastructures; and provision of heating and cooling supply services.

The Group has signed several service concession agreements with several customers of providing heating and cooling supply services to third parties.

(e) Waste treatment and disposal service

The Group's waste treatment and disposal service includes hazardous wastes and general solid waste. Currently, the Group conducts the disposal by way of incineration, landfill, and physicochemical treatment and solidify.

(f) These financial statements are presented in RMB Yuan, unless otherwise stated.

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

This note provides a list of the significant accounting policies adopted in the preparation of these consolidated financial statements. These policies have been consistently applied to all the years presented, unless otherwise stated. The financial statements are for the Group consisting of the Company and its subsidiaries.

2.1 Basis of preparation

(a) Compliance with HKFRS and HKCO

The consolidated financial statements of the Group have been prepared in accordance with Hong Kong Financial Reporting Standards ("HKFRS") and disclosure requirements of the Hong Kong Companies Ordinance ("HKCO") Cap. 622.

(b) Historical cost convention

The financial statements have been prepared on the historical cost basis.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.1 Basis of preparation (Continued)
 - (c) New and amended standards and interpretations adopted by the Group

The Group has applied the following new and amended standards and interpretations for the first time for their annual reporting period commencing 1 January 2019:

- HKFRS 16 Leases
- Prepayment Features with Negative Compensation Amendments to HKFRS 9
- Long-term Interests in Associates and Joint Ventures Amendments to HKAS 28
- Annual Improvements to HKFRS Standards 2015 2017 Cycle
- Plan Amendment, Curtailment or Settlement Amendments to HKAS 19
- Interpretation 23 Uncertainty over Income Tax Treatments

The Group had to change its accounting policies as a result of adopting HKFRS 16. The Group elected to adopt the new rules retrospectively but recognised the cumulative effect of initially applying the new standard on 1 January 2019. This is disclosed in Note 2.2. Most of the other amendments and interpretations listed above did not have any impact on the amounts recognised in prior periods and are not expected to significantly affect the current or future periods.

(d) New and amended standards and revised conceptual framework not yet adopted

Certain new accounting standards and revised conceptual framework for financial reporting have been published that are not mandatory for 31 December 2019 reporting periods and have not been early adopted by the Group. These standards and revised conceptual framework are not expected to have a material impact on the Group in the current or future reporting periods and on foreseeable future transactions.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.2 Change in accounting policies

This note explains the impact of the adoption of HKFRS 16 "Leases" on the Group's financial statements.

As indicated in Note 2.1 above, the Group has adopted HKFRS 16 "Leases" retrospectively from 1 January 2019, but has not restated comparatives for the 2018 reporting period, as permitted under the specific transition provisions in the standard. The reclassifications and the adjustments arising from the new leasing rules are therefore recognised in the opening balance sheet on 1 January 2019. The new accounting policies are disclosed in Note 2.26.

- (a) Measurement of right-of-use assets
- (b) Upon the adoption of HKFRS 16, right-of-use assets were measured on a retrospective basis as if the new rules had always been applied. Adjustments were recognised in the balance sheet on 1 January 2019.

The impact resulted from the change in accounting policy only affected the following items in the balance sheet on 1 January 2019:

- land use rights decrease by RMB60,358 thousand.
- right-of-use assets increase by RMB60,358 thousand.

The adoption of HKFRS 16 has no impact on the Group's retained earnings as of 1 January 2019.

- (c) Lessor accounting
 - The Group did not need to make any adjustments to the accounting for assets held as lessor under operating leases as a result of the adoption of HKFRS 16.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.3 Principles of consolidation and equity accounting

(a) Subsidiaries

Subsidiaries are all entities (including structured entities) over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power to direct the activities of the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are deconsolidated from the date that control ceases.

The acquisition method of accounting is used to account for business combinations by the Group (refer to Note 2.4).

Intercompany transactions, balances and unrealised gains on transactions between group companies are eliminated. Unrealised losses are also eliminated unless the transaction provides evidence of an impairment of the transferred asset. Accounting policies of subsidiaries have been changed where necessary to ensure consistency with the policies adopted by the Group.

Non-controlling interests in the results and equity of subsidiaries are shown separately in the consolidated statement of profit or loss and other comprehensive income, statement of changes in equity and balance sheet respectively.

(b) Associates

Associates are all entities over which the Group has significant influence but not control or joint control. This is generally the case where the Group holds between 20% and 50% of the voting rights. Investments in associates are accounted for using the equity method of accounting, after initially being recognised at cost.

(c) Equity method

Under the equity method of accounting, the investments are initially recognised at cost and adjusted thereafter to recognise the Group's share of the post-acquisition profits or losses of the investee in profit or loss, and the Group's share of movements in other comprehensive income of the investee in other comprehensive income. Dividends received or receivable from associates are recognised as a reduction in the carrying amount of the investment.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.3 Principles of consolidation and equity accounting (Continued)
 - (c) Equity method (Continued)

When the Group's share of losses in an equity-accounted investment equals or exceeds its interest in the entity, including any other unsecured long-term receivables, the Group does not recognise further losses, unless it has incurred obligations or made payments on behalf of the other entity.

Unrealised gains on transactions between the Group and its associates are eliminated to the extent of the Group's interest in associates. Unrealised losses are also eliminated unless the transaction provides the evidence of an impairment of the asset transferred. Accounting policies of equity accounted investees have been changed where necessary to ensure consistency with the policies adopted by the Group.

The carrying amount of equity-accounted investments is tested for impairment in accordance with the policy described in Note 2.11.

(d) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A change in ownership interest results in an adjustment between the carrying amounts of the controlling and non-controlling interests to reflect their relative interests in the subsidiary. Any difference between the amount of the adjustment to non-controlling interests and any consideration paid or received is recognised in a separate reserve within equity attributable to owners of the Group.

When the Group ceases to consolidate or equity account for an investment because of a loss of control, joint control or significant influence, any retained interest in the entity is remeasured to its fair value with the change in carrying amount recognised in profit or loss. This fair value becomes the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associate, joint venture or financial asset. In addition, any amounts previously recognised in other comprehensive income in respect of that entity are accounted for as if the Group had directly disposed of the related assets or liabilities. This may mean that amounts previously recognised in other comprehensive income are reclassified to profit or loss or transferred to another category of equity as specified/permitted by applicable HKFRS.

If the ownership interest in an associate is reduced but significant influence is retained, only a proportionate share of the amounts previously recognised in other comprehensive income are reclassified to profit or loss where appropriate.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.4 Business combinations

The acquisition method of accounting is used to account for all business combinations, regardless of whether equity instruments or other assets are acquired. The consideration transferred for the acquisition of a subsidiary comprises the:

- fair values of the assets transferred
- liabilities incurred to the former owners of the acquired business
- equity interests issued by the Group
- fair value of any asset or liability resulting from a contingent consideration arrangement, and
- fair value of any pre-existing equity interest in the subsidiary.

Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are, with limited exceptions, measured initially at their fair values at the acquisition date. The Group recognises any non-controlling interest in the acquired entity on an acquisition-by-acquisition basis either at fair value or at the non-controlling interest's proportionate share of the acquired entity's net identifiable assets.

Acquisition-related costs are expensed as incurred.

The excess of the:

- consideration transferred,
- amount of any non-controlling interest in the acquired entity, and
- acquisition-date fair value of any previous equity interest in the acquired entity

over the fair value of the net identifiable assets acquired is recorded as goodwill. If those amounts are less than the fair value of the net identifiable assets of the business acquired, the difference is recognised directly in profit or loss as a bargain purchase.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.4 Business combinations (Continued)

Where settlement of any part of cash consideration is deferred, the amounts payable in the future are discounted to their present value as at the date of exchange. The discount rate used is the entity's incremental borrowing rate, being the rate at which a similar borrowing could be obtained from an independent financier under comparable terms and conditions. Contingent consideration is classified either as equity or a financial liability. Amounts classified as a financial liability are subsequently remeasured to fair value with changes in fair value recognised in profit or loss.

If the business combination is achieved in stages, the acquisition date carrying value of the acquirer's previously held equity interest in the acquire is remeasured to fair value at the acquisition date. Any gains or losses arising from such remeasurement are recognised in profit or loss.

2.5 Separate financial statements

Investments in subsidiaries are accounted for at cost less impairment. Cost also includes direct attributable costs of investment. The results of subsidiaries are accounted for by the Company on the basis of dividend received and receivable.

Impairment testing of the investments in subsidiaries is required upon receiving a dividend from these investments if the dividend exceeds the total comprehensive income of the subsidiary in the period the dividend is declared or if the carrying amount of the investment in the separate financial statements exceeds the carrying amount in the consolidated financial statements of the investee's net assets including goodwill.

2.6 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker.

The board of the Group has appointed a strategic steering committee which assesses the financial performance and position of the Group, and makes strategic decisions. The steering committee, which has been identified as being the chief operating decision maker, consists of the chief executive officer, the chief financial officer and the manager for corporate planning.
For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.7 Foreign currency translation

(a) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The consolidated financial statements are presented in Renminbi ('RMB'), which is the Company's functional and Group's presentation currency.

(b) Transactions and balances

Foreign currency transactions are translated into the functional currency using the exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation of monetary assets and liabilities denominated in foreign currencies at year end exchange rates are generally recognised in profit or loss. They are deferred in equity if they relate to qualifying cash flow hedges and qualifying net investment hedges or are attributable to part of the net investment in a foreign operation.

Foreign exchange gains and losses that relate to borrowings are presented in the consolidated statement of profit or loss and other comprehensive income, within finance costs.

Non-monetary items that are measured at fair value in a foreign currency are translated using the exchange rates at the date when the fair value was determined. Translation differences on assets and liabilities carried at fair value are reported as part of the fair value gain or loss. For example, translation differences on non-monetary assets and liabilities such as equities held at fair value through profit or loss are recognised in profit or loss as part of the fair value gain or loss and translation differences on non-monetary assets such as equities classified as available-for-sale financial assets are recognised in other comprehensive income.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.7 Foreign currency translation (Continued)
 - (c) Group companies

The results and financial position of foreign operations (none of which has the currency of a hyperinflationary economy) that have a functional currency different from the presentation currency are translated into the presentation currency as follows:

- assets and liabilities for each balance sheet presented are translated at the closing rate at the date of that balance sheet
- income and expenses for each consolidated statement of profit or loss and other comprehensive income are translated at average exchange rates (unless this is not a reasonable approximation of the cumulative effect of the rates prevailing on the transaction dates, in which case income and expenses are translated at the dates of the transactions), and
- all resulting exchange differences are recognised in other comprehensive income.

On consolidation, exchange differences arising from the translation of any net investment in foreign entities, and of borrowings and other financial instruments designated as hedges of such investments, are recognised in other comprehensive income. When a foreign operation is sold or any borrowings forming part of the net investment are repaid, the associated exchange differences are reclassified to profit or loss, as part of the gain or loss on sale.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.8 Property, plant and equipment

Property, plant and equipment comprise buildings and constructions, machinery and equipment, motor vehicles and others.

All property, plant and equipment are stated at historical cost less accumulated depreciation and accumulated impairment (if any). Historical cost includes expenditure that is directly attributable to the acquisition of the items. Cost may also include transfers from equity of any gains or losses on qualifying cash flow hedges of foreign currency purchases of property, plant and equipment.

Subsequent costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of any component accounted for as a separate asset is derecognised when replaced. All other repairs and maintenance are charged to profit or loss during the reporting period in which they are incurred.

Depreciation is calculated using the straight-line method to allocate their cost or revalued amounts, net of their residual values, over their estimated useful lives as follows:

	Estimated useful lives	Estimated rate of residual value	Annual rate of depreciation
Buildings and construction	10-50 years	0%-5%	1.9%-10%
Machinery and equipment	10-20 years	0%-5%	4.8%-10%
Motor vehicles and others	5-10 years	0%-5%	9.5%-20%

The assets' residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

An asset's carrying amount is written down immediately to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount (Note 2.11).

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised within 'Other gains/(losses) – net' in the consolidated statement of profit or loss and other comprehensive income.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.8 Property, plant and equipment (Continued)

Construction-in-progress ('CIP') is measured at actual cost. Actual cost comprises construction costs, installation costs, other costs necessary to bring the property, plant and equipment ready for their intended use and borrowing costs that are eligible for capitalisation. Depreciation begins from the month when the assets are ready for their intended use. When the recoverable amount of CIP is lower than its carrying value, the carrying value shall be reduced to its recoverable amount.

One or more items of property, plant and equipment may be acquired in exchange for a non-monetary asset or assets. The cost of such an item of property, plant and equipment is measured at carrying amount of the asset given up if the exchange transaction lacks commercial substance the asset received.

An exchange transaction has commercial substance if:

- (a) the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or
- (b) the entity-specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and
- (c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

2.9 Investment properties

Investment property, principally comprising buildings, is held for long-term lease yields and that is not occupied by the Group. Investment property is initially measured at cost, including related transaction costs and where applicable borrowing costs.

Investment properties are stated at cost less accumulated depreciation and impairment. Depreciation of investment properties are calculated to write-off that cost, less estimated net residual value and accumulated impairment losses, if any, on a straight-line basis over estimated useful lives ranging from 40 to 50 years.

If an item of property, plant and equipment becomes an investment property because its use has changed (other than that of temporary nature), it is reclassified as investment property at net book value and vice versa.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.10 Intangible assets

(a) Service concession rights

As described in Note 1(a), (b), (c) and (e), the Group engages with government bodies and their subordinate enterprises and participates in the development, financing, operation and maintenance of infrastructure for public services ("Concession Services") over a specified period of time ("Concession services period"). The Group has access to operate the infrastructures to provide the Concession Services in accordance with the terms specified in the arrangements.

The arrangements are governed by the relevant Concession Services Agreements which set out performance standards and mechanisms for adjusting prices.

The concession services arrangement is within the scope of HK (IFRIC) – Interpretation 12, and the Group recognises the related rights in the services concession arrangements as intangible assets or financial assets. The operator shall recognise an intangible asset to the extent that it receives a right (license) to charge users of the public service and shall recognise a financial asset to the extent that it has an unconditional contractual right to receive a guaranteed minimum volume from the grantor. Concession right as intangible assets is recognised for the right under these service concession arrangements by the Group, which are amortised on a straight-line basis over the terms of operation ranging from 20 to 30 years.

One or more intangible assets may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. The cost of such an intangible asset is measured at carrying amount if the exchange transaction lacks commercial substance. The acquired asset is measured in this way even if an entity cannot immediately derecognise the asset given up.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.10 Intangible assets (Continued)
 - (a) Service concession rights (Continued)

An exchange transaction has commercial substance if:

- (a) the configuration (risk, timing and amount) of the cash flows of the asset received differs from the configuration of the cash flows of the asset transferred; or
- (b) the entity-specific value of the portion of the entity's operations affected by the transaction changes as a result of the exchange; and
- (c) the difference in (a) or (b) is significant relative to the fair value of the assets exchanged.

(b) Technical know-how and software

Separately acquired technical know-how and software is recognised at historical cost. Technical know-how and software has a finite useful life and is carried at cost less accumulated amortisation. Amortisation is calculated using the straight-line method to allocate the cost of technical know-how and software over their estimated useful lives of 5 to 10 years.

2.11 Impairment of non-financial assets

Intangible assets that have an indefinite useful life or intangible assets not ready to use are not subject to amortisation and are tested annually for impairment. Other assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units). Non-financial assets other than goodwill that suffered impairment are reviewed for possible reversal of the impairment at the end of each reporting date.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.12 Investments and other financial assets

2.12.1 Classification

The Group classifies its financial assets in the following measurement categories:

- those to be measured subsequently at fair value (either through OCI or through profit or loss), and
- those to be measured at amortised cost.

The classification depends on the entity's business model for managing the financial assets and the contractual terms of the cash flows.

For assets measured at fair value, gains and losses will either be recorded in profit or loss or OCI. For investments in equity instruments that are not held for trading, this will depend on whether the Group has made an irrevocable election at the time of initial recognition to account for the equity investment at fair value through other comprehensive income (FVOCI).

