

WATER FOR LIFE

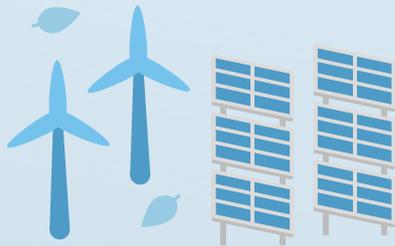


Form 56-1 One Report 2022
(Annual Report)



WATER

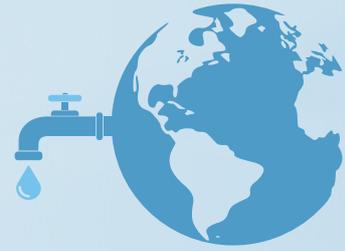
Our Business Operations
are Water Management
Under High Quality
International Standard;
**Cleanliness, Sufficiency
and Continuity;**



ENERGY

We are Aware of Alternative Environmental
Friendly Technology;
**Be Solar Energy,
Wind Energy and Biomass Energy,**
as Sustainably Renewable Energy
and Environmental Conservation





ENVIRONMENT

Our Business Operation is
Environmental Friendly,
**Being Fully Aware of
Environmental Problems**
with Effective Planning
and Control of the use of
Natural Resources.



Message from the Chairman of the Board of Directors

Although Thailand has overcome the challenges of the critical period of the COVID-19 pandemic, the country's economic and social situation remains continually affected by the severity of the pandemic, and the country has been further affected by the impacts of the Ukraine-Russia war on the global supply chain. In 2022, TTW stood by employees, customers, trade partners, shareholders, and stakeholders by sufficiently and consistently distributing quality tap water to water users in every sector as part of our promotion and support for the business, industrial, and tourism sectors, including small and medium enterprises (SMEs) to continue moving forward while retaining the ability to compete, generate income and return to economic growth. The Company's strong performance is reflected by the following indicators received by the Company from various relevant organizations:

In terms of corporate governance, TTW was evaluated at the level of excellence in the Corporate Governance Report of Thai Listed Companies 2022 by the Thai Institute of Directors with a full score of 100 points (5 coins) on the AGM Checklist 2022 by the Thai Investors Association. Internationally, we were assessed for corporate governance at the ASEAN Asset Class level by the ASEAN Corporate Governance Scorecard (ACGS) and we aim towards another level of corporate governance.

In terms of finance, based on the Company's strong financial position and ability to generate good cash flow, the Company has been assigned a TRIS rating of "AA-" with a "Stable" outlook for the 15th consecutive year by Thai Rating and Information Services Co., Ltd. In addition, the Company retains some cash reserves to reduce the risk of emergency situations or loss of liquidity by repaying principal sums in loan agreements and redeeming mature debentures while reducing unnecessary expenses. This enabled us to manage financial costs more effectively. In addition, profit shares from investments in affiliates with outstanding performance has helped support the Company's bottom line performance to grow against a backdrop of crises for another year.

In terms of sustainability, TTW is listed on the SETTHSI and is one of 170 listed companies selected to be on the Thailand Sustainability Investment of 2022 by the Stock Exchange of Thailand (for the 7th consecutive year). In addition, the Company received the Sustainability Disclosure Award 2022 from the Thaipat Institute for the 4th consecutive year, reflecting the role of our performance in sustainable development in every dimension including the environmental, social, and governance (ESG) aspects.

The Company assessed its greenhouse gas emissions (GHG) from indirect business operations (Scope 2) caused by outside electricity consumption in water production and distribution processes. For 2022-2025, our goal is to reduce greenhouse gas emissions and electricity consumption by no less than 0.03 percent and 1 percent, respectively, in addition to using electricity from clean energy sources such as solar rooftops in support of Thailand's goals and international goals to fully solve the problems of climate change by all means and move towards clean energy by achieving net-zero carbon dioxide emissions and carbon neutrality by 2050 and 2065, respectively.

In 2023, Thailand will continue to face challenges from economic turmoil, prolonged war, and higher costs of living, including fierce technological competition in the business world where nothing stays the same. As the country's major private producer of tap water, TTW is confident in our capacity and readiness for business operations with the aim of supporting every sector in line with the Company's mission of "growing on a firm, continuous and sustainable basis in order to accomplish our vision through the balance of interests among customers, employees, business partners, shareholders, communities, and environments." I am confident that there is no problem we cannot overcome, as long as we all cooperate and move forward together. I also believe that it will not be long before we envision Thailand's secure progress again.

On behalf of the Board of Directors, Executives, and Employees of TTW Public Company Limited, I would like to thank our shareholders, business partners, affiliates, communities, and supporters in all sectors for their constant trust and belief in the performance of TTW. In closing, I wish everyone would overcome every crisis and Thailand would move forward again in the future with smiles and better living conditions - that is my dream for all of us once these crises are over.



Dr. Thanong Bidaya
Chairman of the Board of Directors





Board of Directors



Dr. Thanong Bidaya

Independent Director

Chairman of the Board of Directors



Mr. Plew Trivisvavet

Director

Vice Chairman
of the Board of Directors



Mr. Phongsarit Tantisuvanitchkul

Director

Chairman of the Executive Committee,
Nomination and Remuneration
Committee Member



Mr. Phairuch Mekarporn

Independent Director

Chairman of the Audit Committee
Risk Management and Corporate
Governance Committee Member



Mr. Somnuk Chaidejsuriya

Independent Director

Chairman of the Risk Management
and Corporate Governance Committee
Audit Committee Member
Nomination and Remuneration
Committee Member



Mr. Yuttana Yimgarund

Independent Director

Chairman of the Nomination and
Remuneration Committee
Audit Committee Member



Dr. Sombat Kitjalaksana

Director

Executive Committee Member



Mr. Suvich Pungchareon

Director

Executive Committee Member



Mrs. Payao Marittanaporn

Director

Risk Management and Corporate
Governance Committee Member



Mr. Kaoru Umehara

Director

Nomination and Remuneration
Committee Member



Mr. Hideo Matsumoto

Director

Executive Committee Member
Risk Management and Corporate
Governance Committee Member



Ms. Walainut Trivisvavet

Director

Executive Committee Member
Risk Management and Corporate
Governance Committee Member
Managing Director



Executive



Ms. Walainut Trivisvavet
Managing Director



Mr. Phakpoom Thaweewittayarut
Deputy Managing Director
Administration Group



Mr. Somkiat Pattamamongkolchai
Deputy Managing Director
Finance Group



Mr. Pipat Katikul
Acting Deputy Managing Director
Operation Group Operations Director



Ms. Sudarat Chiamchan
Assistant Managing Director
Office of Managing Director
and Company Secretary



Mr. Hongthong Artit
Business Development Director



Mr. Chatchawan Tienprasertkij
Customer Relationship
Management Director



Mrs. Busawan Pholprasert
Acting Human Resources
and Administration Director
Human Resources
Development Manager



Mr. Prem Liemsakul
Acting Director of
Accounting and Finance
Account Manager

TTW Business

01 Water Management

Water management service provided to Provincial Waterworks Authority



02 Fully-Integrated Water Management

Bang Pa-In Industrial Estate

TTW PCL has already acquired the water production and wastewater treatment rights for Bang Pa-In Industrial Estate (BIE), Phra Nakhon Sri Ayutthaya, Bang Pa-In Land Development Co., Ltd. for a period of 30 years from August 2009 onwards. The water production system in Bang Pa-In Industrial Estate uses water from surface water sources, with the maximum production capacity of 48,000 cubic meters per day. Raw water is supplied from Chao Phraya River, with the average water production capacity of 18,000 cubic meters per day.



03 Investment in Other Businesses

In 2011, TTW purchased the common stocks of CK Power Public Company Limited (CKP) which operates the main business as a holding company. CKP invests in companies operating the business of production and distribution of electricity in 3 types of power plants.

Hydro Power Business



Co-Generation Power Business



Solar Power Business





Significant Financial Information

Financial Statements

Total Assets

(Unit : Million Baht)



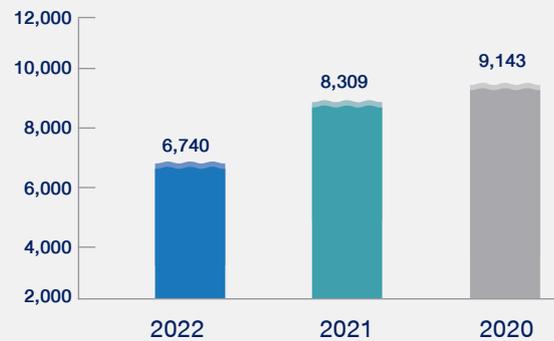
Net Profit

(Unit : Million Baht)



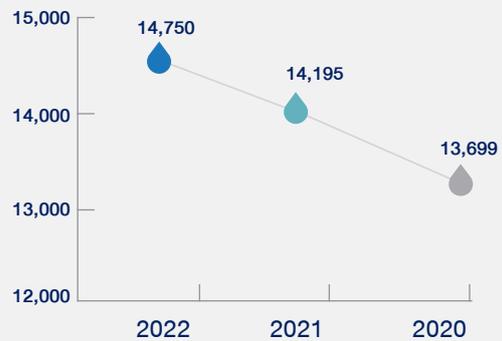
Total Liabilities

(Unit : Million Baht)



Shareholders' equity

(Unit : Million Baht)



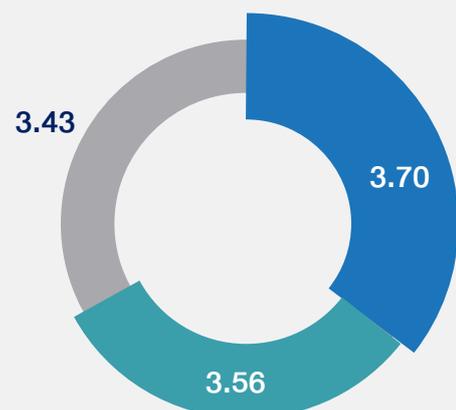
Basic Earnings Per Share

(Baht/Share)



Book Value Per Share

(Baht/Share)



Significant Financial Information

(Unit : Million Baht)

Description	Consolidated financial statements			Separate financial statements		
	For the year ended 31 December			For the year ended 31 December		
	2022	2021	2020	2022	2021	2020
Total assets	21,490	22,504	22,842	18,841	20,286	20,720
Total Liabilities	6,740	8,309	9,143	6,560	8,131	8,914
Shareholders' equity	14,750	14,195	13,699	12,281	12,155	11,806
Sales of treated water	5,575	5,682	6,059	3,867	3,925	4,090
Services income	116	124	120	39	41	40
Total revenues	5,701	5,818	6,193	4,693	4,998	5,181
Cost of sales and services	1,975	1,845	1,862	1,004	1,025	1,061
Administration and Management expenses	289	255	264	240	217	225
Financial expenses	169	249	274	168	249	274
Income tax expenses	657	651	685	493	490	509
Gross margin	3,716	3,961	4,317	2,902	2,941	3,070
Net profit	2,979	3,120	2,972	2,520	2,749	2,850
Book value per share (Baht / share)	3.70	3.56	3.43	3.08	3.05	2.96
Basic earnings per share (Baht / share)	0.74	0.78	0.74	0.63	0.69	0.71

Financial Ratio

Description	Consolidated financial statements			Separate financial statements		
	For the year ended 31 December			For the year ended 31 December		
	2022	2021	2020	2022	2021	2020
Profitability ratio						
Gross profit margin (%)	65.31	68.23	69.87	74.30	74.15	74.32
Net profit margin (%)	52.21	53.59	47.91	53.65	54.94	54.89
Return on equity (%)	20.58	22.37	22.16	20.62	22.95	24.62
Efficiency ratio						
Return on assets (%)	13.54	13.76	12.92	12.88	13.14	13.61
Return on fixed assets (%)	26.09	25.15	22.63	24.65	25.88	26.02
Debt service coverage ratio						
Debt to equity (times)	0.46	0.59	0.67	0.53	0.67	0.76
Dividend Yield (%)	80.37	76.72	80.54	95.02	87.09	83.97



Vision

To be Thailand's Leading Company in Water, Energy and Eco-Friendly Businesses.



Mission

To Grow on A Firm, Continuous and Sustainable Basis in order to Accomplish our Vision through the Balance of Interests among Customers, Employees, Business Partners, Shareholders, Communities and Environments.



Corporate Values

Running Business to Fulfill our Vision and Mission on the Basis of Sharing Highest Satisfaction and Benefits among Stakeholders by Means of:

- Continuous Improvement
- Proactive & Initiative
- Teamwork



บ่อทวนน้ำ 3/1
Flocculation Tank 3/1

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1



Business Operations and
Operating Performance



1. Structure and Operation of the Company

1.1 Business Policy and Overview

TTW Public Company Limited (TTW) operates the business of production and distribution of tap water to the Provincial Waterworks Authority (PWA) in the vicinity of West Bangkok, covering the areas of two provinces, namely, Nakhon Pathom Province in three districts, i.e., Amphoe Nakhon Chai Si, Amphoe Sam Phran, and Amphoe Phutthamonthon, and Samut Sakhon Province in two districts, i.e., Amphoe Krathum Baen and Amphoe Mueang Samut Sakhon. TTW has executed the Water Purchase Agreement with the Provincial Waterworks Authority (PWA) for a period of 30 years on a Build-Own-Operate (BOO) basis and TTW was granted a concession for the tap water business operation to use water from the Tha Chin River for producing tap water by the Ministry of Natural Resources and Environment.

Moreover, TTW also invested in subsidiaries companies related to tap water business, including the acquisition of rights in Industrial Estate in order to conduct business related to tap water production and wastewater treatment together with holds shares in common stocks of Holding Company that operates the business of production and distribution of electricity from various kinds of energy both domestically and internationally.

1.1.1 Vision, Mission, Goals and Business Strategies

TTW is the largest private tap water producer and distributor in Thailand, determined to seek opportunities and possibilities to expand the water supply business in neighboring countries, as well as expand operation in energy and environment business, the Company has the vision, mission and corporate value as follows:

Vision To be Thailand's leading company in Water, Energy, and Eco-Friendly Businesses.

Mission To grow on a firm, continuous and sustainable basis in order to accomplish our vision through the balance of interests among customers, employees, business partners, shareholders, communities and environments.

Corporate Value Running business to fulfill our vision and mission on the basis of sharing highest satisfaction and benefits among stakeholders by means of:

- Continuous Improvement
- Proactive & Initiative
- Teamwork

Goals and Business Strategies

TTW places great importance on the tap water business both domestically and internationally, collaborating with the Provincial Waterworks Authority (PWA) to develop a variety of tap water supply projects. At present, within the country, tap water service providers are still operated and serviced by the public sector, which includes the Provincial Waterworks Authority (PWA), the Metropolitan Waterworks Authority (MWA), the Subdistrict Administrative Organization (SAO), and the Local Administrative Organizations (LAOs). The production capacity of PWA remains the largest in the country and it continues producing its own tap water, with only

certain specific areas open to private investment, while the SAO and LAOs operate tap water production and management at the local level with a low production capacity. However, the public sector allows private investors to invest in new projects such as the Eastern Economic Corridor (EEC) with attractive conditions, the Company is ready to participate in the auction. The tap water business is considered to be capital intensive at the beginning of any new ventures, as a result, the Company must consider the water distribution volume necessary to provide returns reasonably. If the initial sales volume and those of following years do not meet expectations, this can result in a risk which may not make it worth the investment. As such, the tap water supply business must rely on the Minimum Order Quantity (MOQ) agreed upon with the public sector in order to reduce said risks.