The Group reclassifies debt investments when and only when its business model for managing those assets changes.

2.12.2 Recognition and derecognition

Regular way purchases and sales of financial assets are recognised on trade-date, the date on which the Group commits to purchase or sell the asset. Financial assets are derecognised when the rights to receive cash flows from the financial assets have expired or have been transferred and the Group has transferred substantially all the risks and rewards of ownership.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.12 Investments and other financial assets (Continued)

2.12.3 Measurement

At initial recognition, the Group measures a financial asset at its fair value plus, in the case of a financial asset not at fair value through profit or loss (FVPL), transaction costs that are directly attributable to the acquisition of the financial asset. Transaction costs of financial assets carried at FVPL are expensed in profit or loss.

Financial assets with embedded derivatives are considered in their entirety when determining whether their cash flows are solely payment of principal and interest.

(a) Debt instruments

Subsequent measurement of debt instruments depends on the Group's business model for managing the asset and the cash flow characteristics of the asset. There are three measurement categories into which the Group classifies its debt instruments:

- Amortised cost: Assets that are held for collection of contractual cash flows where those cash flows
 represent solely payments of principal and interest are measured at amortised cost. Interest income
 from these financial assets is included in finance income using the effective interest rate method.
 Any gain or loss arising on derecognition is recognised directly in profit or loss and presented in
 'other gains/(losses) net' together with foreign exchange gains and losses. Impairment losses are
 presented as separate line item in the consolidated statement of comprehensive income.
- FVOCI: Assets that are held for collection of contractual cash flows and for selling the financial assets, where the assets' cash flows represent solely payments of principal and interest, are measured at FVOCI. Movements in the carrying amount are taken through OCI, except for the recognition of impairment gains or losses, interest income and foreign exchange gains and losses which are recognised in profit or loss. When the financial asset is derecognised, the cumulative gain or loss previously recognised in OCI is reclassified from equity to profit or loss and recognised in 'other gains/(losses) net'. Interest income from these financial assets is included in finance income using the effective interest rate method. Foreign exchange gains and losses are presented in 'other gains/(losses) net' and impairment expenses are presented as separate line item in the consolidated statement of profit or loss and other comprehensive income.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.12 Investments and other financial assets (Continued)
 - 2.12.3 Measurement (Continued)
 - (a) Debt instruments (Continued)
 - FVPL: Assets that do not meet the criteria for amortised cost or FVOCI are measured at FVPL. A gain or loss on a debt investment that is subsequently measured at FVPL is recognised in profit or loss and presented net within 'other gains/(losses)-net' in the period in which it arises.
 - (b) Equity instruments

The Group subsequently measures all equity investments at fair value. Where the Group's management has elected to present fair value gains and losses on equity investments in OCI, there is no subsequent reclassification of fair value gains and losses to profit or loss following the derecognition of the investment. Dividends from such investments continue to be recognised in profit or loss as other income when the Group's right to receive payments is established.

Changes in the fair value of financial assets at FVPL are recognised in 'other gains/(losses) – net' in the consolidated statement of profit or loss and other comprehensive income as applicable. Impairment losses (and reversal of impairment losses) on equity investments measured at FVOCI are not reported separately from other changes in fair value.

2.12.4 Impairment

The Group assesses on a forward looking basis the expected credit losses associated with its debt instruments carried at amortised cost and FVOCI. The impairment methodology applied depends on whether there has been a significant increase in credit risk.

For trade receivables, the Group applies the simplified approach permitted by HKFRS 9, which requires expected lifetime losses to be recognised from initial recognition of the receivables, see Note 3.1(b) for further details.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.13 Offsetting financial instruments

Financial assets and liabilities are offset and the net amount reported in the balance sheet where the Group currently has a legally enforceable right to offset the recognised amounts, and there is an intention to settle on a net basis or realise the asset and settle the liability simultaneously. The Group has also entered into arrangements that do not meet the criteria for offsetting but still allow for the related amounts to be set off in certain circumstances, such as bankruptcy or the termination of a contract.

2.14 Inventories

Inventories include raw materials, finished goods, low value consumables and construction contract costs, and are stated at the lower of cost and net realisable value.

The amount of construction contract costs incurred, plus profits and less losses recognised and progress billings is determined on individual contract basis. Where positive, this amount is recognised in contract assets. Where negative, it is recognised in contract liabilities.

Costs of raw materials, finished goods and low value consumables are determined using the weighted-average method. The cost of finished goods comprises raw materials, direct labor, other direct costs and related production overheads (based on normal operating capacity). Provision for decline in the value of inventories is determined at the excess amount of the carrying value of the inventories over their net realisable value. Net realisable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses.

2.15 Trade receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. They are generally due for settlement within one year and therefore are all classified as current.

Trade receivables are recognised initially at the amount of consideration that is unconditional unless they contain significant financing components, when they are recognised at fair value. The Group holds the trade receivables with the objective to collect the contractual cash flows and therefore measures them subsequently at amortised cost using the effective interest method. See Note 24 for further information about the Group's accounting for trade receivables and Note 3.1 for a description of the Group's impairment policies.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.16 Cash and cash equivalents

For the purpose of presentation in the consolidated statement of cash flows, cash and cash equivalents includes cash on hand, deposits held at call with financial institutions, other short-term, highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash and which are subject to an insignificant risk of changes in value.

2.17 Share capital

Ordinary shares are classified as equity (Note 27). Incremental costs directly attributable to the issue of new ordinary shares are shown in equity as a deduction, net of tax, from the proceeds.

2.18 Trade and other payables

These amounts represent liabilities for goods and services provided to the Group prior to the end of financial year which are unpaid. The amounts are unsecured and are usually paid within one year of recognition. Trade and other payables are presented as current liabilities unless payment is not due within 12 months after the reporting period. They are recognised initially at their fair value and subsequently measured at amortised cost using the effective interest method.

2.19 Borrowings

Borrowings are initially recognised at fair value, net of transaction costs incurred. Borrowings are subsequently measured at amortised cost. Any difference between the proceeds (net of transaction costs) and the redemption amount is recognised in profit or loss over the period of the borrowings using the effective interest method. Fees paid on the establishment of loan facilities are recognised as transaction costs of the loan to the extent that it is probable that some or all of the facility will be drawn down. In this case, the fee is deferred until the draw down occurs. To the extent there is no evidence that it is probable that some or all of the facility will be drawn down, the fee is capitalised as a prepayment for liquidity services and amortised over the period of the facility to which it relates.

Borrowings are removed from the balance sheet when the obligation specified in the contract is discharged, cancelled or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.20 Borrowing costs

General and specific borrowing costs that are directly attributable to the acquisition, construction or production of a qualifying asset are capitalised during the period of time that is required to complete and prepare the asset for its intended use or sale. Qualifying assets are assets that necessarily take a substantial period of time to get ready for their intended use or sale.

Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalisation.

Other borrowing costs are expensed in the period in which they are incurred.

2.21 Current and deferred income tax

The income tax expense or credit for the period is the tax payable on the current period's taxable income based on the applicable income tax rate for each jurisdiction adjusted by changes in deferred income tax assets and liabilities attributable to temporary differences and to unused tax losses.

(a) Current income tax

The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the consolidated balance sheet date in the countries where the Company's subsidiaries and the Group's associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

(b) Deferred income tax

Deferred income tax is provided in full, using the liability method, on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, deferred income tax liabilities are not recognised if they arise from the initial recognition of goodwill. Deferred income tax is also not accounted for if it arises from initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable profit nor loss. Deferred income tax is determined using tax rates (and laws) that have been enacted or substantially enacted by the end of the reporting period and are expected to apply when the related deferred income tax asset is realised or the deferred income tax liability is settled.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.21 Current and deferred income tax (Continued)

(b) Deferred income tax (Continued)

Deferred income tax assets are recognised only if it is probable that future taxable amounts will be available to utilise those temporary differences and losses.

Deferred income tax liabilities and assets are not recognised for temporary differences between the carrying amount and tax bases of investments in foreign operations where the Company is able to control the timing of the reversal of the temporary differences and it is probable that the differences will not reverse in the foreseeable future.

Deferred income tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred income tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously.

Current and deferred income tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity. In this case, the tax is also recognised in other comprehensive income or directly in equity, respectively.

2.22 Employee benefits

(a) Short-term obligations

Liabilities for wages and salaries, including non-monetary benefits and accumulating sick leave that are expected to be settled wholly within 12 months after the end of the period in which the employees render the related service are recognised in respect of employees' services up to the end of the reporting period and are measured at the amounts expected to be paid when the liabilities are settled. The liabilities are presented as current employee benefit obligations in the balance sheet.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.22 Employee benefits (Continued)
 - (b) Pension obligations

A defined contribution plan is a pension plan under which the Group pays fixed contributions into a separate entity. The Group has no legal or constructive obligations to pay further contributions if the fund does not hold sufficient assets to pay all employees the benefits relating to employee service in the current and prior periods. A defined benefit plan is a pension plan that is not a defined contribution plan.

For defined contribution plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due. Prepaid contributions are recognised as an asset to the extent that a cash refund or a reduction in the future payments is available.

2.23 Provisions

Provisions for legal claims, service warranties and other obligations are recognised when the Group has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are not recognised for future operating losses.

Where there are a number of similar obligations, the likelihood that an outflow will be required in settlement is determined by considering the class of obligations as a whole. A provision is recognised even if the likelihood of an outflow with respect to any one item included in the same class of obligations may be small.

Provisions are measured at the present value of management's best estimate of the expenditure required to settle the present obligation at the end of the reporting period. The discount rate used to determine the present value is a pretax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The increase in the provision due to the passage of time is recognised as interest expense.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.24 Revenue recognition

(a) Sewage water processing and heating and cooling supply services

Revenues from sewage water processing and heating and cooling supply services are recognised when services are rendered.

The Group recognises the revenue from sewage water processing and heating and cooling supply according to the Service Concession right agreements signed by the customers.

As receivable is recognised over time when the services are provided that the consideration is unconditional because only the passage of time is required before the payment is due.

(b) Sales of environmental protection equipment

The environmental protection equipment mainly relates to the achievement of technology research. Revenue from sales of environmental protection equipment is recognised by reference to the percentage of completion of the contract activity at the balance sheet date. The stage of completion is measured by reference to the contract costs incurred up to the end of the reporting period as a percentage of total estimated costs of each contract.

(c) Sales of tap water and recycled water

Revenue from the sale of tap water and recycled water is recognised on the transfer of control when the tap water and recycled water are delivered to customers.

The Group recognises the revenue according to the contracts signed by the customers.

As receivable is recognised over time when the series of goods are delivered that the consideration is unconditional because only the passage of time is required before the payment is due.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.24 Revenue recognition (Continued)

(d) Pipeline connection service for recycled water

Revenue from pipeline connection service for recycled water is recognised by reference to the percentage of completion of the contract activity at the balance sheet date. The stage of completion is measured by reference to the actual outcomes achieved up to the end of the reporting period as a percentage of total contract quantity.

The Group received the consideration in advance and recognised contract liabilities for the performance obligation not fully completed.

(e) Waste treatment and disposal service

Revenue from waste treatment and disposal service is recognised when the services actually provided. The Group recognised the revenue according to the amount of waste disposal confirmed by both parties and the unit price agreed in the contract.

(f) Contract operation income

Revenue from contract operation income is recognised by the service contract which include the fix amount contract and the unit price contract. The fixed amount contract is recognised on average during the service period. The unit price contract is recognised on service quantity provided during the service delivery period.

As receivable is recognised over time when the services are provided that the consideration is unconditional because only the passage of time is required before the payment is due.

(g) Technical services income

Revenue from technical service shall be recognised within the period of service delivery as agreed in the contract according to the unit price of the service and the quantity of the service actually provided.

As receivable is recognised over time when the services are provided that the consideration is unconditional because only the passage of time is required before the payment is due.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

- 2.24 Revenue recognition (Continued)
 - (h) Financing components

For contract where the period between the transfer of the promised goods or services to the customer and payment by the customer exceeds one year, the promised amount of consideration is adjusted for the effects of a significant financing components.

2.25 Earnings per share

(i) Basic earnings per share

Basic earnings per share is calculated by dividing:

- the profit attributable to owners of the company, excluding any costs of servicing equity other than ordinary shares
- by the weighted average number of ordinary shares outstanding during the financial year, adjusted for bonus elements in ordinary shares issued during the year and excluding treasury shares.
- (ii) Diluted earnings per share

Diluted earnings per share adjusts the figures used in the determination of basic earnings per share to take into account:

- the after income tax effect of interest and other financing costs associated with dilutive potential ordinary shares, and
- by the weighted average number of additional ordinary shares that would have been outstanding assuming the conversion of all dilutive potential ordinary shares.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.26 Leases

As explained in Note 2.2 above, the Group has changed its accounting policy for leases where the Group is the lessee. The new policy is described below and the impact of the change in Note 2.2.

Until 31 December 2018, land use rights acquired were recorded at cost and presented net of accumulated amortisation and impairment provision.

From 1 January 2019, leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group.

Right-of-use assets are measured at cost.

Right-of-use assets are generally depreciated over the shorter of the asset's useful life and the lease term on a straightline basis.

2.27 Dividend distribution

Provision is made for the amount of any dividend declared, being appropriately authorised and no longer at the discretion of the entity, on or before the end of the reporting period but not distributed at the end of the reporting period.

2.28 Government grants

Government grants refer to the monetary or non-monetary assets obtained by the Group from the government, including tax return, financial subsidy and etc.

Government grants are recognised when the grants can be received and the Group can comply with all attached conditions. If a government grant is a monetary asset, it will be measured at the amount received or receivable. If a government grant is a non-monetary asset, it will be measured at its fair value. If it is unable to obtain its fair value reliably, it will be measured at its nominal amount.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

2.28 Government grants (Continued)

Government grants related to assets refer to government grants which are obtained by the Group for the purposes of purchase, construction or acquisition of the long-term assets. Government grants related to income refer to the government grants other than those related to assets.

Government grants related to assets are recorded as deferred income and recognised in profit or loss on a systemic basis over the useful lives of the assets. Government grants related to income that compensate the future costs, expenses or losses are recorded as deferred income and recognised in profit or loss in reporting the related expenses; government grants related to income that compensate the incurred costs, expenses or losses are recognised in profit or loss, directly in current period. The Group applies the presentation method consistently to the similar government grants in the financial statements.

Government grants that are related to ordinary activities are included in 'Other income', otherwise, they are recorded in 'Other gains/(loss) – net'.

2.29 Interest income

Interest income on financial assets at amortised cost calculated using the effective interest method is recognised in the consolidated statement of profit or loss and other comprehensive income as part of finance income.

Interest income is presented as finance income where it is earned from financial assets that are held for cash management purposes.

Interest income is calculated by applying the effective interest rate to the gross carrying amount of a financial asset except for financial assets that subsequently become credit-impaired. For credit-impaired financial assets the effective interest rate is applied to the net carrying amount of the financial asset (after deduction of the loss allowance).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT

3.1 Financial risk factors

The Group's activities expose it to a variety of market risks (including foreign currency risk and interest rate risk), credit risk and liquidity risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance.

(a) Market risk

(i) Foreign currency risk

The Group has no significant foreign currency risk as the operations and customers of the Group are located in the PRC with most of the operating assets and transactions denominated and settled in RMB. All of the Group's borrowings are denominated in RMB. The sole foreign currency exposure of the Group arises from fluctuation of US dollar ('USD') and Japanese Yen ('JPY') pursuant to the long-term payment scheme set out in the asset transfer agreement of foreign loan financed assets from Tianjin Sewage Company') (Note 30(c)).

As at 31 December 2019, if RMB had strengthened/weakened by 5% against the US dollar with all other variables held constant, post-tax profit for the period would have been approximately RMB4 million (2018: RMB3 million) higher/lower. Similarly, if RMB had strengthened/weakened by 5% against the JPY with all other variables held constant, post-tax profit for the period would have been approximately RMB9 million (2018: RMB8 million) higher/lower.

The aggregate net foreign exchange gains recognised in profit or loss were:

	2019 RMB'000	2018 RMB'000
Exchange loss on foreign currency borrowing included in finance costs	8,813	16,543
Total net foreign exchange loss recognised in profit before income tax for the year	8,813	16,543

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (a) Market risk (Continued)
 - (ii) Interest rate risk

The Group's interest rate risk arises mainly from borrowings and long-term payables.

Borrowings and long-term payables obtained at variable rates expose the Group to cash flow interest rate risk which is partially offset by cash held at variable rates. Borrowings obtained at fixed rates expose the Group to fair value interest rate risk.

The tables below set out the Group's exposure to interest rate risks. Included in the tables are the liabilities at carrying amounts, categorised by the maturity dates.

	Fixed RMB'000	Floating RMB'000	Total RMB'000
At 31 December 2019			
Short-term borrowings	200,000	-	200,000
Other current liabilities	20,250	-	20,250
Non-current liabilities due within one year:			
– Current portion of long-term bank borrowings	_	811,380	811,380
– Current portion of long-term payables	16,427	11,812	28,239
Long-term borrowings	_	3,006,756	3,006,756
Long-term payables	189,258	73,394	262,652
Debentures	1,797,389		1,797,389
Total	2,223,324	3,903,342	6,126,666
At 31 December 2018			
Short-term borrowings Non-current liabilities due within one year:	200,000	-	200,000
– Current portion of long-term bank borrowings	_	213,952	213,952
– Current portion of long-term payables	17,615	11,802	29,417
Long-term borrowings	-	2,051,953	2,051,953
Long-term payables	187,501	78,866	266,367
Debentures	1,796,363		1,796,363
Total	2,201,479	2,356,573	4,558,052

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (a) Market risk (Continued)
 - (ii) Interest rate risk (Continued)

As at 31 December 2019, if interest rates on bank borrowings had been 1% higher/lower with all other variables held constant, post-tax profit for the year would have been lower/higher by approximately 33 million (2018: RMB18 million).

The Group analyses its interest rate exposure monthly by considering refinancing, renewal of existing positions and alternative financing.

The exposure of the Group's borrowings to interest rate changes and the contractual re-pricing dates of the borrowings at the end of the reporting period are as follows:

	2019 RMB'000	% of total loans	2018 RMB'000	% of total loans
Borrowings – repricing dates:				
6 months or less	_	-	-	-
6 – 12 months	3,903,342	100	2,356,573	100
	3,903,342	100	2,356,573	100

(b) Credit risk

Credit risk arises from cash and cash equivalents, contractual cash flows of debt instruments carried at amortised cost, at fair value through comprehensive income (FVOCI), as well as credit exposures to customers, including outstanding receivables.

(i) Risk management

The Group manages credit risk on bank deposits by placing the majority of its cash and cash equivalents with state owned/listed banks in the PRC. The Group does not have any significant loss arising from non-performance by these parties in the past and management does not expect so in the future.

The credit risk on trade receivables is concentrated on a few customers, all of which are the bodies with PRC government background. Therefore, the directors of the Company are of the view that the credit risk is limited.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (b) Credit risk (Continued)
 - (ii) Impairment of financial assets

The Group has two types of financial assets that are subject to the expected credit loss model

- trade receivables
- other financial assets at amortised cost

While cash and cash equivalents are also subject to the impairment requirements of HKFRS 9, the identified impairment loss was immaterial.

Trade receivables

The Group applies the HKFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables.

To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characterises and the days past due.

The expected loss rates are based on the payment profiles of sales over a period of 36 months before 31 December 2019 or 1 January 2019 respectively and the corresponding historical credit losses experienced within this period. The historical loss rates are adjusted to reflect current and forward-looking information on macroeconomic factors affecting the ability of the customers to settle the receivables. The Group has identified the GDP of cline in which it sells its goods and service to be the most relevant factor, the default rate by client's industry group, the defaulted unsecured loan recoveries and accordingly adjusts the historical loss rates based on expected changes in this factor.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (b) Credit risk (Continued)
 - (ii) Impairment of financial assets (Continued)

Group – banker's acceptance

The Group measures bad debt provision in accordance with the lifetime expected credit loss for the entire duration, and no provision is deemed necessary. The Group considers that there is no significant credit risk in banker's acceptance and no major loss will be caused by bank default.

On that basis, the loss allowance as at 31 December 2019 and 31 December 2018 was determined as follows for trade receivables:

By individual

31 December 2019	Carrying amount RMB'000	Expected credit loss rate	Loss Allowance RMB'000
Tianjin Water Authority Bureau	1,809,061	0.05%	(990)
Qujing Sewage Company	163,735	18.40%	(30,120)
Hangzhou Municipal Facilities			
Development Center	56,757	0.05%	(31)
Guiyang Water Authority Bureau	52,612	0.05%	(29)
Jinghai Development Area Management			
Committee	21,723	24.88%	(5,405)
Xi'an Infrastructure Investment Group	18,424	0.05%	(10)
Tianjin Ziya Environmental Protection			
Industrial Park Co. Ltd	16,797	15.97%	(2,682)
Tianjin City Appearance Sanitation Construction			
Development Co. Ltd	14,513	15.73%	(2,283)
Tianjin Sĥuangkou Municipal Solid Waste Landfill	14,208	36.98%	(5,254)
Zhejiang Xinsanyin Dyeing Co. Ltd	5,731	65.03%	(3,727)
Tianjin Tianbao Municipal Administration			
Co. Ltd	5,174	28.91%	(1,496)
Total	2,178,735		(52,027)
		Expected	7 AU

31 December 2018	Carrying amount RMB'000	credit loss rate	Loss Allowance RMB'000
Tianjin Water Authority Bureau	1,582,240	0.05%	(791)
Qujing Sewage Company	140,296	24.49%	(34,357)
Hangzhou Municipal Facilities			
Development Center	43,545	0.05%	(21)
Guiyang Ŵater Authority Bureau	39,243	0.05%	(2)
Hangzhou Sewage Company	18,198	0.05%	(9)
Xi'an Infrastructure Investment Group	16,608	0.05%	(14)
Tianjin Qudong Culture Media Co. LTD	7,910	100.00%	(7,910)
			·
Total	1,848,040		(43,104)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (b) Credit risk (Continued)
 - (ii) Impairment of financial assets (Continued)

As at 31 December 2019 and 31 December 2018, provision of bad debt for receivables by individual is analysed as follows (Continued),

Group - Government clients except those in provincial capitals and municipalities

31 December 2019	Current	Less than 180 days past due	More than 180 days past due	Total
Expected loss rate Gross carrying amount	5.31% 102,406	5.31% 107.386	7.46% 57,014	266,806
Loss allowance	5,438	5,702	4,255	15,395
31 December 2018	Current	Loss than 180 days past due	More than 180 days past due	Total
Expected loss rate	0.01%	0.11%	0.50%	
Gross carrying amount Loss allowance	42,605 4	63,698 71	64,790 324	171,093 399

Group – Other clients

31 December 2019	Current	Loss than 90 days past due	More than 90 days past due	Total
Expected loss rate	6.70%	6.70%	15.08%	
Gross carrying amount	41,844	27,352	58,983	128,179
Loss allowance	2,804	1,833	8,897	13,534
31 December 2018	Current	Loss than 180 days past due	More than 180 days past due	Total
Expected loss rate	0.10%	1.13%	5.00%	
Gross carrying amount	34,821	48,523	28,572	111,916
Loss allowance	35	546	5,500	6,081

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (b) Credit risk (Continued)
 - (ii) Impairment of financial assets (Continued)

The impairment for trade receivables as at 31 December reconcile to the opening impairment as follows:

	2019 RMB'000	2018 RMB'000
Opening impairment at 1 January	49,584	36,759
Net impairment losses recognised in profit or loss during the year	31,372	12,825
Closing impairment at 31 December	80,956	49,584

For the trade receivable with actual bad debts, the relevant departments of each business will explain the specific reasons for the failure to recover them, and the financial management department will write off the accounts according to the information.

Impairment losses on trade receivables are presented as net impairment losses within operating profit. Subsequent recoveries of amounts previously written off are credited against the same line item.

Other financial assets at amortised cost include other receivables and long-term receivables.

The impairment for other receivables and long-term receivable assets at amortised cost as at 31 December reconciles to the opening impairment as follows:

	Other receivables RMB'000	Long-term receivable RMB'000
Opening impairment as at 1 January 2018 Increase in the impairment recognised in profit or loss during the period		138
Closing impairment as at 31 December 2018 Increase in the impairment recognised in profit or loss during the period	10	
Closing impairment as at 31 December 2019	21	138

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

3.1 Financial risk factors (Continued)

- (b) Credit risk (Continued)
 - (ii) Impairment of financial assets (Continued)

Net impairment losses on financial assets recognised in profit or loss

During the year, the following losses were recognised in profit or loss in relation to impaired financial assets:

	2019 RMB'000	2018 RMB'000
Impairment losses		
– movement in loss allowance for trade receivables	40,901	18,731
Impairment losses on other financial assets	11	148
Reversal of previous impairment losses	(9,529)	(5,906)
Net impairment losses on financial assets	31,383	12,973

(c) Liquidity risk

Cash flow forecasting is performed in the operating entities and aggregated by Group finance. The Group's Finance Department monitors rolling forecasts of the Group's liquidity requirements to ensure it has sufficient cash to meet operational needs while maintaining sufficient headroom on its undrawn committed borrowing facilities at all times so that the Group does not breach borrowing limits or covenants (where applicable) on any of its borrowing facilities (Note 30). Such forecasting takes into consideration the Group's debt financing plans, covenant compliance, compliance with internal consolidated balance sheet ratio targets and, if applicable external regulatory or legal requirements-for example, currency restrictions.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.1 Financial risk factors (Continued)
 - (c) Liquidity risk (Continued)

(i) Maturities of financial liabilities

The Group's financial liabilities (inclusive of interests) are analysed into relevant maturity groupings based on the remaining period at the balance sheet date to the contractual maturity date, using the contracted undiscounted cash flows, as follows:

Contractual maturities of financial liabilities	Less than 1 year RMB'000	Between 1 and 2 year RMB'000	Between 2 and 5 year RMB'000	Over 5 years RMB'000	Total RMB'000	Carrying amount RMB'000
As at 31 December 2019 Short-term bank borrowings Other current liabilities Long-term bank borrowings Long-term payables Trade payables Other payables Debentures	205,738 21,131 970,469 32,058 231,293 1,532,842 78,780	808,529 33,037 - 775,128	1,250,571 106,222 - 1,175,827	- 1,726,434 274,126 - -	205,738 21,131 4,756,003 445,443 231,293 1,532,842 2,029,735	200,000 20,250 3,818,136 290,891 231,293 1,532,842 1,797,389
Dividends payable	1,172	- // 3,128	1,1/3,02/	-	1,172	1,797,589
	3,073,483	1,616,694	2,532,620	2,000,560	9,223,357	7,891,973
Contractual maturities of financial liabilities	Less than 1 year RMB'000	Between 1 and 2 year RMB'000	Between 2 and 5 year RMB'000	Over 5 years RMB'000	Total RMB'000	Carrying amount RMB'000
As at 31 December 2018	200.000				200.000	200.000
Short-term bank borrowings Long-term bank borrowings	200,000 311,457	839,253	1,068,843	419,156	200,000 2,638,709	200,000 2,265,906
Long-term payables	30,340	31,202	99,878	300,901	462,321	2,205,784
Trade payables	176,398		-		176,398	176,398
Other payables	1,456,133	_	_	_	1,456,133	1,456,133
Debentures	78,780	78,780	1,837,215	_	1,994,775	1,796,363
Dividends payable	1,912				1,912	1,912
	2,255,020	949,235	3,005,936	720,057	6,930,248	6,192,496

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

3.2 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

Consistent with others in the industry, the Group monitors capital on the basis of the gearing ratio. This ratio is calculated as net debt divided by total capital. Net debt is calculated as total borrowings (including 'current and non-current borrowings' as shown in the consolidated balance sheet) less cash and cash equivalents. Total capital is calculated as 'equity' as shown in the consolidated balance sheet plus net debt.

For the year ended 31 December 2019, the Group's strategy is to maintain a gearing ratio below 40%. The gearing ratio of the Group is as follows:

	As at 31 December		
	2019	2018	
	RMB'000	RMB'000	
Total borrowings	6,126,666	4,558,052	
Less: Cash and cash equivalents	(2,066,301)	(1,808,543)	
Net debt	4,060,365	2,749,509	
Total equity	7,142,187	6,614,967	
Total capital	11,202,552	9,364,476	
Gearing ratio	36%	29%	

As at 31 December 2019, the gearing ratio of the Group is increased compared to last year, which was mainly due to the increase in the Group's borrowings for new and upgrading projects.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

3 FINANCIAL RISK MANAGEMENT (Continued)

- 3.2 Capital management (Continued)
 - (a) Loan covenants

Under the terms of the major borrowing facilities, the Group is required to comply with the following financial covenants:

- The borrower's gearing ratio must not be more than 90%;
- The borrower shall not provide guarantee to third party before the approval of the lender in certain circumstances, and
- No dividend and bonus shall be distributed in any form until the loan principal, interest and related expenses of the contract have been paid off.

The Group has complied with these covenants through the reporting period.

3.3 Fair value estimation

Financial instruments are carried at fair value as at 31 December 2019 by level of the inputs to valuation techniques used to measure fair value. Such inputs are categorised into three levels within a fair value hierarchy as follows:

Level 1: The fair value of financial instruments traded in active markets (such as publicly traded derivatives, and trading and available-for-sale securities) is based on quoted (unadjusted) market prices at the end of the reporting period. The quoted marked price used for financial assets held by the Group is the current bid price. These instruments are included in level 1.

Level 2: The fair value of financial instruments that are not traded in an active market (for example, over-the-counter derivatives) is determined using valuation techniques. These valuation techniques maximise the use of observable market data where it is available and rely as little as possible on entity specific estimates. If all significant inputs required to fair value an instrument are observable, the instrument is included in level 2.

Level 3: If one or more of the significant inputs is not based on observable market data, the instrument is included in level 3. This is the case for unlisted equity securities.

As at 31 December 2019, the Group has a number of financial instruments which are not measured at fair value in the balance sheet. For all of these instruments, the fair value are not materially different from their carrying amounts, since the interest receivable/payable is either close to current market rates or the instruments are short term in nature.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

The preparation of financial statements requires the use of accounting estimates which, by definition, will seldom equal the actual results. Management also needs to exercise judgement in applying the Group's accounting policies.

Estimates and judgements are continually evaluated. They are based on historical experience and other factors, including expectations of future events that may have a financial impact on the entity and that are believed to be reasonable under the circumstances.

(a) Estimation of provision for financial assets

The Group recognises the loss provision based on expected credit losses ("ECL") for financial assets measured at amortised cost.

The Group calculates the probability weighted amount of the present value of differences between the cash flows receivable by the contract and the cash flows expected to be received, and recognises the ECL by considering the reasonable and well-founded information on past events, current conditions and forecasts of future economic conditions, taking the risk of default as a weight.

As at each balance sheet date, the Group measures the ECL of financial instruments at different stages respectively. Financial instrument that had no significant increase in credit risk since initial recognition belongs to "Stage 1", and the Group makes loss provision based on the ECL in the following 12 months. Financial instrument that had a significant increase in credit risk but with no credit impairment since initial recognition belongs to "Stage 2", and the Group makes the loss provision based on the lifetime ECL. Financial instrument that suffered credit impairment since initial recognition belongs to "Stage 3", and the Group makes the loss provision based on the lifetime ECL.

For the financial instrument with lower credit risk on the balance sheet date, the Group assumes that its credit risk had not been significantly increased since initial recognition, and makes the loss provision based on the ECL in the following 12 months.