In terms of the wastewater treatment business, the Company has a great interest in the construction of a wastewater treatment plant and/or a contract to operate public sector wastewater treatment systems already in operation. However, wastewater treatment service rates are presently still under consideration from the government as to how much water users should be billed, as is the factor of from where funding should be allocated for the hiring of private sector entities in said operations.

In terms of foreign investment, the Company continues examining business opportunities in ASEAN and other regions of interest. However, due to the individual risks of each country, the Company must exercise caution when investing in order to reduce any possible future risks that may occur, such as exchange rates, security factors, revenue collection from customers, natural disasters, raw water sources, etc., to ensure profitability and that such investments are worthwhile.

The Company's operational strategies include:

(1) Business Strategy

Tap water is a primary consumer product that is essential for life. In 2022, the country's largest tap water producer, the Metropolitan Waterworks Authority (MWA), supplied a total of 2,080 million cubic meters of tap water, while the Provincial Waterworks Authority (PWA) had a water supply volume of 2,063 million cubic meters. TTW and PTW are considered the largest private tap water production and distribution contract parties. In 2022, the amount of tap water produced and distributed by TTW and PTW to PWA was 275 million cubic meters or 13% of PWA's total water supply volume, or 74% of the total supply volume of tap water produced by PWA's all private producers, which has a total production volume of approximately 374 million cubic meters per year.

The Company formulated its business strategy as a framework to deliver products and services in response to customer demand and enhancement of competitive advantage and sustainable growth. The company divides its business strategy into 6 categories as follows:

a. Production Strategy

TTW employs foreign-imported tap water production technology which is efficient and modern. The "Leopold" filters are installed, making the filter tank durable than the sand filter tanks that are generally used.

This filter system also helped save water, required for washing the filter tanks. The use of the Leopold filter in place of gravel filter and nozzle made the distribution of water and air circulation more thoroughly while filtering from the top layer and in the backwash process. Also, the use of Leopold helped gotten rid of the sand and gravel mix issue during backwash and the need to change sand and gravel layers. The use of Leopold also helped save more water and air during the backwash than the use of sand and gravel filters. All of TTW's water production and distribution activities are controlled by the Supervisory Control and Data Acquisition (SCADA) System which a modern and efficient computerized management system. TTW also assigned personnel to control production activities 24 hours to ensure that the production process is operated continually and efficiently. TTW also built the Krathumbaen Water Treatment Plant to prevent the risk that may occur and in case that the Banglen plant is unable to produce the water, the Krathumbaen plant could be used as the backup plant to produce tap water for PWA. This plant is located in Krathumbaen District of Samut Sakhon Province, which the production capacity of 100,000 cubic meters/day with an Ultra-Filtration system that could be able to support the need of water in the Samut Sakhon-Nakhon Pathom area sufficiently and continuously.

PTW used the SCADA system to control all production and water transmission similar to TTW. The filter system of PTW uses sand as a filter (media), there was sand washing or backwash by injecting air through the Air Nozzle head spreading the entire area of the filter tank under the sand layer. PTW assigned personnel to control production activities 24 hours to ensure that the production process is operated continually and efficiently same as TTW.

b. Service Area Expansion Strategy

TTW builds a tap water distribution main network that covers main streets in its tap water distribution areas and major communities with high demand for tap water. When combining with PWA's water distribution network, the TTW network covers a large economic area. Moreover, TTW also joined hands with PWA to survey many areas in order to plan for the improvement of tap water distribution efficiency in areas where tap water pressure is low and where the water demand is high. In 2022, the company supported the PWA in transferring of groundwater users from Rai Khing Municipality (Moo 11, 12, 13) to use tap water from the Provincial Waterworks Authority, Om Noi and Sampran branches, totaling 988 cases. In addition, the company also supported PWA's Om Noi branch in installing the pressure booster pipes to support the increasing water demand in the Salaya subdistrict area. The installation of pressure booster pipes is expected to be completed and be able to distribute the water in 2023.

PTW is a potential area, which is an area adjacent to Bangkok that is developing into a dense community in terms of trade, business, industry, educational institutions, and residences, with a tendency for water demand to continuously increase. The Company has discussed with PWA on continuous pressure management in order to increase efficiency in providing water supply services efficiently.

c. Communication and Public Relations Strategy

The Customer (Provincial Waterworks Authority), TTW recognizes the importance of its business processes and contract management, as well as of good cooperation in the carrying out of a variety of activities. Therefore, TTW currently focuses on the communication of necessary information between the Company, PWA, and water users by the process as follows:

- Meeting with customers by setting up a meeting circle to acknowledge the performance of the company and PWA, including problems and obstacles in the water supply service that occur in the service area, in order to plan to solve the problems.
- Meeting with water users and target customers who are new water users and tend to use large quantities of tap water in the future, both in the industrial and commercial sectors, in order to build confidence and emphasize on the quality of tap water that is clean, adequate, and continuous, as well as to acknowledge problems associated with tap water use.
- Public relations through communication channels that are rapid and appropriate, such as electronic mail (email) or Line group (Line), to PWA or industrial users in order to provide quick access to information in the event of a water supply interruption due to the repair of pipes and equipment in the water supply system or during the time of high tide, to reduce the impact that will occur in the production of goods or services.
- Support the activities of PWA's service area expansion to new water users, that PWA provides off-site services to various target communities in order to facilitate the water users, such as registration of new water users, inspection of pipe leaks in houses or buildings, etc.

Other stakeholders, The company arranges various activities to build good relations with the mass media, such as journalists in order to disseminate the company's information to the public, shareholders, and investors so that they can acknowledge the company's information and activities accurately and rapidly. The New media technology has been selected to communicate rapidly for social groups and communities both inside and outside the service area. The company conducts communication and public relations through joint activities in the form of an exhibitions, public relations documents, and lectures to provide knowledge and understanding of the company's business properly.

d. Service Quality Creating Strategy

TTW strongly believes that tap water operator should not only produce good quality tap water but also provide good service which includes the distribution of tap water in adequate quantity and with proper pressure as well as continuity of services. Followings are some of the good quality services provided by TTW in 2022.

- (1) The quality and cleanliness of the tap water met the Industrial Standard 257, Part 1-2521, 100%.
- (2) Sufficient water pressure at the end of tap water distribution pipes at not less than 27 meters water, 100%
- (3) The continuous flow of tap water distribution is not less than 99.93%

Moreover, TTW also cooperated with PWA to organize meetings with large industrial and commercial tap water users regularly in order to get views and recommendations to improve the quality of goods and services, build trust, increase total sales of tap water in service areas, and build good relations between the company, PWA, and water users.

e. Quality Control and Examination Strategy

TTW regards the importance of the good quality of tap water and services that we provide to PWA and tap water consumers. Apart from close control on the quality of water at all steps of production, TTW also provided cooperation to PWA in the examination of water samples, collected from water users in each service areas in TLAA laboratories to ensure that the quality of tap water, distributed to downstream users is consistent with that of the water produced by TTW. At the same time, TTW also provided advice to the water users who requested us to examine the quality of downstream water free of charge. This is because we believe that “Good Quality Tap Water Brings Better Quality of Life”.

f. Cost Management Strategy

With modern production technology installed, TTW is able to efficiently produce tap water by using Ultra-Filtration system technology and gravity to help the sedimentation process without using electrical power to circulate the water so that TTW is able to effectively maintain the cost of production at a manageable level. In addition, the company has a maintenance unit, a subsidiary (TWO) that specializes in maintaining water production and distribution systems without employing outsiders.

(2) Human Resources Strategy

The company's employees are significant resources, and they are also the key to support the business operations to achieve the goals. Therefore, the company establishes the strategic goals and operational guidelines as follows:

1. Develop and enhance employees' knowledge and abilities continuously and consistently, including organizing the organizational structure and career development plans to prepare employees for higher positions.
2. Perform fair employment without the discrimination based on gender, race, or religion in the consideration of promotions and transfers, including providing the opportunity for employees who have good performance and can develop their potential according to the position to be considered as a candidate for appointment by the management in a transparent and fair manner.
3. Provide welfare as required by law and additional welfare to meet the employees' needs, such as medical expenses, life insurance, health insurance, provident fund, and scholarships for employees' children, etc.
4. Focus on the employee's safety by providing training on safety in various fields.
5. Manage compensation in accordance with individual performance, as well as annually study, compare, and improve the compensation management with other companies in the same industry to ensure that the compensation is at a competitive level in accordance with the company's performance.

1.1.2 Significant Change and Developments

TTW Public Company Limited was incorporated as a limited company on 11 September, 2000 under the name “Thai Tap Water Company Limited” to operate the project for producing and distributing water supply in the vicinity of West Bangkok, details of the Company’s significant changes and development can be summarized as follows:

- 21 September 2000 The Company has signed a water purchase agreement with the Provincial Waterworks Authority (PWA) on a Build-Own-Operate (BOO) for a period of 30 years.
- 5 January 2004 Produced tap water for distribution to the Provincial Waterworks Authority before starting operation.
- 21 July 2004 Started selling tap water according to the terms of the water purchase agreement with the Provincial Waterworks Authority.
- 11 March 2005 TTW was granted a concession to engage in tap water production business from the Ministry of Natural Resources and Environment for 25 years to produce and distribute tap water for the areas of Nakhon Pathom Province in three districts, i.e., Amphoe Nakhon Chai Si, Amphoe Sam Phran, and Amphoe Phutthamonthon, and Samut Sakhon Province
- 6 July 2006 The Company has registered as a public company by the name of Thai Tap Water Company Limited.
- 29 June 2007 The Company entered into an agreement to purchase ordinary shares of Pathum Thani Water Company Limited (PTW) amount of 10,698,283 shares or 89.15 percent of total paid-up shares.
- 18 December 2007 The Company entered into an agreement to purchase an additional shares of Pathum Thani Water Company Limited amount of 1,061,452 shares or 8.85 percent of total paid-up shares (as of 31 December, 2007, the company has had a total shareholding in PTW of 98 percent, 2 percent is owned by the Provincial Waterworks Authority).
- 22 May 2008 The Company was converted into a listed company on the Stock Exchange of Thailand (SET) with the registered capital of 3,990,000,000 Baht, comprising 3,990,000,000 ordinary shares at the par value of 1 Baht per share, TTW has been classified into Energy and Utilities Business in Resource Sectors.
- 7 August 2009 TTW has signed an agreement to acquire the right to produce tap water and wastewater treatment in Bang Pa-in Industrial Estate from Bang Pa-in Land Development Company Limited (BLDC) for a period of 30 years (ended on 6 August, 2039).
- 8 January 2010 Waterflow Company Limited merged with BJT Water Company Limited to establish Thai Water Operations Company Limited, staked by TTW 68 percent and PTW 32 percent.

- 1 September 2010 TTW expanded the capacity from 320,000 cubic meters per day to 440,000 cubic meters per day and started selling tap water according to the terms of the water purchase agreement with PWA (expansion), as a result, the company's minimum purchase volume of water has been increased to 309,000 cubic meters per day.
- 13 September 2011 TTW purchased ordinary shares of CK Power Company Limited (CKP).
- 10 May 2012 TTW paid CKP's capital increased (from 100 million shares to 9,200 million shares) in proportion to the shareholder's equity of 2,730 million baht, totaling 276 million shares or equaled to 30 percent.
- 14 March 2014 The 2014 Annual General Meeting of Shareholders approved the Company changed its name to TTW Public Company Limited.
- 22 May 2015 TTW purchased 467.50 million shares in CKP according to the rights and the premium of 23,144,123 shares at a par value of 3 Baht per share, totaling 1,471.90 million baht, resulting in the company had a 25.31 percent stake in CKP.
- 19 June 2017 TTW accepted the construction works from Ch.Karnchang PLC, including; Krathumbaen Water Treatment Plant, Rai Khing Raw Water Pumping Station, Pipe laying of raw water, and the renovation work of a booster station to a water distribution station, including the construction work under the conditions of the government agency license.
- 28 June 2019 Ch.Karnchang PLC has exercised the warrants to purchase ordinary shares (CKP-W1) and shareholding in CKP increased to 32.56 percent, resulting in TTW's shareholding in CKP decreased to 23.43 percent (Dilute Effect).
- 19 September 2019 The Board of Directors has approved TTW to gradually exercise the rights of warrants purchased ordinary shares (CKP-W1) at the sum of 490,644,424 units, in which, 1 unit of the warrant could be converted to 1.0007 new ordinary shares of CKP, TTW could exercise the warrants purchased CKP's shares up to 490,987,875 shares at 6.00 baht per share. The total amount would be 2,945,927,250 Baht.
- 24 September 2019 TTW issued a bill of exchange (B/E) 1,000 million baht of unsecured senior debentures, with no trustees, as an investment to converting warrants into ordinary shares of CKP by private placement offering with a 1.73 percent discounted rate of return, maturity date on 24 December, 2019.
- 4 October 2019 CKP received the additional shares from the exercise of the warrants to purchase ordinary shares (CKP-W1) amount of 165,115,000 shares that trade on 4 October 2019, resulting TTW's stake in CKP 24.98 percent.
- 20 December 2019 TTW issued and offered for sale debentures with a maturity of 7 years 2 months, in the total amount of 1,000 million baht, at the fixed interest rate of 2.41 percent per annum, proceeded of which would be used for repayment of the matured existing debentures.

- 30 July 2020 The Board of Directors has approved the change of sub-committee structure from 5 to 4 to make the work of each sub-committee much more compact by combining the Corporate Governance Committee and the Risk Management Committee to the Risk Management and Corporate Governance Committee.
- 10 June 2021 The Board of Directors meeting no.2/2021 has approved TTW to enter into the Engineering, procurement and construction (EPC) contract with Ch.Karnchang Public Company Limited (CK) for improvement for water supply and distribution systems at Banglen Water Treatment Plant with the project cost of 330.87 million baht (excluded VAT) and the project period was 540 days.
- 29 June 2021 TTW received the construction work of Renovation of Water Treatment and Transmission Distribution Systems of Pathum Thani Water Treatment Plant Project from Ch.Karnchang Public Company Limited (CK).