For financial instruments belonging to "Stage 1", "Stage 2" and those with lower credit risk, the interest income is calculated based on its carrying amount (including impairment provision) and effective interest rate. For the financial instrument belonging to "Stage 3", the interest income is calculated based on the amortised cost (which is made after carrying amount less the impairment provision) and effective interest rate.

For notes receivable, trade receivables and contract assets, regardless of existence of the significant financing component, the Group makes the loss provision according to the lifetime ECL.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

(a) Estimation of provision for financial assets (Continued)

The Group divides receivables into certain groupings based on credit risk characteristics, then pursuant to which, calculates the ECL. Basis for grouping is as follows:

Banker's acceptance notes group	Banker's acceptance from bank under low risk
Non-provincial government customers group	Trade receivables with non-provincial government customers
Non-government customers group	Trade receivables excluding those belong to government customers group
Project deposit group	Project deposits
Others group	Other receivables excluding VAT refund, project deposits and
	receivable from subsidiaries

For notes receivable in above groupings, the Group calculates ECL using exposure at default ("EAD") and lifetime ECL rate with reference to historical credit loss experience, in combination with the current situation and forecasts of future economic conditions.

For trade receivables in above groupings, the Group calculates ECL by preparing cross-reference between overdue days of trade receivables and lifetime ECL rate with reference to historical credit loss experience, in combination with the current situation and forecasts of future economic conditions.

For other receivables in above groupings, the Group calculates ECL using EAD and lifetime ECL rate or ECL rate in the following 12 months with reference to historical loss experience, in combination with the current situation and forecasts of future economic conditions.

The Group included the provision for or reversal of loss provision into profit or loss.

(b) Income tax

The Group is subject to income taxes in numerous jurisdictions. There are some transactions and events for which the ultimate tax determination is uncertain during the ordinary course of business. Significant judgment is required from the Group in determining the provision for income taxes in each of these jurisdictions. Where the final identified outcome of these tax matters is different from the initially-recorded amount, such difference will impact the income tax expenses and deferred income tax in the period in which such determination is finally made.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

4 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS (Continued)

(c) Estimated provision for non-current assets

The Group assesses the impairment of non-current assets based on the recoverabilities of them. An impairment is recognised for the amount by which the asset's carrying amount exceeds its recoverable amount. These assessments require the use of estimates. The carrying amount and the impairment provision will change, when the accounting estimate changes.

5 SEGMENT INFORMATION

(a) Description of segments and principal activities

Management has determined the operating segments based on the reports reviewed by the strategy steering committee held regularly that are used to make strategic decisions for the purpose of allocating resources and assessing performance.

The strategy steering committee meeting considers the business primarily from service perspective and for the most significant business segments geographical perspectives will also be considered. From a service perspective, management assesses the performance of processing of sewage water, recycled water and pipeline connection, heating and cooling services, tap water operations and sale of environmental protection equipment. Processing of sewage water is further evaluated on a geographical basis (Tianjin plants, Hangzhou plant and other plants). The environmental protection equipment is mainly the achievement of technology research. The assets are allocated based on the operations of the respective segment. Expenses indirectly attributable to each segment are allocated to the segments based on the proportion of each segment's revenue.

Other services include contract operation services, lease of office building or apartments and provide technical services etc. These are not separately presented within the reportable operating segments, but included in the 'all other segments' column.

The strategy steering committee assesses the performance of the operating segments based on a measure of profit before income tax, which is measured in the approach consistent with that in the financial statements.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 SEGMENT INFORMATION (Continued)

(b) Operating segment analysis

(i) For the year ended 31 December 2019

	Sewa	ge water process	ing						
	Tianjin plants RMB' 000	Hangzhou plant RMB'000	Other plants RMB'000	Recycled water and pipeline connection RMB'000	Heating and cooling services RMB'000	Tap water operations RMB'000	Sale of environmental protection equipment RMB'000	All other segments RMB'000	Group RMB'000
Segment revenue Timing of revenue recognition:	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	291,477	2,851,453
At a point in time	-	-	-	-	-	-	-	18,875	18,875
Over time	1,122,467	254,208	648,351	283,813	101,377	105,374	44,386	272,602	2,832,578
Segment expense	(878,181)	(210,958)	(511,231)	(199,529)	(63,035)	(80,791)	(28,167)	(250,012)	(2,221,904)
Segment results	244,286	43,250	137,120	84,287	38,342	24,583	16,219	41,462	629,549
Profit before income tax Income tax expense									629,549 (100,587)
Profit for the year									528,962
Segment assets	6,779,197	981,119	6,625,106	985,548	705,829	507,909	57,814	1,153,285	17,795,807
Investment accounted for using the equity method									195,000
Total assets									17,990,807
Total liabilities	(6,090,474)	(286,491)	(2,714,905)	(846,306)	(374,378)	(32,434)	(11,257)	(492,375)	(10,848,620)
Other information									
- Interest income	12,498	1,820	2,874	4,463	855	28	1,186	227	23,951
- Interest expenses	(126,783)	(11,077)	(69,493)	(56)	(3,197)	(1,712)	(9)	(1,655)	(213,982)
– Depreciation	(19,850)	-	(605)	(19,377)	(296)	(1,132)	(521)	(4,737)	(46,518)
- Amortization	(170,375)	(62,648)	(177,327)	(7,727)	(23,186)	(17,330)	(1)	(4,371)	(462,965)
– Capital expenditures	121,112		1,585,870	54,656	53,621	73,918		226,177	2,115,354

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 SEGMENT INFORMATION (Continued)

(b) Operating segment analysis (Continued)

(ii) For the year ended 31 December 2018

	Sewage water processing								
	Tianjin plants RMB'000	Hangzhou plant RMB' 000	Other plants RMB'000	Recycled water and pipeline connection RMB'000	Heating and cooling services RMB'000	Tap water operations RMB'000	Sale of environmental protection equipment RMB'000	All other segments RMB'000	Group RMB'000
Segment revenue Timing of revenue recognition: At a point in time	858,211	284,062	484,102	349,860	91,015	93,261	35,282	251,722	2,447,515
Over time	858,211	284,062	484,102	349,860	91,015	93,261	35,282	251,722	2,447,515
Segment expense	(607,310)	(201,086)	(376,977)	(213,545)	(57,905)	(76,419)	(29,044)	(190,385)	(1,752,671)
Segment results	250,901	82,976	107,125	136,315	33,110	16,842	6,238	61,337	694,844
Profit before income tax Income tax expense									694,844 (168,064)
Profit for the year									526,780
Segment assets	6,430,423	1,090,937	5,136,425	863,109	611,827	376,511	48,816	934,400	15,492,448
Investment accounted for using the equity method									195,000
Total assets									15,687,448
Total liabilities	5,838,269	349,501	1,351,428	816,293	290,659	40,542	9,711	376,078	9,072,481
Other information									
- Interest income	33,398	1,748	2,218	14,206	792	15	386	1,016	53,779
- Interest expenses	(145,836)	(15,461)	(31,211)	(57)	(2,138)	(2,319)	(18)	(1,734)	(198,774)
- Depreciation	(235)	(1),101)	(4,217)	(25,071)	(16)	(48)	(513)	(14,730)	(44,830)
– Amortization	(131,095)	(60,781)	(114,353)	(5,157)	(18,310)	(14,061)	(1,026)	(1,639)	(346,422)
– Capital	/	/	/		/	/			/
expenditures	923,737		2,499,828	182,955	45,520	150,780	2,871	162,481	3,968,172

(iii) The Group's revenue from contracts with customers are all derived from customers in China.

The non-current assets are all located in China.

Segment revenue as derived from two customers of the sewage processing segment amounted to approximately RMB1,110 million and RMB255 million respectively, representing approximately 39% and 9% of the Group's segment revenue (2018: RMB847 million and RMB284 million, 34% and 11%).

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 SEGMENT INFORMATION (Continued)

(c) Liabilities related to contracts with customers - contract liabilities

	31 December 2019 RMB'000	31 December 2018 RMB'000
For recycled water and pipeline connection services	508,138	453,602
For sewage water services	12,071	_
For equipment sales	11,263	_
For heating supply services	8,014	4,074
For hazardous wastes	6,197	_
Others	12,789	11,509
	558,472	469,185

(i) Revenue recognised in relation to contract liabilities

The following table shows how much of the revenue recognised in the current reporting period relates to carried-forward contract liabilities.

	31 December 2019 RMB'000	31 December 2018 RMB'000
<i>Revenue recognised that was included in the contract liability balance at the beginning of the period</i>		
Pipeline connection service	166,190	249,567
Heating supply service	4,074	3,670
Others	3,131	3,955
	173,395	257,192

The Group classified these contract liabilities as current because the Group expects to realise them in its normal operating cycle.
For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

5 SEGMENT INFORMATION (Continued)

(c) Liabilities related to contracts with customers – contract liabilities (Continued)

(ii) Unsatisfied long-term contracts

As at 31 December 2019, the consideration for pipeline connection services of approximately RMB556 million of which the contracts were signed but the performance obligation is not yet fully completed, will be recognised overtime based on the progress towards the completion of related performance obligations in the following years.

As at 31 December 2019, the consideration for certain entrusted sewage operation services of RMB61 million of which the contracts were signed but the performance obligations is not yet fully completed, among which the Group expects the related revenue of approximately RMB52 million, RMB8 million and RMB1 million will be recognised in 2020, 2021 and 2022 respectively.

As at 31 December 2019, the consideration for equipment sales of RMB13 million of which the contracts were signed but the performance obligations is not yet fully completed. The related revenue is expected to be recognised in 2020.

As at 31 December 2019, a contract of road tolls service fee of RMB571 million was signed but the performance obligations is not yet fully completed, among which the Group expects to recognise revenue of approximately RMB62 million in every year from 2020 to 2028, and revenue of approximately RMB13 million in 2029.

All other contracts are for periods of one year or less or are billed based on time incurred. As permitted under HKFRS 15, the transaction price allocated to these unsatisfied contracts is not disclosed.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

6 OTHER INCOME

	2019 RMB'000	2018 RMB'000
Government grants VAT refund	108,103 58,874	73,140 99,512
Others	12	371
	166,989	173,023

7 EXPENSES BY NATURE

Expenses included in cost of sales, distribution costs and administrative expenses are analysed as follows:

2019	2018
RMB'000	RMB'000
Amortisation – intangible assets 462,965	344,780
Raw materials and consumables used 352,215	190,667
Employee benefit expenses 350,018	286,101
Utilities 342,274	314,546
Repair and maintenance expenses 181,978	105,194
Subcontract cost of recycling water pipeline connection service,	
environmental equipment and toll road management 135,556	178,625
Sewage mud processing fee 93,930	97,018
Depreciation – property, plant and equipment 43,862	42,062
Factory environment, detection and fire prevention expenses 36,759	29,355
Impairment loss on other current assets (Note 22(a))26,808	_
Travel, meeting and business entertainment expenses 21,390	14,403
Consulting service expenses 20,416	15,274
Network maintenance costs 17,330	17,416
Office expenses 9,412	7,054
Expenses of secretary of the board 4,789	4,475
Auditors' remuneration – audit services3,300	3,300
Other taxes 2,663	2,464
Depreciation – right-of-use assets 2,278	-
Depreciation – investment properties 378	2,768
Amortisation – land use rights –	1,642
Others 51,952	46,364
2,160,273	1,703,508

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8 EMPLOYEE BENEFIT EXPENSES

	2019 RMB'000	2018 RMB'000
Wages and salaries	236,651	192,215
Social security costs	67,485	50,342
Pension costs – defined contribution plans	27,062	29,591
Other benefits	18,820	13,953
	350,018	286,101

(a) Five highest paid individuals

The five individuals whose emoluments were the highest in the Group for the year included two (2018: two) directors whose emoluments are reflected in the analysis shown in Note 41. The emoluments to the remaining three (2018: three) individuals during the year are as follows:

	2019 RMB'000	2018 RMB'000
Wages and salaries	1,419	1,664
Discretionary bonuses	478	470
Social security costs	360	337
Pension costs – defined contribution plans	178	181
Total	2,435	2,652

The emoluments fell within the following bands:

	2019 RMB'000	2018 RMB'000
Emolument bands (in HK dollar)		
HK\$500,000 – HK\$1,000,000	3	2
HK\$1,000,000 – HK\$1,500,000		1

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9 FINANCE COSTS – NET

	2019 RMB'000	2018 RMB'000
Interest expenses of borrowings	250,341	233,574
Less: Capitalised interest (a)	(36,359)	(34,800)
Net interest expenses	213,982	198,774
Net exchange losses (b)	8,813	16,543
Others	552	448
Finance costs	223,347	215,765
Less: Interest income	(23,951)	(53,779)
– long-term receivables	(9,405)	(10,029)
– bank deposits	(14,546)	(43,750)
Finance costs	199,396	161,986

(a) Capitalised borrowing costs

The capitalisation rate used to determine the amount of borrowing costs to be capitalised is the weighted average interest rate applicable to the Group' general borrowings during the year, which is 4.44% in 2019 (2018: 4.48%).

(b) For the year ended 31 December 2019, the net exchange losses on the long-term payables denominated in JPY and US dollar amounted to approximately RMB9 million (2018: RMB17 million) which have been included as finance costs.

10 OTHER GAINS – NET

	2019 RMB'000	2018 RMB'000
Gain/(loss) on disposal of property, plant and equipment	704	(900)
Gain on disposal of other current assets (Note 22(a))	48,703	-
Government grants	_	5,341
Others	(1,532)	(1,980)
	47,875	2,461

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11 EARNINGS PER SHARE

Basic earnings per share is calculated based on the profit attributable to owners of the Company of approximately RMB507 million (2018: RMB501 million) and weighted average number of ordinary shares of 1,427 million shares in issue during the year (2018: 1,427 million shares).

Diluted earnings per share is calculated by adjusting weighted average number of ordinary shares outstanding to assume conversion of all dilutive potential ordinary shares. The Group has no dilutive potential ordinary shares. Therefore, diluted earnings per share equal to earnings per share and the calculations of which are as below:

	2019 RMB'000	2018 RMB'000
Profit attributable to owners of the Company	507,107	501,168
Weighted average number of ordinary shares in issue (million shares)	1,427	1,427
Basic and diluted earnings per share (RMB Yuan)	0.36	0.35

12 INCOME TAX EXPENSE

Hong Kong profits tax has been provided at the rate of 16.5% (2018: 16.5%) on the estimated assessable profit generated in Hong Kong for the year. Taxation on PRC profits has been calculated on the estimated assessable profit for the year at the statutory corporate income tax rates of 25% except that subsidiaries are eligible to preferential income tax rates or arrangement as describe below.

Name of subsidiaries	Enterprise income tax rate for 2019	Reason for the preferential tax policy
The Company	15%	According to <i>The Corporate Income Tax Policy of Third-party Enterprises Engaged</i> <i>in Pollution Prevention and Control</i> issued on April 13, 2019 (Announcement No. 60, 2019, issued by the Ministry of finance, the Taxation Administration, the National Development and Reform Commission and the Ministry of Ecology and Environment), enterprise income tax shall be levied at a reduced rate of 15% for qualified third-party enterprises engaged in pollution prevention and control.
Fuyang Capital Water Co., Ltd.	12.5%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2014 for the first 3 years and reduction half for the next 3 years.
Gui Zhou Capital Water Co., Ltd.	15%	According to Notice of Guizhou Provincial SAT on Implementation of Preferential Tax Policy Relating to Development of Western Regions, (Qian Guo shui Han [2011] No. 19) from 2011 to 2020.
Xi'an Capital Water Co., Ltd.	15%	According to Notice of Shaanxi Provincial SAT on Issuing Measures for Review and Management of Preferential Tax Policy of Enterprises Relating to Development of Western Regions, (Notice [2010] No. 3) from 2011 to 2020.