Significant Changes and Developments of the Company in 2022

- 22 February 2022 TTW redeemed the debentures of Thai Tap Water Supply Public Company Limited No. 1/2012 valued at 2,000 million baht.
- 29 April 2022 TTW make a loan from the financial institutions (Bank of Ayudhaya) in the amount of 1,000 million for the matured debentures redemption.
- 20 June 2022 TTW was listed in the SETTHSI index for the second half of 2022. (For calculating the index during 1 July – 31 December, 2022).
- 9 August 2022 The Thai Investors Association (TIA) announced that TTW received 100 points (Full score) in the quality assessment by the 2022 Annual General Meeting of Shareholders.
- 10 October 2022 The Stock Exchange of Thailand (SET) announced TTW was 1 of 170 listed companies for the Thailand Sustainability Investment (THSI) listing for the year 2022 (the 7th consecutive year).
- 27 October 2022 The Thai Institute of Directors (IOD) announced the results of the Corporate Governance Report of Thai Listed Companies for 2022 (CGR), TTW received a rating of "excellent".
- 29 November 2022 TRIS Rating Co., Ltd. reaffirmed the Company's rating at "AA-", with a "Stable" outlook.
- 1 December 2022 TTW was awarded the ASEAN Asset Class PLCs from the ASEAN CG Scorecard project for the year 2021.
- 6 December 2022 The Stock Exchange of Thailand (SET) and Futsey Russell announced that TTW was 1 of 18 securities used in the calculation of FTSE SET Shariah Index.
- 21 December 2022 TTW received an honorable award "Sustainability Disclosure Award" for the year 2022 from Thaipat Institute. (for the 4th consecutive year)

1.1.3 Propose of Fund Raised

As of 31 December 2022, the Company had 3 outstanding debentures, equivalent to 3,400 million baht. Details of the debenture are as follows:

Debenture	Issue Date	Total Issue Size (Million Baht)	Term	Coupon Rate (per year)	Purpose of funds
TTW255A	21 May 2015	1,400	10 years	3.98%	To purchase additional shares of CK Power Public Company Limited
TTW232A	1 February 2018	1,000	5 years	2.33%	To refinance the existing debenture to maturity
TTW272A	20 December 2019	1,000	7 years 2 months	2.41%	To repay a bills of exchange that are due from exercising the warrants to purchase the ordinary shares of CK Power Public Company Limited
Total		3,400			

1.1.4 Company's Commitment (if any)

- None -

1.1.5 General Information of the Company

(1) General Information of the Company

Company's Name	:	TTW Public Company Limited
Symbol	:	TTW
Type of Business	:	Utilities business in the production and distribution of tap water
Industrial	:	Resources
Sector	:	Energy and Utilities
Company's Registration Number : 0107549000114		
Registered Capital	:	3,990,000,000 Baht (3,990,000,000 Ordinary shares)
Issued and Fully Paid-Up Capital: 3,990,000,000 Baht (3,990,000,000 Ordinary shares)		
Par Value	:	1 Baht
Head Office	:	No.30/130 Moo 12 Buddha Monthon 5 Road, Raikhing Sub-District Sam Phran District, Nakhon Pathom Province, 73210.
Branch Office	:	(1) Banglen Water Treatment Plant, No.67-68 Moo 9, Bangrakam Sub-District, Banglen District, Nakhon Pathom Province 73130. (2) Krathumbaen Water Treatment Plant, No.29/16 Moo 3, Klong Maduea Sub-District, Krathumbaen District, Samut Sakhon Province 74110. (3) Bang Pa-in Industrial Estate Unit, No.139 Moo 2 Udomsoraryuth Road, Klongjig Sub-District, Bang Pa-in District, Phra Nakhon Si Ayutthaya Province 13160.
Company's Website	:	http://www.ttwplc.com

Telephone Number : 0 2019 9480
 Fax Number : 0 2420 6064

Company's Name	:	CK Power Public Company Limited ("CKP")
Type of Business	:	Holding shares of other companies (Holding Company) operating electricity generation and distribution businesses from different energy sources.
Company's Registration Number	:	0105554074200
Registered Capital	:	9,240,000,000 Baht
Paid-Up Capital	:	8,129,382,729 Baht
Par Value	:	1 Baht
Shareholding	:	2,030,759,929 Shares
Shareholding Percentage	:	24.98%
Head Office	:	587 Viriyathavorn Building floor 20 Sutthisan Road Dindaeng Dindaeng Bangkok 10400
Company's Website	:	http://www.ckpower.co.th
Telephone Number	:	0 2691 9720
Fax Number	:	0 2691 9723



Xayaburi Hydroelectric Power Project, Lao PDR, of Xayaburi Power Co., Ltd., one of the businesses invested by CKP.

1.2 Nature of Business Operations

The Company and its subsidiaries operates the business of generation and distribution of tap water to the Provincial Waterworks Authority (PWA) in the areas of two provinces, Nakhon Pathom Province in three districts, i.e., Amphoe Nakhon Chai Si, Amphoe Sam Phran, and Amphoe Phutthamonthon, and Samut Sakhon Province in two districts, i.e., Amphoe Krathum Baen and Amphoe Mueang Samut Sakhon, Pathumthani – Rangsit Area, including the business of management and maintenance of tap water production system and wastewater treatment.

1.2.1 Revenue Structure

As of 31 December 2022, the revenue structure of the Company and its subsidiaries is as follows:

Type of Business	Operating Company	Shareholding (%)	Financial Information					
			31 Dec 2022		31 Dec 2021		31 Dec 2020	
			Mil.Bt.	%	Mil.Bt.	%	Mil.Bt.	%
Revenues								
Sales of treated water								
TTW	The company		3,866.9	67.8	3,925.3	67.4	4,090.2	65.9
PTW	Subsidiaries	98.0	1,708.0	29.9	1,757.1	30.2	1,969.2	31.8
Service income								
TTW	The company		38.8	0.7	41.1	0.7	40.0	0.6
TWO	Subsidiaries	68.5	77.8	1.3	82.6	1.4	80.2	1.3
Finance income								
	The company and its subsidiaries	-	3.7	0.1	4.6	0.1	10.2	0.1
Other income								
Profits from investment ⁽¹⁾	The company and its subsidiaries	-	8.7	0.1	6.9	0.1	11.0	0.2
Other	subsidiaries		1.0	0.1	4.8	0.1	2.3	0.1
Total revenues		-	5,704.9	100.0	5,822.4	100.0	6,203.1	100.0

Remark : ⁽¹⁾ Profits from investment gains on temporary investments.

1.2.2 Business Operations of the Company based on main business segments:

(1) Tap Water and Related Services

The Company and its subsidiaries is the operator of tap water production and distribution in response to the government's policy to provide the public with adequate, continual, and good quality supply of tap water, and the business of management and maintenance of tap water production and wastewater treatment system, which divides into 2 types as follows:

Tap Water Production and Distribution Business

1. TTW Public Company Limited (TTW)

TTW is the operator of tap water production and distribution in response to the government's policy to provide the public with adequate, continual, and good quality supply of tap water, with the following nature of businesses.

(1) Business Contract and Concession

a) Water Purchase and Sale Agreement with the Provincial Waterworks Authority (PWA)

On 21 September, 2000, TTW and PWA signed a contract in which PWA agreed to purchase tap water, produced by TTW in order to resell the water to consumers in Samphran, Nakhon Chaisri, and Buddha Monthon Districts of Nakhon Pathom Province, as well as Krathumbaen and Muang Districts of Samut Sakhon Province for a period of 30 years, starting from the date that TTW sold water to PWA according to the contract, i.e., 21 July, 2004. The contract will last until 20 July, 2034 is called the Build-Own-Operate (BOO) under which TTW is the builder of water production and distribution facilities and the owner of such production and distribution facilities without having to transfer the facilities to the PWA. According to the contract, TTW must arrange to ensure the production capacity of 320,000 cubic meters per day and the Minimum Order Quantity (MOQ) that the PWA must purchase from TTW throughout the contract period is as follows:

Starting Date	Ending Date	MOQ (Cubic Meter / Day)
21 July 2004	20 July 2006	200,000
21 July 2006	20 July 2008	250,000
21 July 2008	20 July 2034	300,000

Apart from the MOQ amount of tap water that the PWA was required to purchase from TTW as detailed above, the tap water supply contract also required TTW to maintain and ensure that TTW tap water production capability must be adequate to supply minimum amount of tap water required to purchase at the time plus the 7% minimum amount of tap water that was required to be purchased at that time or plus 20,000 cubic meter/day of tap water, whichever amount was lower.

b) An Amendment to the Water Purchase and Sales Agreement with PWA.

TTW signed an amendment to the Water Purchase and Sales Agreement with PWA on 29 December, 2008 in which the MOQ amount has increased from 300,000 cubic meters per day to 354,000 cubic meters per day. (increased 9,000 cubic meters per year). In 2022, from 1 January to 31 December, the rate for 1-300,000 cubic meters shall be 29.788536 Baht per cubic meter, and the exceeding 300,001 cubic meters shall be 12.61 Baht per cubic meter.

c) Tap Water Business Concession

TTW has been granted a concession to engage in tap water production business from the Ministry of Natural Resources and Environment for 25 years, starting from 11 March, 2005 to 10 March, 2020. Under the concession, TTW shall produce and distribute tap water for the areas in 5 districts of 2 provinces as shown in the following table.

Province	District
Nakhon Pathom	Sam Phran, Nakhon Chaisri, and Buddha Monthon
Samut Sakhon	Krathumbaen and Muang Samut Sakhon

According to the provision in TTW Concession, TTW can produce and distribute tap water to anyone in the areas without limitation, e.g., PWA, Industrial Estate Authority and municipalities, etc., and TTW shall charge the tap water users at the rate as specified in the contract between TTW and PWA.

d) Letter of Permission to Use Water from the Tha Chin River for Tap Water Production

TTW has been granted permission to use water from the Tha Chin river for tap water production. It consists of the following licenses:

- Letter No.Nor Ror 0110/423 dated April 27, 2001, with a capacity of 320,000 cubic meters/day.
- Letter No.Tor Sor 0222.2/7464 dated November 29, 2016, to increase production capacity by 120,000 cubic meters/day, totaling 440,000 cubic meters/day.
- Letter No.Tor Sor 0605/5837 dated August 16, 2018, to increase production capacity by 100,000 cubic meters/day. Currently, TTW has a total capacity of 540,000 cubic meters/day.

e) Maintenance Agreement

TTW entered into a management and maintenance agreement with WaterFlow on June 12, 2001 for a term of 30 years, equal to the term of the tap water purchase agreement, which is from July 21, 2004 until the expiration date of the contract, which is July 20, 2034. On January 8, 2010, Waterflow Company Limited merged with BJT Water Company Limited (a company that provides management and maintenance services for Pathum Thani Water Company Limited (PTW)) is Thai Water Operations Company Limited (TWO). Therefore, TWO performs all maintenance services for TTW and PTW, including production and wastewater treatment systems at Bang Pa-In Industrial Estate.

(2) Production and Distribution System

a) Production System

TTW produces tap water by pumping raw water from the middle course of the Tha Chin River into the tap water production process at the TTW water treatment plant on the east side of the river at Bang Rakam Sub-District, Bangleng District, Nakhon Pathom Province. The plant has installed and maximum production capacity of 320,000 cubic meters per day, as of 31 December, 2009 and August, 2010, the

production capacity has increased to 440,000 cubic meters/day. The company built the 2nd water treatment plant at Krathumbaen, located on Settakit Road 1, Khlong Maduea Sub-District, Krathumbaen District, Samut Sakhon Province which intended to be used as a secondary plant with a production capacity of 100,000 cubic meters/day. The two plants have a combined production capacity of 540,000 cubic meters per day.

The production process at the water treatment plants, the distribution of tap water to both water treatment plants and the tap water distribution process to the PWA is controlled by the Supervisory Control and Data Acquisition (SCADA) System which is able to control water production and distribution to distribution stations efficiently. Such system was installed in a control building which was located separately from the tap water production plant.

TTW has built a chemical storage building separate from the water treatment plants in order to store chemicals before they are automatically added into the water production system. The main chemicals used in the production process are as follows:

- Alum is used to precipitate suspended solids in raw water.
- Potassium permanganate is used to eliminate certain chemicals in raw water that make raw water turn colored.
- Liquid chlorine is used in disinfection processes.
- Polyelectrolytes are used to make the sludge larger in order to make it fall to the bottom of the tank rapidly.
- Lime is used to adjust the pH of water.

In addition, TTW also uses a diaphragm dosing pump, which can adjust the pumping frequency and the amount of chemical as appropriate according to the quantity and quality of raw water obtained from daily testing, and also has a backup generator for use in the event of a power outage. Because TTW's machines have to operate 24 hours a day, TTW has set up an employees' dormitory inside the compound of the TTW water treatment plant to ensure that the production process is operated continually in the event of an emergency situation occurring.

The quality of tap water, produced and distributed by TTW met standard criteria, prescribed in the Water Purchase and Sales Agreement with PWA and the Thai Industrial Standard of the Thai Industrial Standard Institute, the Ministry of Industry. To ensure that the quality of the tap water met these standards, TTW conducted the test on water quality at all steps of production, starting from the adding of chemical solvent until the sludge dewatering and the distribution of tap water from the water production plant. With efficient and skillful production, tap water, produced by TTW always meets the standard, prescribed by the PWA ever since the starting of operation on 5 January, 2004 until present and in pursuance to the Thai Industrial Standard 257, Vol. 1-2521.

b) Tap Water Transmission System to Water Distribution Stations

Tap water produced from the Banglen water treatment plant is stored in water storage tanks with a capacity of 30,000 cubic meters, and the tap water at the Krathum Baen water treatment plant is stored in two connected water storage tanks with a capacity of 25,000 and 20,000 cubic meters, from which the tap water will be distributed to the following 2 TTW distribution stations:

(1) Buddha Monthon Distribution Station is located on Buddha Monthon 5 Road, Rai Khing Sub-district, Samphran District, Nakhon Pathom Province, the area consists of 2 water tanks that share a wall with a total capacity of 50,000 cubic meters. The water pumping system is installed by dividing it into 2 sets. The first set consists of 5 water pumps with a pumping rate of 2,569 cubic meters/hour/machine in order to distribute water to the service area and the Samphran and Omnoi Distribution stations, which distribute water to people in the areas of Sampran, Buddha Monthon, and Nakhon Chai Si Districts, Nakhon Pathom Province, and Krathumbaen District, Samut Sakhon Province, and the second set consists of 5 water pumps with a pumping rate of 1,530 cubic meters / hour / machine in order to distribute water to the Krathumbaen booster station and Mahachai distribution station.

(2) Mahachai Distribution Station is located in Mueang Samut Sakhon District, Samut Sakhon Province, the area consists of 2 water tanks that share a wall with a total capacity of 30,000 cubic meters, which receive water from the Buddha Monthon distribution station and distribute water through the water pumping system of 4 machines with a pumping rate of 2,664 cubic meters/hour/machine in order to distribute water to the service area and the Samut Sakhon distribution station, which distributes water to Mueang Samut Sakhon District, Samut Sakhon Province.

Both distribution stations have a water distribution control system that is suitable for the amount of water needed in the water distribution area. The water is pumped through a series of water gauges to record the quantity of water, distributed to PWA. In addition, a pressure control tank is installed to prevent the occurrence of vacuum in water distribution pipes and deformity caused by resonance frequency in the event of a power outage, which it works by filling the air into the pipe system. A backup generator was also installed for use in the event of a power outage, as well as at the water treatment plant.

c) Raw Water & Tap Water Distribution System

1) Bulk Trunk Main (BTM) is the pipeline system from the water treatment plant to the 2 distribution stations of TTW, for a total distance of approximately 51 kilometers consisting of:

- The tap water distribution system from the water treatment plant to Khlong Yong booster station, which has a diameter of 1,500 mm. (1.5 m), with a distance of approximately 17 km. In the first phase, a BTM pipe from the Banglen water treatment plant to the Khlong Yong booster station is installed on the pavement of Salaya-Bangpasee road.

- The tap water distribution system of the Khlong Yong booster station has a diameter of 1,500 mm. (1.5 m), with a distance of approximately 12 km, is installed from the Khlong Yong booster station

on the pavement of Salaya-Bangpasee road to the southern railway, turn right along the railway, and turn left onto the road No. 3414, passing through Pinklao-Nakhon Chaisri road, as well as Buddha Monthon 5 road to the Buddha Monthon distribution station.

- Tap water distribution system from Buddha Monthon Distribution Station to Krathumbaen Booster Station, which has a diameter of 1,000 mm. (1.0 m), with a distance of approximately 14 km. A BTM pipe is installed on the pavement of Buddha Monthon 5 road, passing through Phetkasem road by installing a pipe on the pavement of Setthakit 1 road until the Krathumbaen booster station.

- Tap water distribution system at Krathumbaen booster station to Mahachai Distribution Station, which has a diameter of 1,000 mm. (1.0 m), with a distance of approximately 7 km. A BTM pipe is installed on the pavement of Setthakit 1 road, turn right along Siwaphasawat-Panthuwong road, through Siwaphasawat canal, until the Mahachai distribution station.

2) Local Distribution Network (LDN) is a tap water distribution piping network from 2 TTW's water distribution stations to PWA in order to distribute the water to the water users, with a total length of 113 kilometers.

Each point of LDN is linked by the valve pond that consists of pressure control equipment that linked the LDN and PWA's service piping network. All of the valve ponds and pressure control equipment in 46 points are TTW's assets.

TTW has paid for the lease of land where the bulk transmission main (BTM) and local distribution network (LDN) are laid to the Department of Highways every year according to the lease agreement. The lease fee is subject to an increase of 15% every 5 years according to the condition, prescribed by the Department of Highways. In 2022, the total lease fee that TTW had to pay was 34.62 million Baht, which was 27.94 million Baht for the lease of the water treatment plant in Banglen and 6.68 million Baht for the second water treatment plant in Krathumbaen.

3) Raw Water Distribution System is a raw water distribution system that flows from the Tha Chin distributary to the Rai Khing Raw Water Pumping Station, located at Rai Khing Subdistrict, Samphran District, Nakhon Pathom Province. The distribution system delivers raw water via a 1,500-millimeter water pipe with a total distance of 16 kilometers to the Krathumbaen Water Treatment Plant to bring raw water into the tap water production process.

d) Quality of Tap Water

The quality of tap water produced and distributed by TTW met standard criteria; prescribed in the Water Purchase and Sales Agreement with PWA and the Thai Industrial Standard of the Thai Industrial Standard Institute, the Ministry of Industry.

To ensure that the quality of the tap water met these standards, TTW conducted the test on water quality at all steps of production, starting from the adding of chemical solvent until the sludge dewatering and the distribution of tap water from the water production plant. Moreover, samples of water were also sent to be

examined by the Health Department of the Ministry of Public Health at least once a month from the start of the operation on 5 January, 2004 until the present.

(3) Benefits of Investment Promotion

As of December 31, 2022, TTW has investment promotion certificate that receive privileges from the Office of the Board of Investment as follows:

Investment Promotion	59-0683-1-00-1-0
Certificate Number	
Date	May 26, 2016
Start Date for Income	March 31, 2019
Type of Business	Business of tap water and water production for Industries or steam
Rights and Benefits	(1) Exemption of import duty on machinery as approved by the Board of Directors. (2) Exemption from corporate income tax for net profit from the promoted business combined not exceeding 100% of investment, excluding cost of land and working capital for a period of 5 years from the date of earning income from Undertaking such business, in case of loss during the period of corporate income tax exemption, in carrying out the loss of business, the annual loss incurred during that time shall be applied. to be deducted from the net profit incurred after the period of corporate income tax exemption for a period of not more than 5 years from the date of expiration set that time You can choose to deduct from the net profit of any year or several years. (3) Exempted from the need to include dividends from promoted businesses that are exempted from corporate income tax under Section 31 to include in the calculation of income taxes throughout the period that the promoted person is exempt from corporate income tax.

2. Pathumthani Water Company Limited (PTW)

PTW is a manufacturer and distributor of tap water for the Provincial Waterworks Authority and is the first private investment project to produce tap water for the replacement of groundwater use per government policy. PTW has the following key business nature:

(1) Business Contract and Concession

a) A Contract of Tap Water Production and Distribution to the Provincial Waterworks Authority (PWA)

PTW has signed the Build-Own-Operate-Transfer (BOOT) contract with the Provincial Waterworks Authority (PWA) on 31 August, 1995 in which PWA granted PTW the right to produce and distribute tap water in Pathum Thani-Rangsit areas of Pathum Thani Province for a period of 25 years, starting from the operation date,

i.e., 15 October, 1998 to 14 October, 2023. Under this contract, PTW shall build the tap water production and the distribution system and shall transfer the ownership of the distribution system to the PWA on the date that the operation started. And the ownership of tap water production system shall be transferred to PWA at 24.00 hr. of 14 October 2023 which is the end of the 25-year contractual period. However, PTW may request to lease the tap water production system from PWA in order to produce and distribute the tap water after the 25 years contract is ended by notifying the intent to PWA within the 24th year after the operation has started or at least 6 months before the transfer of tap water production system or between 15 October, 2022 to 14 April, 2023. PTW is entitled to lease the tap water production system from PWA 2 times in 10 year period.

Under this contract, PTW granted the right to distribute tap water supply at the amount of not more than 288,000 cubic meters/day, and PWA would stop supplying from other tap water sources to the consumers in Pathum Thani and Rangsit areas after the start of the operation, i.e., 15 October, 1998 except at a time when PWA projects that the demand for tap water in Pathum Thani and Rangsit areas would exceed 288,000 cubic meters/day. In such case, the PWA would be entitled to commence a project to supply that exceeding amount of tap water, either by itself or by other third party private supplier even though this contract has not yet terminated. However, the PWA shall be able to buy tap water from other sources or distribute tap water to the consumers at the exceeding amount only when the MOQ has reached 288,000 cubic meters/day. Therefore, 15 days before the end of each year, PWA must set and notify the amount of MOQ that must not be lower than the MOQ of the previous year. In 2009, 2010, and 2016, the MOQ was 320,000 cubic meter/day, 330,000 cubic meters/day, and 358,000 cubic meters/day respectively (The total MOQ meets the requirement of the contract).

PTW pumped raw water from the Chao Phraya River to be used for the production of tap water in its production facility in Sam Khok District. The tap water supply would then be sent through the Bulk Transmission Main (BTM) to the 4 distribution stations, i. e., Rangsit Station, Thammasat Station, Pathum Thani Station, and Muang Ake Village Station (Distribution officially started on 7 September, 2015). Then, tap water from Rangsit Station, Thammasat Station and Muang Ake Village Station would be distributed to PWA's Rangsit Office, and Klong Luang Office. The water from Pathum Thani Station would be distributed to PWA's Pathum Thani Office through the LDN main that belonged to PWA. The amount of water to be purchased in each month shall be measured by meter at the 4 distribution stations, and the water charge rate is adjusted on 1 January of every year.

b) Contract to Buy Additional Tap Water

On 15 September, 2006, PWA and PTW signed a contract that increased the purchase additional amount of tap water supply by 70,000 cubic meters/day to be distributed to areas under the operation of PWA's Rangsit Office, using some assets from the Production and Distribution of Tap Water Contract. The expansion project was in response to the increasing daily demand for tap water. PTW invested in improving the raw water system, construction of tap water production system, booster pump station, improving distribution system, and stations in order to increase production capacity by 100,000 cubic meters/day. On 1 August, 2008, PTW started

the production and distribution of tap water to PWA and this contract will end on 14 October, 2023, the same time as that of the Production and Distribution of Tap Water Contract. The nature of the contract was the Build-Own-Operate-Transfer (BOOT).

c) Tap Water Business Concession

PTW granted a concession to operate a tap water business by the Ministry of Interior (Currently, under the supervision of the Department of Natural Resources and Environment) for a period of 25 years, starting from 13 January 2000 to 12 January 2025. Under this concession, PTW granted the right to produce and distribute tap water in the service area of Pathum Thani-Rangsit, Pathum Thani Province. The PTW shall charge the PWA at the rate specified in the Tap Water Production and Distribution Contract.

d) Letter of Permission to Use Water from the Chao Phraya River for Tap Water Production

The Office of the Board of National Water Resources has approved PTW to use raw water for producing tap water according to the letter No. Kor Chor Tor./070 dated January 24, 1996, in the amount of 300,000 cubic meters/day, which has been extended by an additional 200,000 cubic meters/day according to the letter No. Chor Por.Por Tor. 1/2016 dated April 27, 2016.

e) Maintenance Agreement

The Board of Directors' meeting of PTW held on November 27, 2008, resolved PTW to proceed with the amending of the management and maintenance agreement with BJT to be the maintenance agreement. Therefore, PTW operates water supply production and is responsible for the costs of chemicals, electricity, labor of the production unit, and spare parts. Currently, BJT has merged with WaterFlow to become Thai Water Operations Company Limited (TWO), so TWO will perform maintenance work on PTW as TTW.

(2) Production and Distribution System

a) PTW Production System

PTW water treatment plant is located at Ban Pathum Sub-District, Sam Khok District, Pathum Thani Province. Initially, the plant had the installed production capacity of the plant was 288,000 cubic meters/day. PTW increased the production capacity for the first time to 100,000 cubic meters/day in 2008 and 2015, the initial production capacity has increased to 57,000 cubic meters/day and the maximum production capacity to 100,000 cubic meters/day. As a result, the current production capacity is 488,000 cubic meters/day.

b) Tap Water Transmission System to Water Distribution Stations

The tap water is pumped and transmitted to 4 following water distribution stations.

1) **Thammasat Water Distribution Station**, distribute tap water to PWA Khlong Luang Distribution System and some areas under PWA's Ayutthaya Office from where the tap water is further distributed to the users in the areas of Khlong Luang District and some areas in Ayutthaya province.

2) **Rangsit Water Distribution Station**, distribute tap water to PWA Rangsit Distribution Station from where the tap water is further distributed to the users in the areas of Thanyaburi District and Lam Luk Ka District.

3) **Pathum Thani Water Distribution station**, distributed tap water to PWA Pathum Thani Distribution System from where the tap water is further distributed to the users in the areas of Mueang District, Sam Khok District, and Lat Lum Kaew District.

4) **Muang Ake Water Distribution Station**, distribute tap water to some areas under PWA Rangsit Distribution System so that it could transmit more water to the areas of Khlong 4-5 of Khlong Luang area. Muang Ake Water Distribution Station distributes tap water to users in Lak Hok Sub-District, Ban Mai Sub-District, Bang Phoon Sub-District, Mueang District, Pathum Thani province.

All four of PWA's water distribution stations have installed a set of equipment to control the level of distribution pressure to be in proper balance with the water quantity required in the distribution areas. The water is distributed through a series of water gauge that recorded the amount of water, distributed to PWA, the same way it does to TTW. However, the areas under the responsibility of PTW covered the water gauge installed in the water distribution only.

c) Tap Water Transmission System

1) **Bulk Transmission Main (BTM)** This 33.78 Kilometer-long water transmission system distribute tap water from water treatment plant to the company's following

- The water transmission system from PTW water treatment plant to Rangsit distribution station has 4 sizes: a diameter of 1,500 mm., with a distance of approximately 2.35 km. (is placed from PTW water treatment plant to the highway No.347), a diameter of 1,200 mm., with a distance of approximately 2.57 km. (is placed from the highway No.347 to the Khlong Prem Prachakon intersection), and a diameter of 1,000 mm., with a distance of approximately 8.13 km. (is placed from the Khlong Prem Prachakon intersection to Rangsit distribution station).

- The water transmission system from PTW water treatment plant to Thammasat distribution station has 3 sizes: a diameter of 1,500 mm., with a distance of approximately 2.35 km., a diameter of 1,220 mm., with a distance of approximately 2.57 km. (both pipe sizes are used with the pipes that distribute water from PTW's water treatment plant to Rangsit distribution station), and a diameter of 1,000 mm., with a distance of approximately 0.63 km. (is placed from the Khlong Prem Prachakon intersection to the Thammasat distribution station).

- The water transmission system from PTW water treatment plant to Pathum Thani distribution station has installed a BTM pipe that has a diameter of 600 mm., with a distance of approximately 0.45 km. that is placed under the Chao Phraya river and connected with a 700 mm. diameter pipe, with a distance of approximately 0.55 kilometers from the western side of the Chao Phraya river to the Pathum Thani distribution station.

- The water transmission system of Muang Ake water distribution station, which is located in the PTW water treatment plant, has a diameter of 800 mm., with a distance of approximately 14 km. A BTM pipe distributes water into the area of Muang Ake, Lak Hok Subdistrict, Mueang District, Pathum Thani Province.

- Five water pumps are installed at the pressure booster station, which is the origin of the pipe that distributes water to the Rangsit distribution station, in order to increase the capacity to distribute water to the Rangsit distribution station by 200,000 cubic meters/day.

2) Local Distribution Network (LDN) This is a tap water distribution system that transmits water to 4 of PWA's water distribution stations according to the Water Production and Distribution Contract between PTW and PWA. All of distribution systems built by PTW would be transferred under the ownership of PWA on the start of operation or on 15 October 1998. Therefore, the PTW water distribution systems that comprise some of the water distribution mains, including the valve pond are transferred to be the assets of PWA.

3) Raw Water Distribution System is a raw water distribution system that flows from the Chao Phraya River distributary to the Raw Water Pumping Station, located in Baan Pathum Sub-District, Samkhok District, Pathum Thani Province. The distribution system delivers raw water via 2 pipelines with a diameter of 1,500 and 1,000 millimeters, with a distance of 750 and 800 meters, respectively, to the Pathum Thani Water Treatment Plant in order to bring raw water into the tap water production process.

However, PTW annually paid the rental fee for the installation of the 25-meter raw water pipe to the Department of Highways according to the rental agreement. The rental fee will be increased by 15% every 5 years according to the conditions stipulated by the Department of Highways. In 2022, PTW's rental fee for the pipe installation was 3,600 baht.

d) Quality of Tap Water

The tap water produced and distributed by PTW is in accordance with the standards stipulated in the Contract of Tap Water Production and Distribution and the Additional Tap Water Purchase and Sales Agreement, both of which are according to the Industrial Product Standards of the Thai Industrial Standard Institute (TISI), Ministry of Industry. Throughout the past, tap water produced by PTW has always met said production and quality standards.

(3) Benefits of Investment Promotion

As of December 31, 2022, PTW has investment promotion certificate that receive privileges from the Office of the Board of Investment as follows:

Investment Promotion	59-0392-1-00-1-0
Certificate Number	
Date	March 21, 2016
Start Date for Income	December 31, 2017
Type of Business	Business of tap water and water production for Industries or steam
Rights and Benefits	<ol style="list-style-type: none">(1) Exemption of import duty on machinery as approved by the Board of Directors.(2) Exemption from corporate income tax for net profit from the promoted business combined not exceeding 100% of investment, excluding cost of land and working capital for a period of 5 years from the date of earning income from The business operation in the case of a loss during the period of corporate income tax exemption for the loss of business. The annual loss incurred during that time shall be taken. to be deducted from the net profit incurred after the period of corporate income tax exemption for a period of not more than 5 years from the date of the expiration of such period You can choose to deduct from the net profit of any year or several years.(3) Exempted from the need to include dividends from promoted businesses that are exempted from corporate income tax under Section 31 to include in the calculation of income taxes throughout the period that the promoted person is exempt from corporate income tax.