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12 INCOME TAX EXPENSE (Continued)

	Enterprise income tax rate	
Name of subsidiaries		Reason for the preferential tax policy
Hangzhou Tianchuang Capital Water Co., Ltd.	12.5%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 1 July 2016 for the first 3 years and reduction half for the next 3 years.
Tianjin Caring Technology Development Co., Ltd ("Caring Company")	15%	High-tech enterprise entitled to preferential tax policy from 2013 to 2019.
Tianjin Water Recycling Co., Ltd.	income is 90%	According to Cai Shui [2008] No. 47, since 1 January 2008, for revenues generated from products which were in line with national or industry standards, the taxable income amount is 90% of the total revenue.
Karamay Tianchuang Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2017 for the first 3 years and reduction half for the next 3 years.
Linxia Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Bayannur Capital Water Co., Ltd.	Sewage water: 0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
	The taxable income	According to Cai Shui [2008] No. 47, since 1 January 2008, for revenues generated from products which were in line with national or industry standards, the taxable income amount is 90% of the total revenue.
Yingshang Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Dalian Oriental Chunliuhe Water Quality Purification Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2018 for the first 3 years and reduction half for the next 3 years.
Shandong Capital Environmental Protection Technology Consultant Co., Ltd.	0%	According to Cai Shui [2009] No. 166, income from engagement in qualified industrial solid waste treatment projects and hazardous waste treatment projects is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.
Hanshou Tianchuang Capital Water Co., Ltd.	0%	According to Cai Shui [2019] No. 67, income from rural drinking water safety projects is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.
Jiuquan Capital Water Co., Ltd.	0%	Income from engagement in qualified projects of environmental protection and energy and water conservation is subject to exemption from enterprise income tax commence from 2019 for the first 3 years and reduction half for the next 3 years.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

12 INCOME TAX EXPENSE (Continued)

	2019 RMB'000	2018 RMB'000
Current income tax Deferred income tax (credit)/charge (Note 33)	118,021 (17,434)	163,631 4,433
	100,587	168,064

Reconciliation between profit before income tax and the aggregate tax at the statutory corporate income tax rates in the PRC applicable to profits in the respective entities concerned is set below:

	2019 RMB'000	2018 RMB'000
Profit before income tax	629,549	694,844
Tax at PRC tax rate of 25% (2018: 25%) Effect of preferential tax rates	157,387 (33,195)	173,711 (3,552)
Income not subject to tax	(37,070)	(47,596)
Expenses not deductible for taxation purposes	21,664	46,675
 Revenue recognition differences from VAT filing 	5,724	21,158
– Depreciation not deductible	15,112	20,477
– Over provision in the prior year	(1,124)	(208)
– Expenses without tax invoices	2,315	6,138
– Others	(363)	(890)
Utilisation of tax losses and deductible temporary differences unrecognised previously	(10,274)	(3,939)
Recognition of previously unrecognised deductible temporary differences	(6,118)	_
Current year tax losses for which no deferred income tax asset was recognised	8,193	2,765
Income tax expense	100,587	168,064

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

13 DIVIDENDS

(i) Ordinary shares

		2019 RMB'000	2018 RMB'000
	Final dividend for the year ended 31 December 2018 of 10.6 cent (2017: nil) per fully paid share	151,285	
	Dividends paid in cash	151,285	
	(ii) Dividends not recognised at the end of the reporting period		
		2019 RMB'000	2018 RMB'000
	In addition to the above dividends, since year end the directors have recommended the payment of a final dividend of 10.7 cents per fully paid ordinary share (2018: 10.6 cents). The aggregate amount of the proposed dividend expected to be paid on May 13 2020 out of retained earnings	160 710	151 205
	at 31 December 2019, but not recognised as a liability at year end, is	152,713	151,285
14	LAND USE RIGHTS		RMB'000
	Costs		
	At 31 December 2017 and 31 December 2018 Adjustment for change in accounting policy (Note 2.2)		65,445 (65,445)
	At 1 January 2019 (restated) and 31 December 2019		
	Accumulated amortisation		
	At 1 January 2018 Charges for the year		(3,445) (1,642)
	At 31 December 2018 Adjustment for change in accounting policy (Note 2.2)		(5,087) 5,087
	At 1 January 2019 (restated) and 31 December 2019		
	Net book value		
	At 31 December 2019		
	At 31 December 2018		60,358

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

15 RIGHT-OF-USE ASSETS

The Group's right-of-use assets represent the Group's interests in land use rights in respect of lease payments made for the use of land located in the PRC under medium term leases of 25 to 50 years. Until the 2018 financial year, the related lease payments were classified as land use rights. From 1 January 2019, they are recognised as a right-of-use assets. For adjustments recognised on adoption of HKFRS 16 on 1 January 2019, please refer to Note 2.2. The Group's interests in land use rights are analysed as follows:

	RMB'000
Cost	
At 1 January 2019 Adjustment for changes in accounting policy (Note 2.2)	65,445
At 1 January 2019 (restated) and 31 December 2019	65,445
Accumulated depreciation	
At 1 January 2019 Adjustment for changes in accounting policy (Note 2.2)	(5,087)
At 1 January 2019 (restated) Charges for the year	(5,087) (2,278)
At 31 December 2019	(7,365)
Net book value	
At 31 December 2019	58,080
At 1 January 2019 (restated)	60,358

- As at 31 December 2019, bank borrowing of RMB194 million (Note 30(a)(i)) (2018: 80 million) is secured by right-of-use assets with carrying amount of RMB26 million (2018: RMB27 million).
- (ii) Except for the land use rights as classified as right-of-use assets as mentioned above, the Group does not have any other leasing activities which may give rise to right-of-use assets or lease liabilities to be recognised in accordance with HKFRS 16.
- (iii) As at 31 December 2019, the legal title certificates of certain land use rights with carrying amount of 10 million and cost of RMB13 million (2018: carrying amount of RMB10 million and cost of RMB13 million) are yet to be obtained. As these assets are supported by legal sale and purchase agreements, management of the Company is of the view that the legal titles will be obtained in due course without additional significant costs to the Group.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

16 PROPERTY, PLANT AND EQUIPMENT

	Buildings and constructions RMB' 000	Machinery and equipment RMB'000	Motor vehicles and others RMB'000	Construction in progress (Note (iii)) RMB'000	Total RMB'000
Cost					
At 1 January 2018 Additions Transfer to intangible assets (Note 17) Disposals Others(iii)	299,825 10,427 (3,182) 5,669	320,131 6,570 (230) (26,886)	67,539 6,062 (8,341) 4,673	20,657 2,300,318 (2,170,036) 	708,152 2,323,377 (2,170,036) (11,753) (16,544)
At 31 December 2018	312,739	299,585	69,933	150,939	833,196
Additions Transfer from investment properties (Note 18) Transfer to intangible assets (Note 17) Disposals	101,599 118,408 (1,285)	144,675 	10,947 	1,100,576 (1,092,301)	1,357,797 118,408 (1,092,301) (5,638)
At 31 December 2019	531,461	443,180	77,607	159,214	1,211,462
Accumulated depreciation					
At 1 January 2018 Charges for the year Disposals Others (iii)	(102,832) (13,488) 3,023 11,928	,	(52,483) (3,689) 6,869 (1,184)	- - -	(303,664) (42,062) 10,110
At 31 December 2018	(101,369)	(183,760)	(50,487)	_	(335,616)
Charge for the year Transfer from investment properties (Note 18) Disposals	(13,436) (34,734) 	,	(4,000)	_ 	(43,862) (34,734) 3,757
At 31 December 2019	(149,539)	(209,580)	(51,336)		(410,455)
Net book value					
At 31 December 2019	381,922	233,600	26,271	159,214	801,007
At 31 December 2018	211,370	115,825	19,446	150,939	497,580

(i) As at 31 December 2019, the certificate of legal title to the building included in property, plant and equipment with carrying amount of RMB102 million and cost of RMB160 million (2018: carrying amount of RMB43 million and cost of RMB68 million) has yet to be obtained. As these assets are supported by legal sale and purchase agreements, management of the Company is of the view that the legal titles will be obtained in due course without additional significant costs to the Group.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

16 PROPERTY, PLANT AND EQUIPMENT (Continued)

(ii) According to the policies of the Tianjin Municipal Government (the "Tianjin Government"), the Company is mandated to improve the quality standards of the effluent from two of its sewage treatment plants in Tianjin. As a result, the operations of the Company's Xianyang Road Sewage Plant and Dongjiao Water Plant (include matched recycling water plant) have to be relocated and conducted in another new plants to be constructed by the Tianjian Government (namely the "New Xianyang Road Sewage Plant and the New Dongjiao Water Plant"). All of the construction costs for the new plants (together with the associated land costs) and relocation costs will be borne by the Tianjin Government.

The New Xianyang Road Water Plant as freely provided by the Tianjin Government becomes ready for use on 1 August 2019 and all of the operations of the Xianyang Road Sewage Plant has been relocated to the New Xianyang Road Sewage Plant and the Group has transferred its entire interests in the Xianyang Road Sewage Plant (including the land) to the Tianjian Government on the same date (the "Assets Transfer Date") (the "Relocation and Nonmonetary Assets Exchange Arrangement"). All of the key terms of the service concession right agreement governing the operations of the Xianyang Road Sewage Plant (the "Concession Right Agreement") remains unchanged and continued to be applicable to the Company's operations of the New Xianyang Road Sewage Plant till the end of the Concession Right Agreement. The Tianjin Government has also approved that the Company can increase the tariff rates for its sewage processing services (to certain extent) so as to compensate the higher operating costs for maintaining the improved quality standards of the effluent from the New Xianyang Road Sewage Plant.

As of the Assets Transfer Date, the assets and concession right as recognised by the Group in connection with operations of the Xianyang Road Sewage Plant were included in property, plant and equipment, right-of-use assets (representing the land use rights) and intangible assets with the carrying amounts of RMB19 million (with cost amounts and accumulated depreciation amounts of RMB96 million and RMB77 million respectively), RMB4 million (with cost amounts and accumulated depreciation amounts of RMB5 million and RMB1 million respectively) and RMB685 million (with cost amounts and accumulated amortisation amounts of RMB1,094 million and RMB409 million respectively), respectively.

The entire Relocation and Non-monetary Assets Exchange Arrangement is conducted based on the instructions of the Tianjin Government and the Group has not been exposed to or benefit from any significant changes in risks and rewards as a result of that arrangement. In view of this, the Directors of the Company are of the view that the Relocation and Non-monetary Assets Exchange Arrangement will not have any impact on the carrying amounts of property, plant and equipment, right-of-use assets and intangible assets as previously recognised by the Group and the related assets (including the concession right) will continue to be depreciated or amortised on a consistent straight-line basis over their respective remaining useful lives or concession right period (as applicable).

The relocation of the Dongjiao Water Plant under similar arrangement as mentioned above is expected to be commenced and completed in 2020.

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16 PROPERTY, PLANT AND EQUIPMENT (Continued)

(iii) In November 2018, the construction cost of Jingu sewage water recycling factory has been finalised and adjustments and reclassification to the respective cost and accumulated depreciation have been made by reference to the final accounts report for the project accordingly.

17 INTANGIBLE ASSETS

	Concession rights RMB'000	Technical know-how and software RMB'000	Total RMB'000
Cost			
At 1 January 2018 Transfer from construction in progress (Note 16) Business combination Additions	8,649,998 2,170,036 1,124,058 495,049	11,541 405	8,661,539 2,170,036 1,124,058 495,454
At 31 December 2018	12,439,141	11,946	12,451,087
Transfer from construction in progress (Note 16) Additions	1,092,301	237	1,092,301 757,557
At 31 December 2019	14,288,762	12,183	14,300,945
Accumulated amortisation			
At 1 January 2018 Charges for the year	(1,733,319) (343,964)	(6,436) (816)	(1,739,755) (344,780)
At 31 December 2018 Charges for the year	(2,077,283) (462,152)	(7,252)	(2,084,535) (462,965)
At 31 December 2019	(2,539,435)	(8,065)	(2,547,500)
Impairment At 1 January 2018, 31 December 2018 and 31 December 2019	(52,083)		(52,083)
Net book value			
At 31 December 2019	11,697,244	4,118	11,701,362
At 31 December 2018	10,309,775	4,694	10,314,469

(i) At 31 December 2019, certain concession rights with carrying amounts of approximately RMB2,646 million (cost of RMB3,323 million) (2018: carrying amount of RMB2,758 million (cost of RMB3,323 million)) have been pledged as securities for bank borrowing of RMB527 million (2018: RMB321 million) (Note 30(a)(i)).

(ii) The amortisation period of concession rights ranges from 10 to 30 years.

For t	he year ended 31 December 2019
(All amounts in RMB	thousand unless otherwise stated)

18 INVESTMENT PROPERTIES

	RMB'000
Cost	
At 31 December 2017 and 31 December 2018 Transfer to property, plant and equipment (Note)	118,408 (118,408)
At 31 December 2019	
Accumulated depreciation	
At 1 January 2018 Charge for the year	(31,588) (2,768)
At 31 December 2018	(34,356)
Charge for the year Transfer to property, plant and equipment (Note)	(378) 34,734
At 31 December 2019	
Net book value	
At 31 December 2019	
At 31 December 2018	84,052

Note:

Upon the expiring of related lease agreements, the Tianjin Ningfa Building and certain properties of Tianjin Water Recycling Co., Ltd. have been held for internal use since 1 January 2019 and 21 September 2019 respectively. Accordingly, these properties have been reclassified as the Group's property, plant and equipment since then.

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19A SUBSIDIARIES

The following is a list of the principal subsidiaries at 31 December 2019:

Name	Place of registration and operation	Nature of business and business scope	Registered capital RMB'000	Equity interest held by the Group (%) 2019/2018	Equity interest held by the non- controlling interest (%) 2019/2018
Qujing Capital Water Co., Ltd. ("Qujing Company")	Qujing, PRC	Sewage processing, tap water supply	178,983	87/87	13/13
Guizhou Capital Water Co., Ltd. Baoying Capital Water Co., Ltd. ("Baoying Company")	Guizhou, PRC Baoying, PRC	Sewage processing Sewage processing	120,000 83,000	95/95 70/70	5/5 30/30
Hang Zhou Tianchuang Capital Water Co., Ltd. ("Hang Zhou Company")	Hangzhou, PRC	Sewage processing	377,445	70/70	30/30
Tianjin Capital New Materials Co., Ltd.	Tianjin, PRC	Production and sales of new types of construction materials	37,500	71/71	29/29
Fuyang Capital Water Co., Ltd. Tianjin Capital Environmental Protection (Hong Kong) Co., Ltd.	Fuyang, PRC Hong Kong, PRC	Sewage processing Sewage processing	390,111 62,987	100/100 100/100	_/_ _/_
Wendeng Capital Water Co., Ltd.	Wendeng, PRC	Sewage processing	61,400	100/100	_/_
Tianjin Jinghai Capital Water Co., Ltd Tianjin Water Recycling Co., Ltd.	Tianjin, PRC Tianjin, PRC	Sewage processing Production and sales of recycled water and technical consulting for water recycling business	37,553 100,000	100/100 100/100	_/_ _/_
Xi'an Capital Water Co., Ltd. Caring Company	Xi'an, PRC Tianjin, PRC	Sewage processing Environmental engineering, protection and technical consultation material	334,000 33,333	100/100 60/60	_/_ 40/40
Anguo Capital Water Co., Ltd. Wuhan Tianchuang Environmental Protection Co., Ltd	Anguo, PRC Wuhan, PRC	Sewage processing Sewage and tap water processing	41,000 201,969	100/100 100/100	_/_ _/_
Tianjin Jinning Capital Water Co., Ltd. Tianjin Capital Alternative Energy Technology Co., Ltd.	Tianjin, PRC Tianjin, PRC	Sewage processing Energy saving, innovative energy research, consulting and transfer service property management	22,560 191,951	100/100 100/100	_/_ _/_
Yingshang Capital Water Co., Ltd. Shandong Capital Environmental Protection Technology Consultant Co., Ltd. ("Shandong Company")	Yingshang, PRC Shandong, PRC	Sewage processing Sewage processing engineering	53,000 105,600	100/100 55/55	_/_ 45/45
Changsha Tianchuang Capital Environmental Protection Co., Ltd.	Changsha, PRC	Sewage processing	40,250	81/81	19/19
Karamay Tianchuang Capital Water Co., Ltd.	Karamay, PRC	Sewage processing	120,000	90/90	10/10
Anhui Tianchuang Capital Water Co., Ltd.		Sewage processing	63,670	100/100	_/_
Linxia Capital Water Co., Ltd. Dalian Oriental Chunliuhe Water Quality Purification Co., Ltd. ("Dalian Company")	Linxia, PRC Dalian, PRC	Sewage processing Sewage processing	45,000 94,079	100/100 64/64	_/_ 36/36
Changsha Tianchuang Capital Water Co., Ltd.	Changsha, PRC	Sewage processing	19,148	80/80	20/20
Inner Mongolia Bayannur Capital Water Co., Ltd. ("Bayannur Company")	Bayannur, PRC	Sewage processing	1,067,578	70/70	30/30
Honghu Tianchuang Capital Water Co., Ltd.	Honghu, PRC	Sewage processing	131,331	85/85	15/15
Hefei Capital Water Co., Ltd. Deqing Capital Water Co., Ltd. Hebei Guojin Tianchuang Capital Water Co., Ltd. ("Guojin Company")	Hefei, PRC Deqing, PRC Gaocheng, PRC	Sewage processing Sewage processing Sewage processing	205,957 60,000 217,497	100/100 90/90 59/59	_/_ 10/10 41/41
Hanshou Tianchuang Capital Water Co., Ltd.	Hanshou, PRC	Sewage processing	45,000	75/75	25/25
Jiuquan Capital Water Co., Ltd.	Jiuquan, PRC	Sewage processing	178,238	89/89	11/11

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

19A SUBSIDIARIES (Continued)

(i) Material non-controlling interests

The total non-controlling interests as at 31 December 2019 are approximately RMB968 million (2018: RMB797 million), of which approximately RMB872 million (2018: RMB733 million) are attributable to following subsidiaries:

	At	At 31
	31 December 2019	December 2018
	RMB'000	RMB'000
Hang Zhou Company	214,057	204,730
Qujing Company	40,287	36,024
Dalian Company	25,333	23,988
Bayannur Company	337,398	333,358
Baoying Company	33,525	33,103
Caring Company	49,650	46,136
Shandong Company	82,112	55,378
Guojin Čompany (Note)	89,148	
	871,510	732,717

Note:

On March 2019, the Company contributed RMB128 million in cash to Guojin Company whose registered capital was RMB217 million, accounting for 59% of the share capital. Three other shareholders contributed RMB89 million and hold 41% of the equity interest in Guojin Company.

The non-controlling interests in other subsidiaries are not material. Summarised financial information on subsidiaries with material non-controlling interests is set out as below:

Summarised balance sheet

	At 31 December 2019						
	Current assets RMB'000	Current liabilities RMB'000	Current net assets RMB'000	Non-current assets RMB'000	Non-current liabilities RMB'000	Non-current net assets RMB'000	Net assets RMB'000
Hang Zhou Company	277,436	153,740	123,696	722,580	132,751	589,829	713,525
Qujing Company	150,284	87,197	63,087	251,500	19,350	232,150	295,237
Dalian Company	23,146	64,647	(41,501)	192,075	80,788	111,287	69,786
Bayannur Company	90,362	14,870	75,492	1,061,028	11,861	1,049,167	1,124,660
Baoying Company	43,553	3,705	39,848	117,614	51,396	66,218	106,066
Caring Company	146,105	29,747	116,358	8,032	266	7,766	124,124
Shandong Company	57,661	104,957	(47,296)	425,597	194,431	231,166	183,870
Guojin Company	58,759		58,759	200,676	42,000	158,676	217,435
	847,306	458,863	388,443	2,979,102	532,843	2,446,259	2,834,703

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19A SUBSIDIARIES (Continued)

(i) Material non-controlling interests (Continued)

Summarised balance sheet (Continued)

		At 31 December 2018					
	Current	Current	Current net	Non-current	Non-current	Non-current	
	assets	liabilities	assets	assets	liabilities	net assets	Net assets
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Hang Zhou Company	325,273	158,784	166,489	784,561	268,617	515,944	682,433
Qujing Company	129,511	72,858	56,653	265,004	58,124	206,880	263,533
Dalian Company	12,294	61,879	(49,585)	171,341	55,692	115,649	66,064
Bayannur Company	36,593	6,680	29,913	1,095,010	13,728	1,081,282	1,111,195
Baoying Company	25,427	2,191	23,236	81,683	259	81,424	104,660
Caring Company	133,640	28,340	105,300	10,342	303	10,039	115,339
Shandong Company	35,503	42,705	(7,202)	207,963	77,700	130,263	123,061
	698,241	373,437	324,804	2,615,904	474,423	2,141,481	2,466,285

Summarised income statement

			Profit allocated	Dividends paid
	Revenue	Profit for the year	to NCI	to NCI
	RMB'000	RMB'000	RMB'000	RMB'000
Hang Zhou Company	254,539	31,091	9,327	_
Qujing Company	116,868	31,703	4,263	_
Dalian Company	29,652	3,723	1,345	_
Bayannur Company	85,615	13,466	4,040	_
Baoying Company	20,154	4,006	1,202	780
Caring Company	122,493	8,785	1,602	_
Shandong Company	14,387	(4,590)	(2,066)	_
Guojin Company		(62)	(25)	
	643,708	88,122	19,688	780

Year ended 31 December 2018

	Revenue RMB'000	Profit for the year RMB'000	Profit allocated to NCI RMB'000	Dividends paid to NCI RMB'000
Hang Zhou Company	284,476	59,991	17,997	_
Qujing Company	110,327	8,414	1,131	-
Dalian Company	4,726	650	235	-
Bayannur Company	55,016	1,256	377	_
Baoying Company	19,189	4,262	1,279	780
Caring Company	114,129	9,453	3,045	_
Shandong Company	368	(3,623)	(336)	
	588,231	80,403	23,728	780

19A SUBSIDIARIES (Continued)

(i) Material non-controlling interests (Continued)

Summarised statement of cash flows

	Year ended 31 December 2019				
	Cash flows from operating activities RMB'000	Cash flows from investing activities RMB'000	Cash flows from financing activities RMB'000	Net increase/ (decrease) in cash and cash equivalents RMB' 000	Cash and cash equivalents at the end of the year RMB'000
Hang Zhou Company	130,900	(27,530)	(148,281)	(44,911)	215,396
Qujing Company	27,157	(1,845)	(31,886)	(6,574)	13,925
Dalian Company	19,238	(38,059)	26,616	7,795	14,195
Bayannur Company	9,578	(4,651)	_	4,927	13,255
Baoying Company	7,865	(40,814)	50,756	17,807	37,680
Caring Company	12,899	(712)	_	12,187	95,210
Shandong Company	4,873	(212,072)	217,894	10,695	37,141
Guojin Company	(56)	(200,682)	259,497	58,759	58,759
	212,454	(526,365)	374,596	60,685	485,561

		Year e	nded 31 Decembe	r 2018	
	Cash flows from operating activities RMB' 000	Cash flows from investing activities RMB'000	Cash flows from financing activities RMB'000	Net increase/ (decrease) in cash and cash equivalents RMB'000	Cash and cash equivalents at the end of the year RMB'000
Hang Zhou Company	138,010	(44,259)	(89,183)	4,568	260,307
Qujing Company	24,941	(621)	(18,022)	6,298	20,499
Dalian Company	257	(72,912)	66,911	(5,744)	6,400
Bayannur Company	9,466	(1,005)	(133)	8,328	8,328
Baoying Company	11,309	(5,695)	4,025	9,639	19,873
Caring Company	7,803	(4,492)	60,067	63,378	83,023
Shandong Company	(2,260)	(124,330)	79,920	(46,670)	26,446
	189,526	(253,314)	103,585	39,797	424,876

19B INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD

	31 December 2019 RMB'000	31 December 2018 RMB'000
Associates Less: provision for long-term equity investment (a)	217,358 (22,358)	217,358 (22,358)
	195,000	195,000

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

19B INVESTMENTS ACCOUNTED FOR USING THE EQUITY METHOD (Continued)

Details of the associates are as below:

	Registration place	Registration capital RMB'000	Shareholding/ voting %
Tianjin International Machinery Co., Ltd. (a)	Tianjin	120,000	27.50%
Tianjin Bihai Sponge City Co., Ltd. (b)	Tianjin	650,000	30.00%

- (a) Tianjin International Machinery Co., Ltd. ("International Machinery") is a Sino-foreign joint venture company registered in the Tianjin Economic-technological Development Area. The principal activities of International Machinery include research and development, production and sale of valve and actuating devices; heater exchanger; environment protection equipment; engineering technical consultation; trading; manufacturing and sale of general equipment. The Group's investment in Internal Machinery is considered as fully impaired and fully provision for impairment had been recognised in 2016 to reduce the Group's internet in the associate to zero.
- (b) Tianjin Bihai Sponge City Co., Ltd. ("Bihai Sponge City") is a limited liability company registered in Tianjin. The principal activities of Bihai Sponge City include construction and operation of water processing projects; purchase and manufacture of water processing equipments; ecological restoration; tourism development; ecological management; Bihai Sponge city project construction and operating management; municipal engineering construction and operation. Bihai Sponge City was registered on 30 July 2018 and is still in the initial construction and pre-operation period.

Summarised investing movement for Bihai Sponge City

	31 December 2019 RMB'000	31 December 2018 RMB'000
Net book value of investments	195,000	195,000
Attributable comprehensive income for the year: – Net profit – Other comprehensive income		
Total comprehensive income		

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

20 FINANCIAL ASSET AT FAIR VALUE THROUGH OTHER COMPREHENSIVE INCOME:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Unlisted securities, at cost: – Equity securities	2,000	2,000

The investments represents an investment in the equity shares of an unlisted entity which do not have a quoted market price in an active market and the fair value of which cannot be reliably measured. Therefore, the investment is stated at costs. The investment is denominated in RMB.

21 LONG-TERM RECEIVABLES

	31 December 2019 RMB'000	31 December 2018 RMB'000
Receivables from toll road concession right Less: loss allowance for impairment of long-term receivables	253,812 (138)	276,613 (138)
Less: current portion	253,674 (17,224)	276,475 (22,789)
	236,450	253,686

The Group receives toll road fee from Tianjin Municipal and Highway Management Bureau (the 'Bureau') over the concession period till 2029. Receivables from toll road concession represent the amortised costs of the related receivables as calculated using effective interest method with reference to the guaranteed minimum future traffic flow over the concession period.

The Bureau is a public institution of the Tianjin Municipal Government. The credit risk level of the Bureau is low. Based on past experience, the receivables can be collected within agreed period. Therefore, the Company estimates that the ECL rate of this receivable item is 0.05%.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

22 OTHER CURRENT ASSETS AND OTHER NON-CURRENT ASSETS

	31 December 2019 RMB'000	31 December 2018 RMB'000
Other current assets:		
Input tax of VAT	52,605	98,605
Current portion of long-term receivables (Note 21)	17,224	22,789
Input VAT to be verified	13,642	10,572
Concession right assets to be returned (a)	6,257	36,913
Income tax prepaid		10,598
	89,728	179,477
Other non-current assets:		
Input tax of VAT	169,965	49,122
Prepayments for construction projects	18,221	50,927
Others	7,733	9,132
	195,919	109,181

(a) As at 31 December 2018, the concession right assets to be returned included tap water plant assets of RMB4 million and sewage water plant assets of RMB33 million (net of accumulated impairment of RMB39 million) which will be returned to the Anguo Government subject to the agreement of amount of compensation to be received from the Anguo Government. In July 2019, the Group received compensation of RMB53 million from the Anguo Government for returning the tap water plant assets to the Anguo Government and hence has recognised a net gain from the derecognition of the related tap water plant assets of RMB49 million during the year ended 31 December 2019 (Note 10).

As the Anguo Government has already compensated a considerable amount for the transfer of the tap water plant assets, management believes that it will become more difficult to also return the sewage water plant to the Auguo Government within a short period of time. Hence, management has conducted an impairment assessment on the recoverable amounts of the sewage plant assets on the basis that the Group has to continue to operate the sewage water plant assets till the end of the related concession period in 2037. Based on the results of the assessment, an impairment loss on the sewage water plant assets of approximately RMB27 million has been recognised during the year ended 31 December 2019. As of the date of these consolidated financial statements, the Group is still in process of negotiating with the Anguo Government for returning of the related sewage water plant assets.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

23 INVENTORIES

	31 December 2019 RMB'000	31 December 2018 RMB'000
Raw materials Finished goods Spare parts and low value consumables	10,888 3,529 388	9,897 3,746 348
	14,805	13,991

24 TRADE RECEIVABLES

	31 December 2019 RMB'000	31 December 2018 RMB'000
Trade receivables Notes receivable	2,508,246	2,079,697 10,295
Receivables from third parties Receivables from related parties	2,524,377 65,474	2,089,992 51,352
	2,589,851	2,141,344
Less: loss allowance (see Note 3.1(b))	(80,956)	(49,584)
	2,508,895	2,091,760

(i) The majority of the Group's sales are on credit or documents against payment. The ageing analysis of the trade receivables based on invoice date were as follows:

	31 December 2019 RMB' 000	31 December 2018 RMB'000
Within 1 month	517,692	204,628
1 month to 1 year	1,352,969	1,263,411
1 to 2 years	641,788	649,268
2 to 3 years	52,987	15,464
More than 3 years	24,415	8,573
Total	2,589,851	2,141,344

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

24 TRADE RECEIVABLES (Continued)

(ii) Impairment and risk exposure

The Group applies the HKFRS 9 simplified approach to measuring expected credit losses which uses a lifetime expected loss allowance for all trade receivables. Note 3.1(b) provides for details about the calculation of the loss allowance and the related movement during the years ended 31 December 2019 and 2018.

25 OTHER RECEIVABLES

	31 December 2019 RMB'000	31 December 2018 RMB'000
VAT refund receivables (i)	31,670	10,379
Deposits	26,847	18,922
Others	6,660	6,871
Less: loss allowance (Note 3.1(b))	65,177 (21)	36,172 (10)
	65,156	36,162

(i) The VAT refund is due from the local tax authorities at balance sheet date.

26 CASH AND CASH EQUIVALENTS

	31 December 2019 RMB'000	31 December 2018 RMB'000
Cash in hand Bank balance and deposits	37 2,079,576	61 1,826,140
	2,079,613	1,826,201
Less: Restricted cash (i)	(13,312)	(17,658)
Cash and cash equivalents	2,066,301	1,808,543

 As at 31 December 2019, bank balance and deposits of approximately RMB13 million (2018: RMB18 million) are restricted as borrowing guarantee deposits.

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27 SHARE CAPITAL

Movement of the Company's authorised, issued and fully paid up capital is set out below. All of the Company's shares are ordinary shares with par value of RMB1.

	Number of circulating A-shares (thousands)	Number of circulating H-shares (thousands)	Total number of shares (thousands)	Total share capital RMB'000
At 31 December 2017, 2018 and 2019	1,087,228	340,000	1,427,228	1,427,228

A-shares represent shares listed on the Shanghai Stock Exchange and H-shares represent shares listed on the Main Board of The Stock Exchange of Hong Kong Limited. All the A-shares and H-shares rank pari passu in all respects.

There is no movement in the Group's issued A-shares and H-shares during the years ended 31 December 2019 and 2018.