3. Right of Tap Water Production and Wastewater Treatment in Bang Pa-In Industrial Estate (BIE)

(1) Business Rights and Agreements

a) Right of Tap Water Production

TTW has acquired the rights from the Bang Pa-in Land Development Company Limited to produce tap water and treat wastewater in the Bang Pa-in Industrial Estate (BIE) for a period of 30 years, starting in August 2009, with a production capacity of 48,000 cubic meters/day and a wastewater treatment capacity of 18,000 cubic meters/day.

b) Maintenance management and water production and wastewater treatment systems management agreements with Thai Water Operations Company Limited (TWO)

The Company entered into a maintenance system management agreement with Thai Water Operations Company Limited (TWO) on August 7, 2009 to manage the water production and distribution

system and the wastewater collection and treatment system in Bang Pa-in Industrial Estate, Phra Nakhon Si Ayutthaya Province. The details are as follows:

(1) Tap Water Production System

Tap water is produced by pumping raw water from the Chao Phraya river into the production process at the water treatment plant located at 139 Moo 2, Udomsorayuth Road, Khlong Chik Subdistrict, Bang Pa-In District, Phra Nakhon Si Ayutthaya Province. It has a maximum production capacity of 48,000 cubic meters /day. In order to control water supply and distribution efficiently, water production and water supply processes to various factories in Bang Pa-In Industrial Estate use fully automated control with a SCADA system (Supervisory Control and Data Acquisition). The system is located in a control building in a water supply plant, which consists of a water storage tank with a capacity of 7,000 cubic meters. A precipitate chemical storage building has been built separately from the water treatment plant to store chemicals before they are automatically added into the water production system. The main chemicals used in the production process are as follows:

- Alum is used to precipitate suspended solids in raw water.
- Liquid chlorine is used in disinfection processes.
- Lime is used to adjust the pH of water.

The quality of the tap water produced and distributed is in accordance with the standards stipulated in the contract, which is in accordance with the water quality standard criteria of the Provincial Waterworks Authority as recommended by the World Health Organization (WHO) in 2011. To guarantee that the tap water meets the said criteria, the water quality is tested at every step of the production process, from the adding of chemical solvents to the distribution of tap water from the water treatment plant, thus ensuring that the production process is efficient and all water meets the standard criteria.

(2) Tap Water Quality

The tap water produced must meet the quality standards stipulated in the contract in order to ensure the quality according to the standard. The company prepares for quality control testing in every step of production. In addition, water samples were sent to external organizations to examine at least once a quarter.

(3) Wastewater Treatment System

The central wastewater treatment system of Bang Pa-in Industrial Estate, which is an activated sludge treatment system, has a maximum wastewater treatment capacity of 18,000 cubic meters/day, with current levels of wastewater totaling about 14,190 cubic meters/day. The treated wastewater is stored in an 18,000 cubic meter wastewater tank (1 day retention period) before being discharged into the Bang Pa-in Industrial Estate drainage system for reuse and recycling before the remaining water is drained into nearby water sources.

(4) Treated Water Quality (Effluent)

The management of the central wastewater treatment system of Bangpa-in Industrial Estate controls the quality of the treated water (effluent) to ensure it is in accordance with the Ministry of Natural Resources and Environment's Notification regarding Industrial Effluent Standards for Industrial Factories, Industrial Estates, and Industrial Zones, 2016.

To ensure the quality of treated water, the company prepares for quality control testing at every step. In addition, water samples are sent to external organizations to examine at least once a month. The implementation of the BIE project increases revenue for the organization and also increases the skills, knowledge, and experience of TTW personnel to be service providers to customers directly.

The business of management and maintenance of tap water production system and wastewater treatment

Thai Water Operations Company Limited (TWO)

TWO has been contracted by TTW and PTW to provide management and maintenance of the water production and wastewater treatment systems for TTW within the Bangpa-in Industrial Estate and Amata Water Company Limited within the Amata City Industrial Estates of Chonburi and Rayong. Significant operating agreements are as follows:

1. Maintenance management and water production and wastewater treatment systems management agreement with TTW

TWO has entered into an agreement with TTW to manage all maintenance for machinery, equipment, and water distribution pipe under TTW's responsibility from July 21, 2004 to July 20, 2034, with the contract period of 30 years. TWO has also entered into a agreement for the management of water production-distribution systems and wastewater collection and treatment systems within Bang Pa-In Industrial Estate, Phra Nakhon Si Ayutthaya Province, on August 7, 2009, with the contract period of 30 years.

2. Maintenance management agreement with PTW

TWO entered into a maintenance management agreement with Pathum Thani Water Company Limited, located at 43 Moo 3, Chiang Rak Noi - Bang Sai Road, Ban Pathum Subdistrict, Sam Khok District, Pathumthani Province, to be responsible for the maintenance of the water production system. The contract expires on October 14, 2023.

3. Management and maintenance of water production and wastewater treatment systems agreement with Amata Water Company Limited

TWO entered into a management and maintenance of water production and wastewater treatment systems agreement with Amata Water Company Limited within the Amata City Industrial Estate, Chonburi, and Amata City Industrial Estate, Rayong, for a total of 6 contracts.

- a) The purchase order for maintenance for wastewater treatment system, Amata City Chonburi Industrial Estate (Phase 3), for a period of 1 year, from December 26, 2022 to December 25, 2023, which is in the process of negotiating for a long-term contract.
- b) The purchase order for operation and maintenance of the water supply system, Amata City Chonburi Industrial Estate (Phase 1), for a period of 1 year, from December 26, 2022 to December 25, 2023, which is in the process of negotiating for a long-term contract.
- c) The contract for the operation and maintenance of the water supply system Phase 1, Amata City Industrial Estate, Rayong, for a period of 20 years, from December 26, 2019 to December 26, 2039.
- d) The contract for the operation and maintenance of the raw water system, raw water supply pipe system, water supply pipe system, and wastewater collection system with Amata City Chonburi Industrial Estate, for a period of 9 years 7 months, from June 1, 2017 to December 31, 2026.
- e) The contract for the operation and maintenance of the raw water system, raw water supply pipe system, water supply pipe system, and wastewater collection system with Amata City Rayong Industrial Estate, for a period of 9 years 7 months, from June 1, 2017 to December 31, 2026.
- f) The concession contract for study, design, construction and operation of the sludge removal system of the 1/1 water supply system in Amata City Rayong Industrial Estate, for a period of 20 years, from December 26, 2019 to December 26, 2039.



Production and Maintenance Work, Amata City Industrial Estate, operated by TWO

(2) Marketing and Competition

TTW operates the business of production and distribution of tap water to the Provincial Waterworks Authority (PWA) in Nakhon Pathom and Samut Sakhon areas: Om Noi branch, Sampran branch, Nakhon Pathom branch, and Samut Sakhon branch. TTW is the main producer and distributor of tap water in the service areas of 4 branches of PWA. In addition to the tap water purchased from TTW according to the minimum order quantity (MOQ), the PWA brings tap water produced from the Photharam water treatment plant (PTR), Ratchaburi province, to sell in the PWA's service area: Nakhon Pathom branch and Samut Sakhon branch. PWA also purchases tap water from the Metropolitan Waterworks Authority (MWA) to supply in some parts of PWA's service areas, Samut Sakhon branch. Details can be summarized as the following table.

Producer / Distributor of PWA	Produced Water / Purchased Water (Million Cubic Metres)	%
TTW Public Company Limited (TTW)	141.88	82
Photharam Water Treatment Plant (PTR)	30.41	17
Metropolitan Waterworks Authority (MWA)	1.50	1
Total	173.79	100

Meanwhile, PTW operates the business of producing and distributing tap water to the PWA in the Pathum Thani-Rangsit area: Rangsit branch, Klong Luang branch, and Pathum Thani branch. The PWA's Thanyaburi branch, that is established later, provides water supply services in the areas of Thanyaburi District, Pathum Thani Province. PWA produces tap water from the Khlong 13 water treatment plant and purchases tap water from private sectors and MWA into the PWA's service area because the existing water pipe system and water supply pressure of PTW's water treatment plant do not cover the mentioned service area.

In 2022, PTW's water sales volume in the service areas of PWA's 3 branches as mentioned above is equal to 133.54 million cubic meters, compared to the total volume of tap water sold by the PWA that they produce by themselves or purchase from the MWA and other private sectors, which can be summarized in the following table.

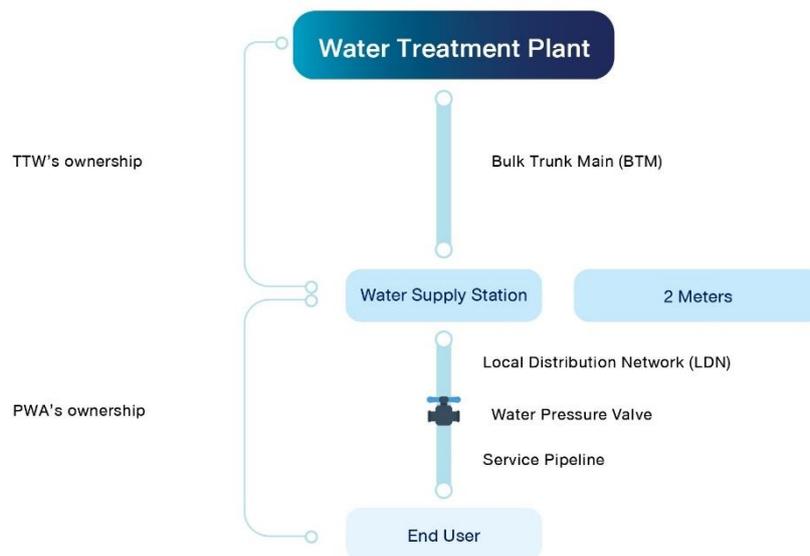
PTW's water volume purchased by the PWA's 3 branches / Water produced by PWA / MWA or other private sectors in 2022

Producer / Distributor of PWA	Produced Water / Purchased Water (Million Cubic Metres)	%
Pathumthani Water Company Limited (PTW)	133.54	79
Wat Chaiyasitthawat and Maitra Water Treatment Plant	24.70	14
Metropolitan Waterworks Authority (MWA)	8.87	5
Other Private Sectors	4.37	2
Total	171.48	100

1. Nature of Customers and Channel of Distribution

TTW

TTW provides tap water production and distribution to one client that is only PWA. At present, PWA purchases tap water from TTW at both of its distribution stations, namely, the Phuttamonton Distribution Station and the Mahachai Distribution Station. PWA will distribute the tap water to water users via main water distribution pipes and service pipes. The amount of tap water sold by TTW to PWA is calculated from the main water meters at both of TTW's water distribution stations—the aforementioned Phuttamonthon and Mahachai Distribution Stations. The amount of tap water distributed by PWA to water users is measured by water meters at the water users' locations.



TTW will calculate the value of tap water according to the tap water volume sold to PWA each month and send an invoice to the 3 water supply offices that are in charge of providing water distribution services in the service areas as follows:

- 1) Provincial Waterworks Authority, Sam Phran Branch
- 2) Provincial Waterworks Authority, Om Noi Branch
- 3) Provincial Waterworks Authority, Samut Sakhon Branch

According to the payment terms, PWA must pay the water bill within 15 days of receiving the invoice from TTW.

TTW will average the water supply volume every 6 months according to the contract. If the average value of PWA's purchased water from TTW is lower than the stipulated contract, PWA will pay an additional fee to TTW based on the water tariff rate multiplied by the difference between the amount of tap water delivered by TTW and the minimum order quantity under the contract (MOQ).

TTW has also acquired the right to manage tap water and wastewater in Bang Pa-In Industrial Estate, worth 1,400 million baht, from August 2009 for a period of 30 years. The contract will expire in 2039 with a capacity of on-site water supply of 48,000 cubic meters/day. In 2022, the selling price of tap water was 24.75

baht/cubic meter, and BIE has a wastewater treatment capacity of 18,000 cubic meters/day. The cost of treating wastewater is 8 baht/cubic meter, depending on the quality of the wastewater. If the quality of the wastewater exceeds the specified criteria, it will be charged at the rate of 20 baht/cubic meter. Bang Pa-In Industrial Estate started operations in 1992 with a total area of 1,962 rai. The area can be divided according to the nature of the industrial area as follows:

- General industrial areas accounted for 59%.
- Utilities and green areas accounted for 30%.
- Export industrial areas accounted for 8%.
- Commercial and residential areas accounted for 3%, and if the area was divided according to the actual use, it could be divided into factory areas that are already in operation, accounting for 55%.

The nature of factories located in Bang Pa-In Industrial Estate, comprising of electrical appliance factories, accounted for 29%, engines, machinery, and spare parts factories, accounted for 14%, and other industrial-related businesses, accounted for 11%, etc.

PTW

PTW operates the business of producing and distributing tap water to PWA, which purchases tap water from PTW's 4 water distribution stations, i.e., Pathum Thani, Rangsit, Thammasat, and Muang Ake Stations. PWA will sell tap water to users in the service areas of Pathum Thani-Rangsit by distributing water through PWA's LDN water pipes and service pipes.

PTW will calculate the actual value of the tap water volume sold to PWA each month and send an invoice to the 3 water supply offices that are responsible for providing water distribution services in the service area as follows:

- 1) Provincial Waterworks Authority, Rangsit Branch
- 2) Provincial Waterworks Authority, Khlong Luang Branch
- 3) Provincial Waterworks Authority, Pathum Thani Branch

According to the payment terms, PWA must pay the water bill within 7 days of receiving the invoice from PTW.

PTW will average the water supply volume every 12 months according to the contract. (From October 15 to October 14 of every year) if the average value of PWA's purchased water from PTW is lower than the stipulated contract, PWA will pay an additional fee to PTW based on the water tariff rate multiplied by the difference between the amount of tap water delivered by PTW and the minimum order quantity under the contract (MOQ).

2. Demand for Tap Water in the Areas

(1) Population growth

The population growth increases water consumption demand because Nakhon Pathom and Samut Sakhon provinces are areas outside of Bangkok, that have continued growth. The population expansion in its

area, including moving from Bangkok to live in the suburbs, causes an increase in residences, village projects, and allocated land, and it is likely to increase in the future. In 2022, Nakhon Pathom province had a population of 921,882 people and Samut Sakhon province had a population of 589,428 people, totaling 1,511,310 people, which was an increase of 0.21% from the population in 2021. While compared with the year 2012 (10 years ago), the total population of both provinces was 1,383,428 people or an increase of 9.24%.

In the Pathum Thani-Rangsit area, Pathum Thani province, which is a continuation area of Bangkok, has developed into a more crowded community caused by the expansion of the population due to the area expansion and the development of transportation systems by sky train, roads, and expressways for travel to conveniently connect with Bangkok and nearby provinces, including using the land for housing instead of agriculture, especially, the land allocated for residential and commercial purposes in Lam Luk Ka, Thanyaburi, and Mueang Pathum Thani District. In 2022, Pathum Thani province had a population of 1,201,532 people, increased by 0.96% as compared with the year 2021. And when compared with the year 2012, Pathum Thani province had a population of 1,033,837 people, or increased by 16.22%.

Details of the population of Nakhon Pathom, Samut Sakhon, and Pathum Thani provinces during the years 2012-2022 are as follows:

The Population during 2012-2022 in Nakhon Pathom, Samut Sakhon, and Pathum Thani Provinces (unit: people)

Year	Nakhon Pathom	Samut Sakhon	Pathum Thani
2012	874,616	508,812	1,033,837
2013	882,184	519,457	1,053,158
2014	891,071	531,887	1,074,058
2015	899,342	545,454	1,094,249
2016	905,008	556,719	1,111,376
2017	911,492	568,465	1,129,115
2018	917,053	577,964	1,146,092
2019	920,030	584,703	1,163,604
2020	920,719	586,140	1,176,411
2021	921,946	586,194	1,187,933
2022	921,882	589,428	1,201,532

Source: The Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior

(2) Industrial Sector Expansion

The area in Samut Sakhon province has the most industrial factories in the country. According to data from the Ministry of Industry's Department of Factory, at the end of the year 2022, there were 6,224 industrial factories in Samut Sakhon province, and most of them were frozen seafood factories, seafood processing factories, canned food factories, and other factor types. In Nakhon Pathom province, the number of industrial factories was 3,269 factories, and most of them were the ready-to-eat food, beverages, clothing,

and apparel industries, including sports equipment factories, etc., which caused the water demand for consumption to continuously increase in accordance with the growth of domestic consumption and exports. (Source: the number of industrial factories reported by the Ministry of Industry's Department of Industrial Works.)

As for the area of Pathum Thani province, which is the service area of PTW, there was an expansion of the industrial sector, especially in Klong Luang, Thanyaburi, Lam Luk Ka, and Mueang Pathum Thani Districts. At the end of 2022, there were 3,111 industrial factories, and most of them were electronic components and communications, food and beverage, and electric powered engines and electric tool production industries. Because Pathum Thani province is adjacent to Bangkok, the leading universities, educational institutions, and malls were located to support the city's growth. The increase in the population has caused water consumption in both the industrial and household sectors to continually increase. (Source: the number of industrial factories reported by the Ministry of Industry's Department of Industrial Works.)

(3) Tap Water Demand in Nakhon Pathom and Samut Sakhon Provinces

As these are expanding areas on the outskirts of Bangkok with rapid growth in both population and residential areas, and as they are densely populated industrial areas with tens of thousands of industrial factories, the Department of Water Resources has placed particular importance on the adequate supply of water to meet the continuously increasing water demand in these areas. According to the survey and study of water demand of PWA by TEAM Consulting Engineering and Management Public Company Limited in December 2022 of the PWA's 4 branches projected that water consumption by users in these service areas until 2034 will be about 800,000 cubic meters per day.

Industrial water users are the main water users in the TTW service area. According to 2022 data, industrial water users account for 38% of the total water supply distributed by PWA, followed by commercial and household water users, which accounted for 14% and 48% respectively. The factors that drive water consumption in service areas depend on the production activities of the industrial sector because there is a large amount of water consumption, which includes working with PWA to expand water supply service areas to respond to the water users' needs in the household sector. Therefore, TTW's marketing plan focuses on creating cooperation with PWA to meet the water users' needs in both industrial and household sectors, in order to ensure that they receive adequate and good water quality by preparing activities to meet water users, planning and supporting the expansion of service areas with PWA, and continually communicating the useful information for the operation of water users in the industrial and household sectors.

(4) Tap Water Demand in Pathum Thani – Rangsit Areas

The results of a study on tap water demand in this area, conducted by Team Consulting Co., Ltd., indicated that the area with the highest increase in tap water demand was the Lam Luk Ka District, as this is located in the area where Pathum Thani and Sai Mai, Bangkok, connect, and is an area predicted to experience an increase in economic prosperity. Currently, there is also the Green Line electric railway in order

to connect Moh Chit, Saphan Mai, Khu Khot, and Lum Luk Ka Districts that opened for service in 2020, resulting in the development of real estate projects around the BTS route, further increasing the likelihood of greater population growth in the Lum Luk Ka District, thus also increasing the demand for tap water in this area in the future. In addition, the completion of the Bang Sue – Rangsit Red Line electric railway in the Khlong Luang District makes this another area with a high water demand growth rate expected. Pathum Thani province has a project to build a new Dusit Zoo (Khao Din) located between Klong 6 and Klong 7 on the south side of the Rangsit canal, with an area of 300 rai, which will be the new attraction and resting place for tourists in Pathum Thani province, including being a source of nature conservation and wildlife propagation and being a learning place for youths. As a result, such areas will experience both economic growth and an increase in water consumption. The new zoo is expected to open in 2027.

According to TEAM Consulting Co., Ltd.'s survey and study results from May 2017, the water supply volume in TEAM Consulting Co., Ltd.'s service area will be around 840,000 cubic meters/day until the year 2033.

However, when considering PTW's data on tap water usage in the Pathum Thani-Rangsit service area, it was found that the household or residential sector had the highest proportion of water consumption at 65%, followed by the industrial sector at 19% and the commercial sector at 16%. As a result, the residential or household sector is important to PTW's business operations. Therefore, PTW has to focus on building confidence in the continuity of the production and distribution system and coordinating with PWA about the appropriate pressure management so that the water users in the household sector can consume tap water of good and sufficient quality.

(3) Product and Services

1. TTW Production

(1) Production Technology

TTW used water production technology from England, and the Company's staffers have knowledge and expertise in tap water production process that met international standard. The modern technology used by TTW is the Supervisory Control and Data Acquisition (SCADA) which is a computerized system, used for the automatic control of tap water production and distribution process. As a result, tap water produced by TTW always meets the TIS 257 Parts 1-2521, the standard prescribed by the PWA.

In addition, TTW's tap water supply system has been designed for efficient production with a view to attain a maximum saving on production costs. Said design is based on the "Gravity Flow" principle, in which raw water is pumped up to a water pumping station and then is released to flow downward by gravity through the rapid mixing tank, sedimentation, filtration, and chlorine mixture processes before being sent to the water storage process and, finally, to both water distribution stations. This process allows the Company to save on electricity used in production when compared to pumping water through each of the above steps as is normally done in the tap water production process.

Average Quantity of Tap Water Produced by TTW during 2020 – 2022

Unit : Cubic meter per day

Description	2020	2021	2022
Production Capacity	540,000	540,000	540,000
Average Water Sales Volume	453,155	419,939	388,714
Utilization of Production	84%	78%	72%

In 2022, TTW had an average water supply volume of 388,714 cubic meters/day, or equaled to 72% of the total water supply capacity of 540,000 cubic meters/day. The water supply volume of TTW decreased by 7.44% as compared to the year 2021 due to economic factors, especially the Thai export sector that is still affected by the Ukraine-Russia war. Although the situation of COVID-19 would get better in 2022, overall, it affects the amount of water consumption in the industrial and commercial sectors and also affects the water supply volume of TTW.



Banglen Water Treatment Plant, Nakhon Pathom Province

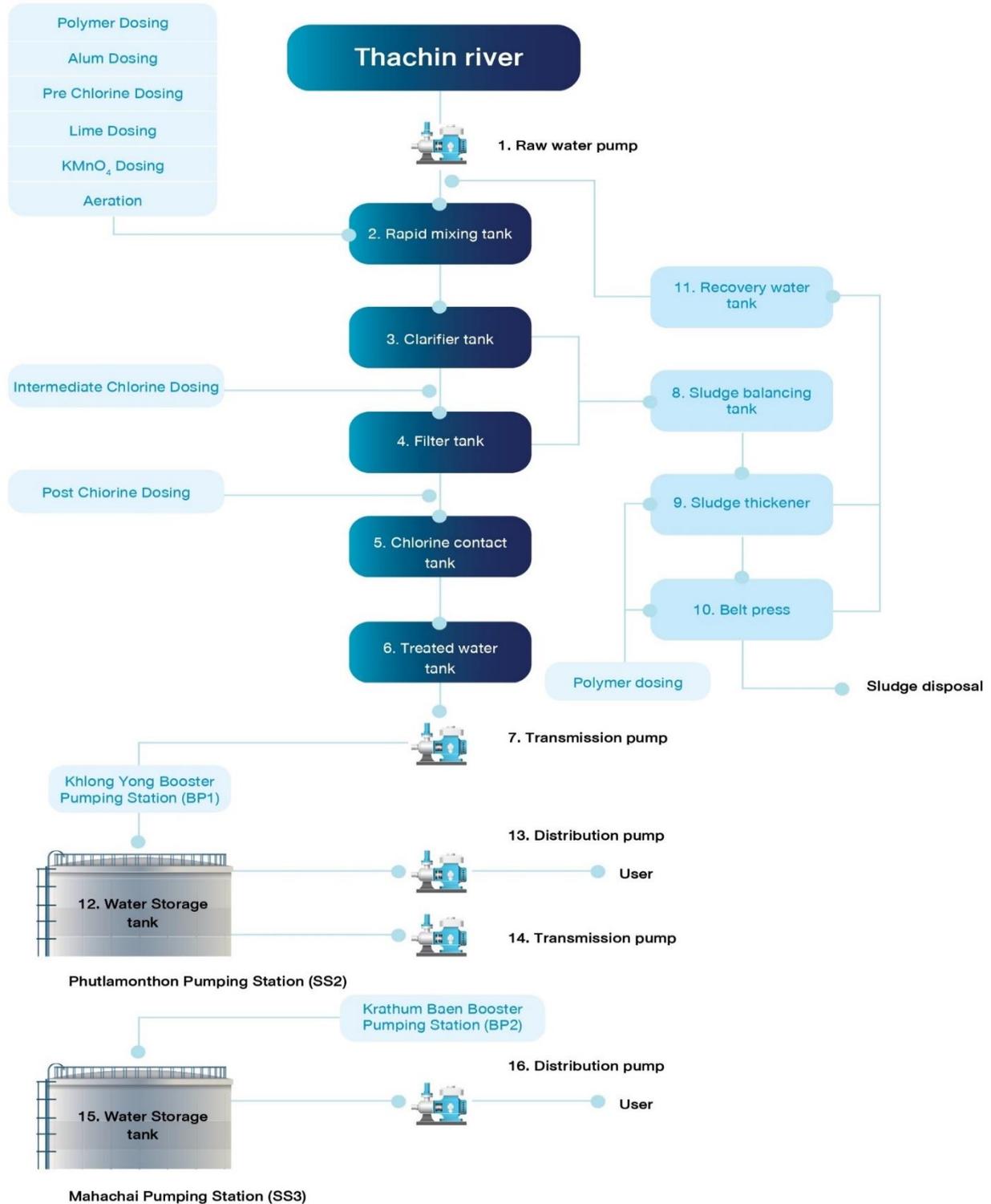
(2) Production Process

The water source for the production of tap water by TTW is the area in the middle course of the Tha Chin River. The raw water in natural source in general is contaminated with physical, chemical, and biological substances and not proper for the production of tap water. Followings are processes used in the production of drinkable tap water.

- (a) There must be no pathogenic microorganisms remaining in tap water, from the tap water plant to the pipes and water transmission system until it reaches the faucets of tap water users.
- (b) There must be no impurities, either dissolved or suspended, in tap water.
- (c) There must be no harmful toxins contaminating the tap water. This includes those that could cause either chronic or acute harm to the human body, such as cadmium, lead, phenol, cyanide, etc.

- (d) Tap water must not have either a smell or taste that is unpleasant to tap water users.
- (e) Tap water must be satisfactory to tap water users at all times, both for use, consumption, cleanness, and industrial purposes.

TTW Water Production Process



2. PTW Production

(1) Production Technology

The technology used by PTW to produce tap water was similar to that of TTW, i.e., all production steps were controlled by SCADA System which was an automatic system, operated through telecommunications system, control and adjustment of work rates for various units throughout the system, such as water flow rate, pressure, etc., can all be carried out via a computer used the SCADA System in the control room building.

PTW's maximum production capacity as of December 31, 2022, was 488,000 cubic meters per day. The total sum of 488,000 cubic meters per day comprised:

- Installed production capacity of the water plant was 288,000 cubic meters per day.
- Additional production capacity was 200,000 cubic meters per day due to expansion of the water production plant and construction of the Booster Pump Station in the Liap Khlong Premprachakon road area on the Bulk Transition Main (BTM) between the water plant and the Rangsit water distribution station. Production details are as follows:

Average Quantity of Tap Water Produced by PTW during 2020 – 2022

Unit : Cubic meter per day

Description	2020	2021	2022
Production Capacity	488,000	488,000	488,000
Average Water Sales Volume	418,373	378,160	365,872
Utilization of Production	86%	77%	75%

In 2022, PTW had an average water supply volume of 365,872 cubic meters/day, or equaled to 75% of the total water supply capacity of 488,000 cubic meters/day. The water supply volume of PTW decreased by 3.25% as compared to the year 2021 due to economic factors, especially the Thai export sector that is still affected by the Ukraine-Russia war. Although the situation of COVID-19 would get better in 2022, overall, it affects the amount of water consumption in the industrial and commercial sectors and also affects the water supply volume of PTW.

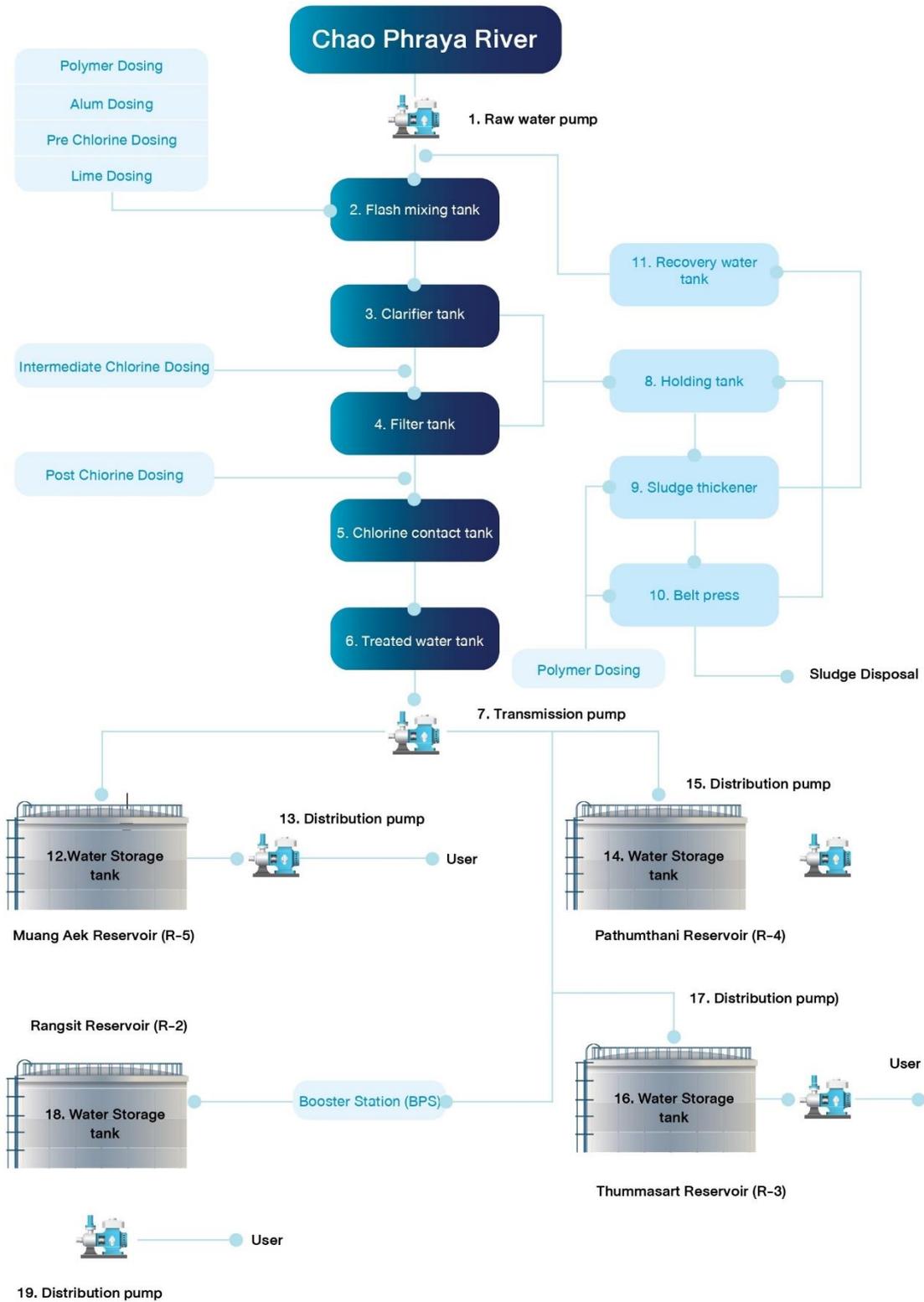


Pathum Thani Water Treatment Plant, Pathum Thani Province

(2) Production Process

PTW tap water production process has identical procedures as that of TTW.