28 OTHER RESERVES

	Capital reserve (Note(i)) RMB'000	Statutory reserves RMB'000	Total RMB'000
Balance at 1 January 2018 Non-controlling interests from capital contribution (Note(i)) Profit appropriation to statutory reserve (Note(ii))	399,115 31,909	479,907 	879,022 31,909 37,200
Balance at 31 December 2018 Profit appropriation to statutory reserve (Note(ii))	431,024	517,107 41,143	948,131 41,143
Balance at 31 December 2019	431,024	558,250	989,274

- (i) In 2018, a then wholly-owned subsidiary of the Group introduced an new strategic investor. The amount as contributed by the new strategic investors in excess of its proportionate share of the net assets of the subsidiary, which has been credited to capital reserve during the year ended 31 December 2018.
- (ii) In accordance with PRC laws and regulations, companies established in the PRC are required to transfer at least 10% of their net profit for the year, as determined under the PRC accounting standards, to relevant reserves until the reserve reaches 50% of the registered capital. Such reserves can be used to offset accumulated losses, capitalisation into capital and expansion of production.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

29 RETAINED EARNINGS

	2019 RMB'000	2018 RMB'000
Balance 1 January Net profit for the year Profit appropriation to statutory reserves (Note 28) Dividends declared (Note)	3,442,844 507,107 (41,143) (151,285)	2,978,876 501,168 (37,200)
Balance 31 December	3,757,523	3,442,844

Note :

According to the approval of the general meeting of shareholders on 14 May 2019, the Board of Directors proposed that the Company shall pay a cash dividend of RMB0.106 per share to all shareholders of the Company. The total dividend approximately RMB151.29 million was paid in May 2019.

30 BORROWINGS

	31 December 2019 RMB'000	31 December 2018 RMB'000
<i>Non-current:</i> Long-term bank borrowings (Note(a)) Less: Current portion (Note (a))	3,818,136 (811,380)	2,265,905 (213,952)
	3,006,756	2,051,953
Debentures (Note (b)) Less: Current portion (Note (b))	1,840,363 (42,974)	1,796,363
	1,797,389	1,796,363
Long-term payables (Note (c)) Less: Current portion (Note (c))	290,891 (28,239)	295,784 (29,417)
	262,652	266,367
Total non-current borrowings	5,066,797	4,114,683
<i>Current:</i> Short-term bank borrowings (Note (d)) Current portion of long-term bank borrowings (Note (a)) Current portion of long-term payables (Note (c))	200,000 811,380 28,239	200,000 213,952 29,417
	1,039,619	443,369
Other current liabilities (Note (e))	20,250	
Total current borrowings	1,059,869	443,369
Total borrowings	6,126,666	4,558,052

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

30 BORROWINGS (Continued)

(a) Long-term bank borrowings

Summary of terms of bank borrowings:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Secured (Note (i))	763,762	400,633
Guaranteed (Note (ii))	1,904,374	147,000
Unsecured	1,150,000	1,718,272
	3,818,136	2,265,905

 (i) As at 31 December 2019, bank borrowing of RMB194 million (2018: RMB80 million) is secured by rightof-use assets (Note 15) and property and equipment under (Note 16) of Shandong Capital Environmental Protection Technology Consultant Co., Ltd..

As at 31 December 2019, bank borrowing of RMB527 million (2018: RMB321 million) is secured by all earnings and equity of Jingu and Beicang upgrading project under the Group's concession right (Note 17). As at 31 December 2019, bank borrowing of RMB43 million (2018: Nil) is secured by certain account receivables of a subsidiary, the Guojin Company.

- (ii) As at 31 December 2019, bank borrowing of RMB110 million (2018: RMB147 million) is guaranteed by ultimate shareholder, City Infrastructure Construction and Investment. As at 31 December 2019, bank borrowing of RMB1,794 million (2018: Nil) is guaranteed by the Company for certain of its subsidiaries.
- (iii) The interest rates of the long-term bank borrowings range from 4.275% to 5.463% per annum as at 31 December 2019 (2018: 4.275% to 5.463% per annum).
- (iv) The carrying amounts of the Group's long-term bank borrowings borrowings are denominated in RMB.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

30 BORROWINGS (Continued)

(a) Long-term bank borrowings (Continued)

(v) As at 31 December 2019, the Group's long-term bank borrowings borrowings were repayable as follows:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Within 1 year	811,380	213,952
1 to 2 years	684,304	763,828
2 to 5 years	995,356	959,302
Over 5 years	1,327,096	328,823
	3,818,136	2,265,905

(vi) The carrying amounts of long-term bank borrowings approximate their fair values as at 31 December 2019 because they bear interests at prevailing floating market rates throughout their maturity periods.

(b) Debentures

	31 December 2018 (Including due within 1 year) RMB'000	Additions RMB'000	Repayment RMB'000	Amortisation RMB'000	31 December 2019 RMB'000
Par value Transaction cost	1,800,000 (3,637)	-	-	1,026	1,800,000 (2,611)
	1,796,363	_		1,026	1,797,389

Debentures are analysed as follows:

	Par value RMB' 000	Issue date	Duration	Issue amount RMB'000
Debenture I(i)	700,000	25 October 2016	5 years	700,000
Debenture II(ii)	1,100,000	25 April 2018	5 years	1,100,000

30 BORROWINGS (Continued)

(b) Debentures (Continued)

Interest accrued/paid for the debentures is analysed as follows:

		Interest accrued/paid				
	31 December 2018 RMB'000	Interest accrued in current year RMB'000	Interest paid in current year RMB'000	31 December 2019 RMB'000		
Debenture I(i) Debenture II(ii)	4,021 38,952	21,911 56,870	(21,910) (56,870)	4,022 38,952		
	42,973	78,781	(78,780)	42,974		

- (i) On 25 October 2016, the Company issued a debenture at par value of RMB700 million on The Shanghai Stock Exchange. Interests are payable annually at the fixed interest of 3.13% per annum. The debenture will be due for repayment on 25 October 2021.
- (ii) On 25 April 2018, the Company issued a debenture at par value of RMB1,100 million on The Shanghai Stock Exchange. Interests are payable annually at the fixed interest of 5.17% per annum. The debenture will be due for repayment on 25 October 2023.

(c) Long-term payables

	÷	31 December 2019 Principal Unrecognised			1 December 201 Unrecognised	.8
	amounts of the payable RMB'000	financing charges RMB' 000	Carrying amounts RMB'000	amounts of the payable RMB'000	financing charges RMB'000	Carrying amounts RMB'000
Payable to Sewage Company for assets acquisition	445,444	(154,553)	290,891	462,321	(166,537)	295,784

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

30 BORROWINGS (Continued)

- (c) Long-term payables (Continued)
 - (i) Summary of terms of long-term payables above:

	Maturity date		0	Current portion at 31 December 2019 RMB'000
Sewage Company	20 March 2041	5.94%	290,891	28,239

The balance of the long-term payables to Sewage Company is the consideration payable in respect of the acquisition of sewage processing assets from Sewage Company, net of unrecognised financing charges.

Pursuant to the 'Assets transfer agreement from foreign banks loans about Haihe River Tianjin sewage processing project and Beicang sewage processing project', Sewage Company sold to the Company certain sewage processing assets. The first instalment of RMB261 million was settled in cash and the remaining amount is to be settled on a quarterly basis in RMB translating at exchange rates prevailing on each repayment date over the remaining 22 years till March 2041. The fair value of the initial recognition of the payable balance was RMB430,314 thousand, assessed based on discounted future cash payments and the discount rate of 5.94%.

The carrying amounts of long-term payables are denominated in the following currencies:

	31 December 2019 RMB'000	31 December 2018 RMB'000
JPY US dollar	205,685 85,206	205,116 90,668
	290,891	295,784

The balance denominated in US dollar bears interests at the rate of 6 month LIBOR plus 0.6% and the balance denominated in JPY bears interests at the fixed interest rates carrying from 1% or 1.55% per annum.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

30 BORROWINGS (Continued)

(c) Long-term payables (Continued)

(ii) The long-term payables is maturing as follows:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Within 1 year	28,239	29,417
1 to 2 years	27,465	28,551
2 to 5 years	78,625	81,380
Over 5 years	156,562	156,436
	290,891	295,784

(d) Short-term bank borrowings

	31 December 2019 RMB'000	31 December 2018 RMB'000
Unsecured	200,000	200,000

 The interest rates of the short-term bank borrowings ranged from 3.6975% to 3.9200% per annum as at 31 December 2019 (2018: 4.1325% per annum).

(e) Other current liabilities

		31 December 2019 RMB'000	31 December 2018 RMB'000
	Entrusted loans due within one year	20,250	
31	OTHER LIABILITIES		

31 December 2019
RMB'00031 December 2018
RMB'000Other non-current liabilities
Receipt in advance of subsidies for provision of cooling services36,00038,000

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

32 DEFERRED REVENUE

Deferred revenue represents the subsidies received from governmental authorities with respects to the Group's certain construction and research and development projects. Details of the deferred revenue are as below:

	31 December 2018 RMB'000	Additions RMB'000	Recognised in other income RMB'000	31 December 2019 RMB'000	Relating to assets/costs
Sewage water processing project:					
– Jingu	1,258,545	_	(51,285)	1,207,260	assets
– Jingu upgrading project	163,000	-	(6,520)	156,480	assets
 Beichen upgrading project 	90,000	_	(3,600)	86,400	assets
 Xianyanglu-upgrading project 	59,079	-	(2,363)	56,716	assets
 Dongjiao-upgrading project 	41,456	-	(1,658)	39,798	assets
– Ningxiang project	18,279	-	(931)	17,348	assets
 Beishiqiao-upgrading project 	10,354	-	(719)	9,635	assets
– Linxia project	7,600	2,000	(208)	9,392	assets
– Chibi project	-	5,500	-	5,500	assets
Water recycling project:					
– Jingu	206,393	-	(6,895)	199,498	assets
– Dongjiao	21,081	-	(675)	20,406	assets
– Beichen	18,112	-	(525)	17,587	assets
– Xianyanglu	13,200	-	(856)	12,344	assets
Heating and cooling supply service project	180,357	38,147	(8,235)	210,269	assets
Others	13,629	4,087	(6,647)	11,069	costs
Total	2,101,085	49,734	(91,117)	2,059,702	

33 DEFERRED INCOME TAX

(i) Deferred income tax assets before offsetting

	31 December 2019 Deductible		31 Decem Deductible temporary	ber 2018
	temporary differences and deductible losses RMB'000	Deferred income tax assets RMB'000	difference and deductible loss RMB'000	Deferred income tax assets RMB'000
Provisions for assets	69,322	17,330	_	_
Accrued liabilities	16,010	2,402	-	-
Accrued expenses	10,000	2,500		
	95,332	22,232		
Deferred income tax assets to be recovered within 1 year Deferred income tax assets to be recovered		4,440		_
after more than 1 year		17,792		
		22,232		

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

33 DEFERRED INCOME TAX (Continued)

(i) Deferred income tax assets before offsetting (Continued)

(a) The movement in deferred income tax assets during the year is as follows:

	2019 RMB'000	2018 RMB'000
At 1 January Credited to profit or loss (Note 12)	22,232	
At 31 December	22,232	

(ii) Deferred income tax liabilities before offsetting

	31 December 2019 Taxable		31 Decem Taxable	ber 2018
	temporary differences RMB'000	Deferred income tax liabilities (a) RMB'000	temporary differences RMB'000	Deferred income tax liabilities RMB'000
Amortisation of concession rights (a)	521,412	130,353	500,328	125,082
Business combination	53,028	13,257	54,920	13,730
	574,440	143,610	555,248	138,812
Deferred income tax liabilities to be recovered within 1 year Deferred income tax liabilities to be		4,848		8,296
recovered after more than 1 year		138,762		130,516
		143,610		138,812

- (a) Deferred income tax liabilities were recognised on temporary differences arising between the tax bases of concession right and their carrying amounts, which is to be recovered within the concession period.
- (b) The movement in deferred income tax liabilities during the year is as follows:

	2019 RMB'000	2018 RMB'000
At 1 January Charged to profit or loss (Note 12) Business combination	138,812 4,798	120,259 4,433 14,120
At 31 December	143,610	138,812

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33 DEFERRED INCOME TAX (Continued)

(ii) Deferred income tax liabilities before offsetting (Continued)

(c) Unrecognised temporary differences

The deductible temporary differences of which deferred income tax assets have not been recognised are analysed as follows:

	2019 RMB'000	2018 RMB'000
Impairment of assets Provision for restoration costs (Note 34)	121,205 8,588	163,608 10,069
	129,793	173,677

(d) Unrecognised deferred income tax assets of tax losses

Deferred income tax assets were recognised for tax losses carry-forwards to the extent that the realisation of the related tax benefit through future taxable profits is probable. The Group did not recognise deferred income tax assets of approximately RMB16 million (2018: RMB11 million) in respect of losses amounting to RMB59 million (2018: RMB44 million).

The unrecognised tax losses will expire in the following years:

Year	2019 RMB'000	2018 RMB'000
2019	_	18,056
2020	6,243	6,243
2021	5,124	5,124
2022	3,466	3,466
2023	11,061	11,061
2024	32,773	
	58,667	43,950

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33 DEFERRED INCOME TAX (Continued)

(iii) The net balances of deferred income tax assets and deferred income tax liabilities after offsetting are shown below:

	31 December 2019 After offsetting		31 Decemb	er 2018 After offsetting
	Set-off amount RMB'000	the balance RMB'000	Set-off amount RMB'000	the balance RMB'000
Deferred income tax assets Deferred income tax liabilities	18,023 18,023	4,209 125,587		138,812

34 PROVISIONS FOR OTHER LIABILITIES AND CHARGES

	31 December 2018 RMB' 000	Increase RMB'000	Decrease 3 RMB'000	1 December 2019 RMB'000
Provision for restoration costs	10,069	16,010	(1,481)	24,598
To be utilised: – within 1 year – after 1 year				12,933 11,665
	10,069			24,598

35 TRADE PAYABLES, OTHER PAYABLES AND INCOME TAX AND OTHER TAXES PAYABLE

	Notes	2019 RMB'000	2018 RMB'000
Trade payables	(a)	231,293	176,398
Other payables	(b)	1,532,842	1,456,133
Income tax and other taxes payables	(c)	86,188	68,893
	_	1,850,323	1,701,424

(a) Trade payable

The aging analysis of trade payables based on supplier's invoice date is as below:

	2019 RMB'000	2018 RMB'000
Within 1 year Overdue 1 year	164,526 66,767	143,620 32,778
	231,293	176,398

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

35 TRADE PAYABLES, OTHER PAYABLES AND INCOME TAX AND OTHER TAXES PAYABLE (Continued)

(a) Trade payable (Continued)

As at 31 December 2019, trade payable are mainly payable for purchases of inventories. The trade payable with aging more than 1 year are mainly source water charges payable by Qujing Company of RMB34 million, and the subcontract costs payable by Tianjin Water Recycling Co., Ltd of RMB21 million. As the Group has not yet recovered the relevant sewage treatment charges and the related projects have not yet been completed, the Group has not settled the related balances.

(b) Other payables comprise:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Construction costs payable Payable for purchases of property, plant and equipment and concession rights Interest payable for borrowings and debentures Others	1,224,453 171,392 42,974 94,023	1,328,505 13,892 43,768 69,968
	1,532,842	1,456,133

As at 31 December 2019, other payables of approximately RMB663 million (2018: RMB453 million) were aged over one year, which are mainly payables and deposits received in connection with the sewage plants construction upgrading projects. The balances had yet to be settled as those projects and their final accounts have not been completed.