PTW Water Production Process



3. Raw Material and Suppliers

(1) Raw Material used in the production of TTW

(a) Raw water that TTW uses for the production of tap water is the Tha Chin River which is pumped to the water treatment plant in Bang Ra Kum Sub-District, Banglen District, Nakhon Pathom Province without any cost, except for the 200 Baht/year concession fee. Payment must be made to the Ministry of Natural Resources and Environment as the concessionaire. Additionally, the Company must pay compensation to the concessionaire's inspector, paid in advance annually in the amount of 200 baht per year per concession. As TTW has received two concessions, therefore, TTW must pay compensation of 400 baht per year to the concessionaire's inspector.

(b) Main chemical substances used are Liquid alum, Liquid Chlorine, Polymer, Potassium Permanganate, and Lime.

TTW purchases raw materials from a variety of suppliers, selecting those manufacturers that have standard product quality, whose products have been tested in the TTW chemical laboratories, who have the ability to deliver and keep reserve products according to the needs of TTW, and who offer said products at the reasonable costs.

TTW's raw material procurement

Raw Material	2020		2021		2022	
	MB.	(%)	MB.	(%)	MB.	(%)
Liquid alum	35.0	55.6	25.1	48.5	33.0	52.3
Potassium permanganate	5.5	8.7	4.3	8.2	7.4	11.7
Liquid Chlorine	8.8	14.0	10.4	20.1	13.9	22.2
Lime	0.6	1.0	0.5	1.4	0.1	0.1
Polymer	9.4	14.9	8.4	16.2	5.7	9.1
Total chemical	59.3	94.1	48.9	94.4	60.1	95.4
Equipment	3.7	5.9	2.9	5.6	2.9	4.6
Total	63.0	100.0	51.8	100.0	63.0	100.0

(c) Maintenance work in case of production system water supply system or a specific device is damaged and requires repair or maintenance Initially operated by Thai Water Operations Company Limited (TWO), a subsidiary. But if the nature of work is limited or exceeds the capabilities of TWO, the company will consider its worth. and may arrange for the selection of contractors Instead, an outside expert took over. by providing a bidding process and select contractors who meet the specified conditions by considering the ability of the contractor and with reasonable costs

(d) TTW is responsible for the cost of spare parts by purchasing from time to time from distributors. However, consideration for choosing a distributor depends on the product characteristics that are suitable for the job, quality, service and reasonable price.

(2) Raw Material used in the production of PTW

(a) The raw water used by PTW to produce tap water is raw water from the Chao Phraya River. PTW is pumped into the water supply plant at Ban Pathum Subdistrict, Sam Khok District, Pathum Thani Province. PTW has to pay a fee for the concession to operate the water supply business in the amount of 200. baht per year, which must be paid to the Ministry of Interior as a concession grantor (which later the Ministry of Interior has transferred powers and duties relating to waterworks to the Ministry of Natural Resources and Environment) and compensation for expenses of the inspector of the concession provider, which must be paid annually in advance in the amount of 200 baht per year PTW paid in lieu of the expenses of the inspector of the concession grantor by paying in advance until the full amount must be paid throughout the 25-year concession period, totaling 5,000 baht in March 2000. In 2022, PTW was charged an irrigation fee by the Pathum Thani Provincial Irrigation Office for pumping raw water from the Chao Phraya River to produce tap water at the rate of 0.50 baht/m³, starting from January 2022 onwards. PTW has monthly charged the irrigation fee to the PWA in accordance with the grant of rights agreement.

(b) The main chemicals used by PTW in tap water production are Liquid alum, Liquid Chlorine, and Polymer. PTW does not use potassium permanganate in its tap water production due to different raw water characteristics between raw water from the Tha Chin River and raw water from the Chao Phraya River. Raw water from the Tha Chin River contains some chemicals that make the water color. And potassium permanganate helps to get rid of the chemicals that cause the color.

PTW uses a quality control system to calculate the quantity and proportion of chemicals suitable for the quality of raw water at that time for tap water production. by bringing raw water through the Jar Test system as well

In purchasing each chemical, PTW operates the same chemical procurement process as TTW to increase its bargaining power. Like TTW, the alum purchasing volume is therefore the highest among all chemical purchases.

PTW's raw material procurement

Raw Material	2020		2021		2022	
	MB.	(%)	MB.	MB.	(%)	MB.
Liquid alum	21.0	59.5	25.1	51.6	21.5	55.3
Liquid Chlorine	4.1	11.6	10.4	21.4	5.8	14.9
Polymer	6.0	17.0	8.4	17.3	5.9	15.2
Total chemical	0.0	0.0	0.0	0.0	0.0	0.5
Equipment	31.1	88.1	43.9	90.3	33.4	85.9
Total	4.2	11.9	4.7	9.7	5.5	14.1

(c) Maintenance work in case of production system water supply system or a specific device is damaged and requires repair or maintenance Initially operated by Thai Water Operations Company Limited

(TWO), a subsidiary. But if the nature of work is limited or exceeds the capabilities of TWO, it will consider its worth, and may arrange for the selection of contractors. Instead, an outside expert took over, by providing a bidding process and select contractors who meet the specified conditions by considering the ability of the contractor and with reasonable costs.

(d) PTW is responsible for the cost of spare parts by purchasing from time to time from distributors like TTW, the decision to choose a supplier depends on the product characteristics that are suitable for the job, quality, service and reasonable price as well.

Satisfaction Surveys

The Company understands the importance of providing good services to customers (PWA) in its Samut Sakhon – Nakhon Pathom and Pathum Thani – Rangsit areas. The Company, therefore, conducts regular customer satisfaction surveys every 6 months and summarizes the results of these annually in order then to utilize said results to improve and develop the efficiency and quality of the products and services of the company. In 2022, the Company completed a customer satisfaction survey, the results of which can be summarized as follows:

Customer satisfaction factors	Samut Sakhon – Nakhon Pathom areas (%)	Pathum Thani – Rangsit areas (%)
Tap Water Cleanliness	94	97
Tap Water Pressure	92	94
Tap Water Supply Continuity	93	95
Appropriateness of Dress Code	97	99
Etiquette and Politeness	98	99
Service Attentiveness	98	98
Information Accuracy	93	96
Information Speed	94	95
Documentation Completeness	94	96
Communication Efficiency Levels	93	95
Problem Solving Speed and Efficiency	92	99
Support for PWA Activities	94	93
Average Satisfaction	94	96

Business Development

Business Environment

An overview of the COVID-19 situation around the world is improving but the global economy is entering a recession, although the Thai economy tends to recover the tourism sector and private consumption from the Pent-up Demand. However, the headline inflation is high due to cost-push factors inflation factor which is passed on to the rising costs of goods and services. At the end of 2022, the headline inflation grew at

an average of 6.0%, and it was a transition into an era of rising interest rates. The Bank of Thailand (BOT) has adjusted the policy interest rate to 1.25% over the past year in order to control the inflation and the value of the baht that impacts on business costs for the private sector, which creates a challenge to business operations after the COVID-19 crisis.

Throughout the year 2022, TTW is aware of the changing economic conditions and the risks to the company's business from a high headline inflation and an increase in the Thailand's policy interest rate. Therefore, TTW has a guideline for management and business operations in order to create strength and sustainable growth.

(1) Domestic Water Business Investment Direction

TTW continues placing a special focus on seeking out investment opportunities in the concessions business, including tap water and wastewater treatment, with government agencies in public-private partnership (PPP) projects while considering business growth factors in conjunction with risk management factors for investment expansion.

(2) International Water Business Investment Direction

TTW and its business partners look for the investment opportunities in tap water business as well as acquiring an integrated water management rights in the ASEAN region by carefully considering the risk factors in terms of economic, social, and political stability of each country.

(3) Energy Business Investment Direction

TTW focuses on seeking investment opportunities in energy businesses according to the Power Development Plan (PDP) and the Renewable and Alternative Energy Development Plan (AEDP 2018) of Thailand in 2018-2037, which is the latest edition with a policy that supports the growth of energy businesses both the internal country and the ASEAN region for investment with the associated companies.

Sustainable competitiveness of TTW

TTW continues conducting investment strategy policies for the sustainable development of the company in 3 dimensions: economy, society, and environment, by taking into account the risk factors and all stakeholders' interests, which can be summarized into 4 strategic concepts as follows:

Strategies	Actions
1. The full service of water management.	<ul style="list-style-type: none"> - Creating professionalism in business operations. - Creating competitiveness. The company has a production capacity of more than 1 million cubic meters/day, so the company can produce tap water at a low cost, which results in economies of scale. Improving the quality of water and quality of life from upstream to downstream. - Using the information for management.
2. The development in 3 dimensions: economy, society, and environment.	<ul style="list-style-type: none"> - Focusing on the projects and beneficial project development processes that has no conflicts or negative impacts on the economy, society, and environment

Strategies	Actions
3. The integrated solution of water resource.	- Participating with the public and private sectors in education, management, planning, and problem solving in order to achieve results and maximum efficiency in accordance with the 3R principle.
4. The Value creation between the organization and stakeholders	- Creating a network of cooperation with customers, partners, communities, the environment, shareholders, and employees to create shared value and competitive potential, such as: -> Developing product and service to expand and cover the entire business cycle -> Creating a mutually beneficial business model (Win-Win situation). -> Creating a technology such as membrane, energy-saving, and solar-energy (Solar roof) technologies.

(4) Main Operating Assets

1. Main Fixed Assets of the Company and its subsidiaries

As of December 31, 2022, the Company and its subsidiaries had main fixed assets used in business operations as follows:

Assets	Net Value (million baht)	Nature of Ownership	Obligations
<u>TTW</u>			
Land Building and Equipment	784.7	Owner	N/A
Assets for production of treated water	8,280.8	Owner	N/A
Rights to produce and sell treated water and treat wastewater	978.5	Own rights	N/A
Total	10,044.0		
<u>TWO</u>			
Land Building and Equipment	63.1	Owner	N/A
Intangible assets	10.2	Own rights	N/A
Total	73.3		
<u>PTW</u>			
Assets for production of treated water	456.0	Own rights	N/A
Equipment	121.5	Owner	N/A
Total	577.5		
Grand Total	10,694.8		

In August 2009, the Company acquired the rights to produce tap water and wastewater treatment in Bang Pa-in Industrial Estate, Phra Nakhon Si Ayutthaya Province from Bang Pa-in Land Development Company Limited for a period of 30 years with a production capacity of 48,000 cubic meters per day and a wastewater treatment capacity of 18,000 cubic meters per day. The implementation of the BIE program

increases the income of the organization and also adds the skills, knowledge, and experience of TTW personnel to become a direct service provider to customers.

2. Investment in Other Companies

The Company has the policy to invest in businesses related to water, energy, and environment, in order to increase income in addition to revenue from the water supply business. The management of such associated companies or subsidiaries, the company will appoint a representative of the company to be a director of that company to supervise the operations of subsidiary company to be in the appropriate direction. Currently, the company invested in 2 subsidiaries and 1 associated company as follows:

1) Pathum Thani Water Co.,Ltd. (PTW) operates the business of production and distribution of water to the PWA in the vicinity of Pathum Thani – Rangsit. As of December 31, 2022, the company's shareholding proportion in PTW represented 98 percent of the registered capital. The company, as a shareholder, assigned its 4 representatives as Ms.Walainut Trivisvavet, Mr.Phongsarit Tantisuvanitchkul, Dr.Sombat Kitjalaksana, and Mr.Somkiat Pattamongkolchai to be a member of the Board of Directors of PTW.

2) Thai Water Operations Co., Ltd (TWO) operates the business of management and maintenance of tap water production system and wastewater treatment system for TTW, PTW, the Bang Pa-in Industrial Estate, the Amata City Chonburi Industrial Estate, and the Amata City Rayong Industrial Estate. As of December 31, 2022, TTW and PTW shareholding proportions in TWO represented 68.5 and 31.5 percent of the registered capital respectively. The company, as a shareholder, assigned its 2 representatives as Ms.Walainut Trivisvavet and Mr.Pipat Katikul to be a member of the Board of Directors of TWO.

3) CK Power Public Company Limited (CKP) which is a listed company on the Stock Exchange operates the main business as a holding company by holding shares in other companies operating the business of production and distribution of electricity. As of December 31, 2022, TTW's shareholding percentage in CKP represented 24.98 percent of the registered capital and assigned Mr.Chaiwat Utaiwan: the Advisory of the Board of Directors, as a representative to be a member of the Board of Directors of CKP. In addition, the Deputy Managing Director, Financial Group, of the company also attended the meeting with the associated company.

(5) Work that has not been delivered

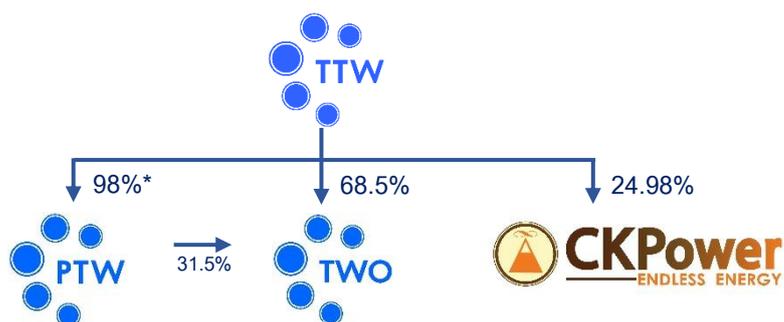
There are no projects under development and construction.