(c) Income tax and other taxes payables

	31 December 2019 RMB'000	31 December 2018 RMB'000
VAT payables Income tax payables Others	37,256 32,083 16,849	26,213 34,658 8,022
	86,188	68,893

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

36 CASH FLOW INFORMATION

(a) Cash generated from operations

	2019 RMB'000	2018 RMB'000
Profit before income tax	629,549	694,844
Adjustments for:		
– Amortisation of deferred revenue (Note 32)	(84,470)	(70,278)
– Depreciation and amortisation	509,483	391,252
– Dividend income	_	(200)
– (Gain)/loss on disposal of property, plant and equipment and		
other current assets (Note 10)	(49,407)	900
– Net impairment provision on financial assets	31,383	12,973
- Provision for impairment of other current assets	26,808	_
– Interest income on bank deposit (Note 9)	(14,546)	(43,750)
- Interest expense of borrowings (Note 9)	213,982	198,774
– Net exchange loss (Note 9)	8,813	16,543
Changes in working capital		
– (Increase)/decrease in inventories	(814)	4,121
– Increase in receivables	(454,711)	(96,647)
- Increase in other operating assets (i)	(91,566)	(102,937)
– Increase/(decrease) in other taxes payables	19,870	(1,145)
– Increase/(decrease) in contract liabilities	89,287	(121,832)
 Increase in provisions for other liabilities and charges 	12,933	_
– Increase in other operating liabilities (ii)	88,143	2,241
Cash generated from operations	934,737	884,859

(i) Other operating assets mainly include prepayment and other current assets.

(ii) Other operating liabilities mainly include trade and other payables.

(b) Major non-cash transactions

Under the Restoration and Non-monetary Assets Exchange Arrangement as mentioned in Note 16(ii), the Company has transferred its entire interests in the Xianyang Road Sewage Plant (including the land) to the Tianjian Government on 1 August 2019 in exchange for the new operating plant as freely provided by the Tianjin Government to continue the related sewage processing operations till the end of the related concession right agreement.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

36 CASH FLOW INFORMATION (Continued)

(c) In the consolidated statement of cash flows, proceeds from disposal of property, plant and equipment and other current assets comprise:

	2019 RMB'000	2018 RMB'000
Net book amount (Notes 16 and 22) Gain/(loss) on disposal of property, plant and equipment and other current assets	5,729 49,407	1,643 (900)
Proceeds from disposal of property, plant and equipment and other current assets	55,136	743

(d) Net debt reconciliation

This section sets out an analysis of net debts and the movements in net debts for each of the periods presented.

	As at 31 December		
Net debts	2019 RMB'000	2018 RMB'000	
Cash and cash equivalents	2,066,301	1,808,543	
Borrowings – repayable within one year	(1,059,869)	(443,369)	
Borrowings – repayable after one year	(5,066,797)	(4,114,683)	
Net debts	(4,060,365)	(2,749,509)	
Cash and cash equivalents	2,066,301	1,808,543	
Gross debts – fixed interest rates	(2,223,324)	(2,201,479)	
Gross debts – variable interest rates	(3,903,342)	(2,356,573)	
Net debts	(4,060,365)	(2,749,509)	

	Cash and cash equivalents RMB'000	Liabilities from financing activities Borrowings due within 1 year RMB'000	Borrowings due after 1 year RMB'000	Total of net debts RMB'000
Net debts as at 1 January 2018	1,893,689	(1,370,456)	(1,543,388)	(1,020,155)
Cash flows	(85,146)	930,259	(2,542,570)	(1,697,457)
Foreign exchange adjustments	-	(1,645)	(14,897)	(16,542)
Other non-cash movements		(1,527)	(13,828)	(15,355)
Net debts as at 31 December 2018	1,808,543	(443,369)	(4,114,683)	(2,749,509)
Cash flows	257,758	(614,119)	(928,945)	(1,285,306)
Foreign exchange adjustments	_	(856)	(7,957)	(8,813)
Other non-cash movements		(1,525)	(15,212)	(16,737)
Net debts as at 31 December 2019	2,066,301	(1,059,869)	(5,066,797)	(4,060,365)

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

37 COMMITMENTS

(i) The Group's capital expenditure contracted for at the end of the year but not yet recognised as liabilities is as follows:

	Contracted but	Contracted but not provided for		not contracted for
	31 December 2019 RMB' million	31 December 2018 RMB' million	31 December 2019 RMB' million	31 December 2018 RMB' million
Property, plant and equipment	31	325	34	288
Intangible assets	1,414	206	1,088	1,082
	1,445	531	1,122	1,370

38 RELATED PARTY TRANSACTIONS

(1) Information of the parent of the Company

(a) General information of the parent Company

Name	Туре	Place of registration	Legal representative	Nature of business
Municipal Investment	Limited liability Company	Tianjin, the PRC	Yu Zhongpeng	Development and management of municipal infrastructures

The Company's ultimate controlling party is City Infrastructure Construction and Investment.

(b) Registered capital and changes in registered capital of the parent company

	31 December 2018 RMB'000	Increase in current year	Decrease in current year	31 December 2019 RMB'000
Municipal Investment	1,820,000			1,820,000

(c) The percentages of shareholding and voting rights in the Company held by the parent Company

	31 Decen	nber 2019	31 December 2018		
	Shareholding (%)	Shareholding (%) Voting rights (%) Shareholding (%) Votin			
Municipal Investment	50.14	50.14	50.14	50.14	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

38 RELATED PARTY TRANSACTIONS (Continued)

(2) Information of subsidiaries

The information of the subsidiaries is set out in Note 19a.

(3) Information of associate

The information of the associate is set out in Note 19b.

(4) Information of other related parties

Relationship with the Group

Tianjin Lecheng Properties Limited Tianjin City Resource Operation Co., Ltd. Tianjin Haihe Construction Developing Investment Co., Ltd. Tianjin Jinrongcheng Property Management Co., Ltd. Controlled by the same ultimate holding Company Controlled by the same ultimate holding Company Controlled by the same ultimate holding Company Controlled by the same ultimate holding Company

(5) Related party transactions

In addition to those disclosed elsewhere in the consolidated financial statements, the following transactions were carried out with related parties:

(a) Purchase of goods and sales of services

Purchases of goods

Related party	Nature of transaction	2019 RMB'000	2018 RMB'000
Tianjin Jinrongcheng Property Management Co., Ltd.	Property management services		2,682
Sales of services			
Related party	Nature of transaction	2019 RMB'000	2018 RMB ² 000
City Infrastructure Construction and Investment	Commission income from contract operation	84,738	56,296
Tianjin Lecheng Properties Limited	Income from heating and cooling supply	33,165	38,639
City Infrastructure Construction and Investment	Commission income from technical services	1,936	10,024
Tianjin Haihe Construction Developing Investment Co., Ltd.	Income from sewage plant construction		69
		119,839	105,028

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

38 RELATED PARTY TRANSACTIONS (Continued)

(5) Related party transactions (Continued)

(a) Purchase of goods and sales of services (Continued)

The Group's pricing on pipeline construction contract service and heating supply service with related parties are based on the reference price stipulated by the local government. Other transactions were entered into at terms as agreed with the related parties in the ordinary course of business.

(b) Guarantee :

Guarantor	Guarantee	Amount RMB'000	Starting date	Due date
City Infrastructure Construction and Investment	Xi'an Capital Water Co., Ltd.	110,000	28 September 2008	27 September 2022

(c) Key management compensation:

	31 December 2019 RMB'000	31 December 2018 RMB'000
Key management compensation	11,998	12,620

(6) Year-end balances arising from sales/purchases of services/goods

	31 December 2019 RMB'000	31 December 2018 RMB'000
Receivables from related parities:		
Trade receivables – City Infrastructure Construction and Investment – Tianjin Lecheng Properties Limited – Tianjin City Resource Operation Co., Ltd.	60,423 4,650 401	39,638 9,640 401
	65,474	49,679

The receivables from related parties arise mainly from services provided and are due within one year after the date of sales. The receivables are unsecured in nature and bear no interest. The provisions of RMB1 million are held against receivables from related parties.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

38 RELATED PARTY TRANSACTIONS (Continued)

(7) Transactions/balances with other state-owned enterprises in the PRC

The Group operates in an economic environment currently predominated by enterprises directly or indirectly owned or controlled by the PRC government (hereinafter collectively referred to as 'state-owned enterprises').

During the year, the Group's significant transactions with these state controlled entities include processing of sewage water, construction and management of related facility, processing of tap water and supply of heating. As at 31 December 2019, majority of the Group's cash and cash equivalents and borrowings are deposited/arranged with state controlled banks.

39 EVENTS AFTER THE REPORTING PERIOD

After the outbreak of Coronavirus Disease 2019 (the "COVID-19 outbreak") in early 2020, a series of precautionary and control measures have been and continued to be implemented across the country.

The directors of the Group have assessed that the COVID-19 outbreak may have the following possible impact to the Group:

- The economic slowdown resulted from the COVID-19 outbreak may lead to a temporary reduction in the manufacturing or production activities of factories and the construction activities of property developers which may indirectly affect the financial performance of our sewage processing and recycled water and pipeline connection business segments.
- The assessment of the recoverable amounts of the other current assets as mentioned in Note 22 is based on the conditions as at 31 December 2019. The COVID-19 outbreak and its impact on the recoverable amounts of the related assets will be considered in the impairment test to be performed in 2020;
- The Group might have to experience longer turnover time for recovering its trade receivables which may increasing the associated credit risks.

The Group believes that the above factors may have a temporary impact on the Group's operations.

The Group will continue to closely monitor the development of the COVID-19 outbreak and evaluate its impact on the financial position and operating results of the Group.

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

40 BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY

	As at 31 December		
	2019 RMB'000	2018 RMB'000	
ASSETS			
Non-current assets			
Property, plant and equipment	161,611	107,316	
Intangible assets	4,018,932	4,089,620	
Land use rights	-	2,675	
Right-of-use assets	3,002	_	
Investment properties	-	63,289	
Investments in subsidiaries	4,067,052	3,520,705	
Financial assets at fair value through other comprehensive income	2,000	2,000	
Long-term receivables	236,450	253,686	
Other non-current assets	115,332	190,519	
	8,604,379	8,229,810	
Current assets			
Inventories	4,811	3,992	
Trade receivables	1,958,081	1,687,179	
Prepayments	1,916	822	
Other current assets	495,790	847,439	
Other receivables	87,945	134,560	
Cash and cash equivalents	736,182	586,889	
Restricted cash	5,075	9,101	
	3,289,800	3,269,982	
Total assets	11,894,179	11,499,792	

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

40 BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY (Continued)

	As at 31 December		
	2019	2018	
	RMB'000	RMB'000	
LIABILITIES			
Non-current liabilities			
Borrowings	3,865,673	3,671,443	
Deferred revenue	1,593,830	1,662,338	
Deferred income tax liabilities	60,642	67,841	
Provisions for other liabilities and charges	11,665	10,069	
	5,531,810	5,411,691	
Current liabilities			
Trade payables	65,904	46,500	
Contract liabilities	4,950	4,541	
Wages payable	30,463	24,868	
Income tax and other taxes payables	31,101	250	
Dividend payable	-	1,912	
Other payables	417,707	959,379	
Borrowings	769,939	281,417	
Provisions for other liabilities and charges	12,933		
	1,332,997	1,318,867	
Total liabilities	6,864,807	6,730,558	
Net assets	5,029,372	4,769,234	
EQUITY			
Equity attributable to owners of the Company			
Share capital	1,427,228	1,427,228	
Other reserves	939,038	897,895	
Retained earnings	2,663,106	2,444,111	
Total equity	5,029,372	4,769,234	

The financial statements on pages 328 to 330 were approved by the Board of Directors on 26 March 2020 and were signed on its behalf.

Liu Yujun Chairman Niu Bo Director

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

40 BALANCE SHEET AND RESERVE MOVEMENT OF THE COMPANY (Continued)

	Share capital RMB'000	Other reserves RMB'000	Retained earnings RMB'000	Total RMB'000
Balance at 31 December 2017	1,427,228	860,695	2,111,266	4,399,189
Changes in accounting policies			(1,964)	(1,964)
Restated total equity at 1 January 2018	1,427,228	860,695	2,109,302	4,397,225
Comprehensive income – Profit for the year	-	-	372,009	372,009
Transactions with owners in their capacity as owners – Profit appropriation to statutory reserves		37,200	(37,200)	
Total transactions with owners		37,200	334,809	372,009
Balance at 31 December 2018	1,427,228	897,895	2,444,111	4,769,234
Total equity at 1 January 2019	1,427,228	897,895	2,444,111	4,769,234
Comprehensive income – Profit for the year	_	_	411,423	411,423
Transactions with owners in their capacity as owners – Profit appropriation to statutory reserves – Dividends declared		41,143	(41,143) (151,285)	(151,285)
Total transactions with owners		41,143	218,995	260,138
Balance at 31 December 2019	1,427,228	939,038	2,663,106	5,029,372

41 BENEFITS AND INTERESTS OF DIRECTORS

Directors' emoluments

The remuneration of directors of the Company for the year ended 31 December 2019 was as follows:

Name	Fees RMB'000		uments paid in res ices as a director of Discretionary bonuses RMB'000		Employer's contribution to a retirement benefit scheme RMB'000	Emolumer the s Salary RMB'000	tts paid in respect (management of the Discretionary bonuses RMB'000	of director's other e affairs of the Cou Housing fund and other social security contributions RMB'000	services with mpany Employer's contribution to a retirement benefit scheme RMB' 000	Total RMB'000
Chairman:										
Liu Yujun	-	-	-	-	-	479	160	120	59	818
Executive directors (i):										
Wang Jing	-	-	-	-	-	445	146	120	59	770
Niu Bo	-	-	-	-	-	385	110	120	59	674
Independent non-executive directors (i):										
Wang Xiangfei	220	-	-	-	-	-	-	-	-	220
Guo Yongqing	220	-	-	-	-	-	-	-	-	220
Di Xiaofeng	220									220
	660					1,309	416	360	177	2,922

For the year ended 31 December 2019 (All amounts in RMB thousand unless otherwise stated)

41 BENEFITS AND INTERESTS OF DIRECTORS (Continued)

Directors' emoluments (Continued)

The remuneration of directors of the Company for the year ended 31 December 2018 was as follows:

			uments paid in res ces as a director of		Employer's contribution		nts paid in respect management of the			
	_		Discretionary	social security	to a retirement		Discretionary	social security	to a retirement	
Name	Fees	Salary	bonuses	contributions	benefit scheme	Salary	bonuses	contributions	benefit scheme	Total
	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000	RMB'000
Chairman:										
Liu Yujun	-	-	-	-	-	544	161	112	60	877
Executive directors (ii):										
Wang Jing	_	_	_	_	-	19	5	4	2	31
Niu Bo	_	_	_	_	_	15	4	4	2	26
Tang Fusheng					_	524	146	108	58	837
Fu Yana	-	-	-	-		924 440	140	108	58	724
	-	-	-	-	-					
Peng Yilin	-	-	-	-	-	457	119	108	58	742
Independent non- executive directors (ii):										
Gao Zongze	220	-	-	-	-	-	-	-	-	220
Wang Xiangfei	220	-	_	-	-	-	_	-	-	220
Guo Yongqing	220	-	-	-	-	-	-	-	-	220
Di Xiaofeng	8									8
	668					1,999	553	444	238	3,905

(i) On 17 December 2018, the Group held the 2018 First Extraordinary General Meeting (the "EGM") and approved the appointment of Mr. Liu Yujun, Ms. Wang Jing and Mr. Niu Bo as Executive Directors of the Group; approved the appointment of Mr. Yu Zhongpeng, Mr. Han Wei and Mr. Si Xiaolong as Non-executive Directors of the Group; and approved the appointment of Mr. Wang Xiangfei, Mr. Guo Yongqing and Mr. Di Xiaofeng as Independent non-executive Director of the Group. Ms. Wang Jing, Mr. Niu Bo, Mr. Si Xiaolong and Mr. Di Xiaofeng are new members of the Board of Directors. Mr. Gao Zongze no longer served as the Independent nonexecutive director of the Board of Directors.

15. List of Documents Available for Inspection

- 1. The financial statements signed and sealed by the person in charge of the Company, the officer in charge of the accounting function and the officer in charge of the accounting department (the chief accountant).
- 2. Original of the report of the auditor sealed by the certified public accountants, and signed and sealed by the auditor.
- 3. Original copies of all documents and announcements of the Company publicly disclosed in the website designated by the CSRC during the reporting period.
- 4. The annual report released in other stock markets.