1.3 Shareholding Structure of the Company and its subsidiaries

1.3.1 Shareholding Structure of the Company and its subsidiaries

The Company has a policy on investment in subsidiaries companies and associated companies related to tap water business together with holds shares in common stocks of Holding Companies that operating the business of production and distribution of electricity from various kinds of energy. The Company's investment as of December 31, 2022, was as follows:

Chart of Shareholding Structure and the Company's Shareholding Percentage as of December 31, 2022



Remark : *2% is owned by the Provincial Waterworks Authority (PWA)

Investment in Subsidiaries and Other Companies

Unit : million Baht

Names of Companies	Nature of Business	Registered Capital	Paid-up Capital	Shareholding Percentage	Investment Value at Cost
Subsidiaries					
Pathum Thani Water Company Limited (PTW)	Tap water production and distribution for the Provincial Waterworks Authority in Pathum Thani – Rangsit areas.	1,200	1,200	98.0%	914.6
Thai Water Operations Company Limited (TWO)	Management and maintenance of tap water production system and wastewater treatment system for TTW, PTW, the Bang Pa-in Industrial Estate, the Amata City Chonburi Industrial Estate, and the Amata City Rayong Industrial Estate.	60	60	68.5%	336.0

Names of Companies	Nature of Business	Registered Capital	Paid-up Capital	Shareholding Percentage	Investment Value at Cost
Other Companies					
CK Power Public Company Limited (CKP)	Investment by holding shares in other companies (Holding Company) operating business of electricity production and distribution.	9,240	8,129	24.98%	5,218.7

Details of the Companies Invested by TTW

1. Pathum Thani Water Company Limited (PTW)

PTW is TTW's subsidiary, with the registered capital amounting to 1,200 million baht, divided into 12 million ordinary shares, at the par value of 100 baht per share, with the paid-up capital amounting to 1,200 million baht. As of December 31, 2022, the Company's shareholding proportion in PTW represented 98 percent of the registered capital (another 2 percent of its shares were held by the Provincial Waterworks Authority). PTW operates the business of production and distribution of water to the PWA in the vicinity of Pathum Thani – Rangsit on a Build-Own-Operate-Transfer (BOOT) basis for a period of 25 years. PTW commenced its business operation in 1998 onwards. Currently, PTW's production capacity accounted for 488,000 cubic meters per day, with the minimum off-take quantity to which the PWA has committed amounting to 358,000 cubic meters per day.

2. Thai Water Operations Company Limited (TWO)

TWO is TTW's subsidiary, with the registered capital amounting to 60 million baht, divided into 600,000 ordinary shares, at the par value of 100 baht per share, with the paid-up capital amounting to 60 million baht. As of December 31, 2022, the Company's shareholding proportion in TWO represented 68.50 percent of the registered capital (another 31.50 percent of its shares were held by PTW). TWO operates the business of management and maintenance of tap water production system and wastewater treatment system for TTW, PTW, the Bang Pa-in Industrial Estate, the Amata City Chonburi Industrial Estate, and the Amata City Rayong Industrial Estate.

3. CK Power Public Company Limited (CKP)

CKP is a listed company on the Stock Exchange, operates the main business as a holding company by holding shares in other companies operating the business of production and distribution of electricity. CKP has the registered capital in the total amount of 9,240 million baht, divide into 9,240 million ordinary shares, at the par value of 1 baht per share, with the paid-up capital amounting to 8,129 million baht. As of December 31, 2022, TTW's shareholding percentage in CKP represented 24.98 percent of the registered capital. CKP

invests in companies operating the business of production and distribution of electricity in 3 types of power plants, which are, Hydroelectric Power Plant, Cogeneration Power Plant, and Solar Power Plant, divided into investment in a total of 6 subsidiaries and associated companies as follows:

Investment in power plants of 3 subsidiaries, comprising:

- Nam Ngum 2 Power Company Limited, as the CKP's core company, via SouthEast Asia Energy Company Limited.
- Bang Pa-in Cogeneration Company Limited
- Bangkhenchai Company Limited

Investment in power plants of 4 associated companies, comprising:

- Xayaburi Power Company Limited
- Luang Prabang Power Company Limited
- Chiangrai Solar Company Limited
- Nakhon Ratchasima Solar Company Limited

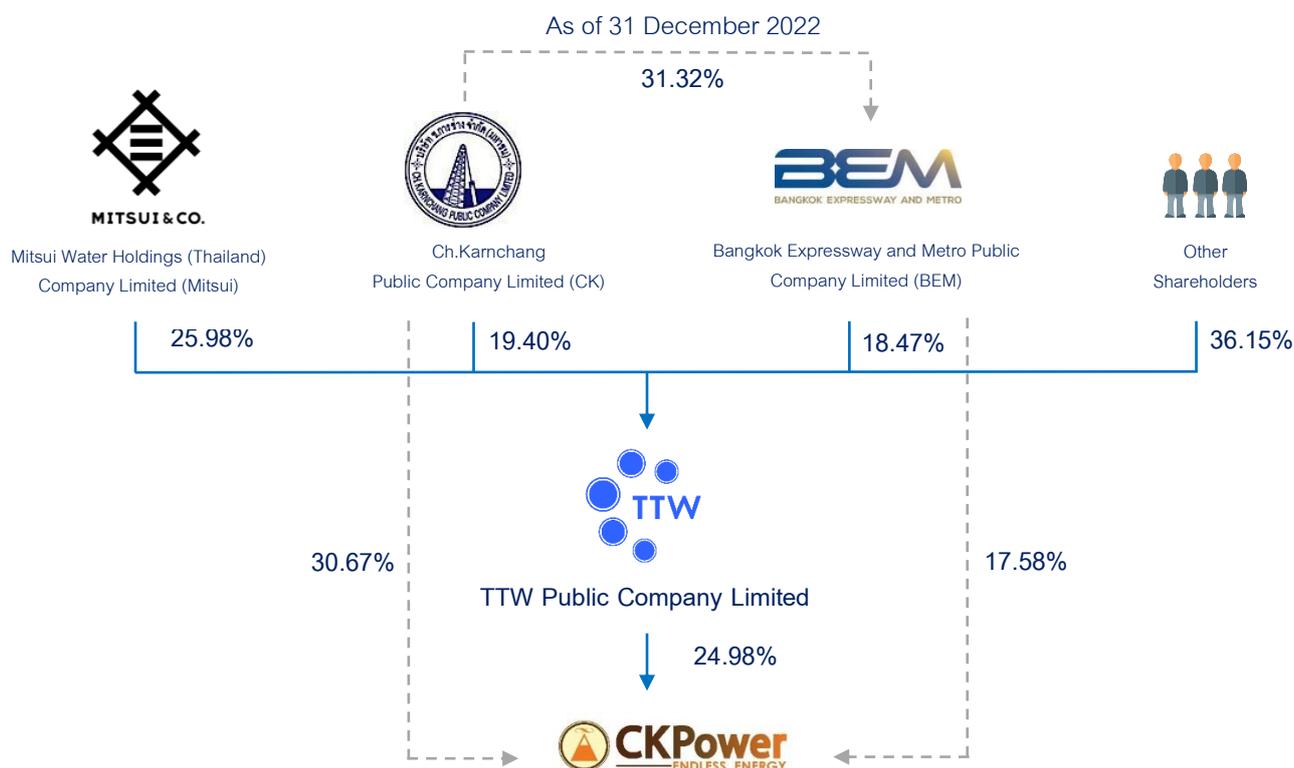
4. Bang Pa-in Industrial Estate

TTW has acquired the rights to produce tap water and wastewater treatment in Bang Pa-in Industrial Estate from Bang Pa-in Land Development Company Limited for a period of 30 years since August, 2009, with a production capacity of 48,000 cubic meters per day and a wastewater treatment capacity of 18,000 cubic meters per day. The Company has moved the raw water pumping station from Khlong Wua to the Chao Phraya River at Bang Krasan Subdistrict, Bang Pa-in District, Phra Nakhon Si Ayutthaya Province, which has better raw water quality, thus increasing their confidence in quality and continuity in tap water production. The implementation of the BIE program increased the income of the organization and also adds the skills, knowledge, and experience of TTW personnel to become a direct service provider to customers.



Water Production and Wastewater Treatment Projects, Bang Pa-in Industrial Estate

1.3.2 Relationship with Major Shareholder



1.3.3 Shareholders

(1) List of Major Shareholders of the Company

(a) Top 10 major shareholders as of December 30, 2022, which was the most recent closing date of the share register, were listed as follows:

No.	Name	Number of Shares	Shareholding Percentage
1.	Mitsui Water Holdings (Thailand) Company Limited	1,036,500,000	25.98
2.	CH.Karnchang Public Company Limited	774,077,400	19.40
3.	Bangkok Expressway and Metro Public Company Limited	736,900,000	18.47
4.	Thai NVDR Co., Ltd.	182,457,453	4.57
5.	Mr. Min Tienworn	90,000,000	2.25
6.	Bangkok Life Assurance Public Company Limited	51,680,800	1.30
7.	Mr. Paisarn Chartpitak	44,000,000	1.10
8.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	41,491,000	1.04
9.	Dhipaya Insurance Public Company Limited	24,360,700	0.61
10.	South East Life Insurance Public Company Limited	20,316,000	0.51
	Total	3,001,783,353	75.23
	Others	988,216,647	24.77
	Grand Total	3,990,000,000	100.00

Remark :

1. Shareholder names are compiled by Thailand Securities Depository Company Limited, the Company's Registrar.
2. Thai NVDR Company Limited is 99.99 percent owned by the Stock Exchange of Thailand. It issues NVDRs, which are tradable on the stock exchange. Owning NVDRs, the shareholders are entitled to financial gains like investing in listed companies' common shares but without the voting right. (The interested can get more information from www.set.or.th/nvdr)
3. As of 30 December 2022, the Company has 92 foreign shareholders from a total of 30,854 shareholders, foreign shareholders hold a total of 114,076,687 shares or 2.86 percent of total issued shares.
4. As of 30 December 2022, minority shareholders (free float) are numbered 29,573 holding 24.77 percent of total issued shares.

(b) Major shareholders who had substantial influence on the Company's management policy or operations comprised:

No.	Name	Number of Shares	Shareholding Percentage
1.	Mitsui Water Holdings (Thailand) Company Limited	1,036,500,000	25.98
2.	CH.Karnchang Public Company Limited	774,077,400	19.40
3.	Bangkok Expressway and Metro Public Company Limited	736,900,000	18.47
Total		2,547,477,400	63.85

- Shareholders of Mitsui Water Holdings (Thailand) Company Limited comprised:

No.	Name	Number of Shares	Shareholding Percentage
1	Mitsui & Co. (Asia Pacific) Pte. Ltd.	8,999,998	99.99
2	Mitsiam International Limited	1	0.00
3	Mitsui & Co. (Thailand) Ltd.	1	0.00
Total		9,000,000	100.00

- Top 10 shareholders of CH.Karnchang Public Company Limited as of August 29, 2022 which was the closing date for the right to receive the dividend comprised:

No.	Name	Number of Shares	Shareholding Percentage
1	Mahasiri Siam Company Limited	241,512,365	14.26
2	CH.Karnchang Holding Company Limited	189,396,530	11.18
3	Thai NVDR Co., Ltd.	103,809,067	6.13
4	CK. Office Tower Company Limited	86,048,212	5.08
5	Bangkok Bank Public Company Limited	38,950,000	2.30
6	Ch.Karnchang Public Company Limited	36,000,000	2.13
7	Mr. Sutin Puttitanun	22,399,400	1.32
8	K20 Select Long Term Equity Dividend Fund	19,701,500	1.16
9	UOB KAY HIAN (HONG KONG) LIMITED – Client Account	18,813,900	1.11
10	CGS-CIMB Securities (Hong Kong) Limited	16,912,000	1.00
Total		773,542,974	45.67

- Top 10 shareholders of Bangkok Expressway and Metro Public Company Limited as of October 31, 2022, which was the closing date for the right to attend the AGM comprised:

No.	Name	Number of Shares	Shareholding Percentage
1	CH. Karnchang Public Company Limited	4,947,389,484	32.37
2	Mass Rapid Transit Authority of Thailand	1,256,259,584	8.22
3	Thai NVDR Co., Ltd.	971,447,811	6.36
4	Krung Thai Bank Public Company Limited	815,356,075	5.33
5	Social Security Office	535,297,600	3.50
6	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	400,531,149	2.62
7	Mr. Wichai Wachiraphong	316,825,657	2.07
8	Bangkok Bank Public Company Limited	303,448,709	1.99
9	STATE STREET EUROPE LIMITED	219,186,556	1.43
10	Mr. Min Tienworn	160,000,000	1.05
Total		9,925,742,625	64.94

(2) List of Shareholders of Subsidiaries Operating Core Business

(a) Pathum Thani Water Company Limited (“PTW”)

No.	Name	Number of Shares	Shareholding Percentage
1	TTW Public Company Limited	11,759,733	98.00
2	Provincial Waterworks Authority	240,262	2.00
3	Capital Rice Company Limited	1	0.00
4	Mr. Prasert Marittanaporn	1	0.00
5	Mr. Vorapote Uchoepaiboonvong	1	0.00
6	Ms. Walainut Trivisvavet	1	0.00
7	Mr. Nopadol Intralib	1	0.00
Total		12,000,000	100.00

Remark : Information as of December 31, 2022. In 2022, the shareholdings in PTW remained unchanged.

(b) Thai Water Operations Company Limited (“TWO”)

No.	Name	Number of Shares	Shareholding Percentage
1	TTW Public Company Limited	411,000	68.50
2	Pathumthani Water Company Limited	188,999	31.50
3	Ms. Warissara Chaimongkol	1	0.00
Total		600,000	100.00

Remark : Information as of December 31, 2022. In 2022, the shareholdings in TWO remained unchanged.

(3) Shareholders’ agreement

As of December 31, 2022, the Company had no shareholders’ agreement on any matter affecting the Company’s issuance and offering for sale of securities or its management.

1.4 Registered Capital and Paid-up Capital

(1) Ordinary Shares

As of December 31, 2022, the Company's registered capital amounted to 3,990,000,000 Baht, divided into 3,990,000,000 ordinary shares, at the par value of 1 Baht per share, which paid-up capital of 3,990,000,000 Baht.

(2) Non-Ordinary Share

The Company has no other shares than ordinary shares.

1.5 Other Securities Issuance

(1) The company does not have convertible securities.

(2) The Company's outstanding debentures were as per the following details:

The Company's outstanding debenture as of December 31, 2022

Debenture Symbol	Issue Date of Debentures	Total Value of Debentures (Million Baht)	Maturity	Maturity Date	Interest Rate per annum	Rating
TTW255A	21 May 2015	1,400	10 years	21 May 2025	3.98%	AA-
TTW232A	1 February 2018	1,000	5 years	1 February 2023	2.33%	AA-
TTW272A	21 December 2019	1,000	7 years 2 months	20 February 2027	2.41%	AA-
Total		3,400				

1.6 Policy on Dividend Payment

(1) TTW's Dividend Payment Policy

The Board of Directors meeting on 18 March 2008 resolved to set a policy for dividends payment to shareholders, which will consider the demand for money according to the company's goals in the next 5 years, including maintaining the debt to equity ratio of the company to be at an appropriate level. If there is a possibility to pay dividend, the company will consider paying as high rate as possible. However, such rate shall not be less than 50% of its net profit after corporate income tax, statutory reserve, and other reserves required by terms of relevant agreements.

The Company's dividend payment in the previous year was as follows:

Description	2018	2019	2020	2021	2022
Earning per share (Baht)	0.67	0.72	0.71	0.69	0.63
Dividend per share – First half (Baht)	0.30	0.30	0.30	0.30	0.30
Dividend per share – Second half (Baht)	0.30	0.30	0.30	0.30	0.30 ^(*)
Dividend per share (Baht)	0.60	0.60	0.60	0.60	0.60
Dividend Payout Ratio (percent)	89.76	83.86	83.99	87.09	95.00

Note: * The Dividend payment for the second half of 2022 will be approved at the 2023 Annual General Meeting of Shareholders.

(2) Dividend Payment Policy of the Subsidiaries

The Board of Directors of subsidiaries have the policy to pay dividend based on operating performance and with consideration of each company's financial position, cash flow, and investment plan in accordance with the regulations of the subsidiaries in Chapter 6 dividends and reserves are as follows:

- Announcement of any dividends (Except interim dividends) must be approved by the general meeting of shareholders only Notice of payment of dividends must be made in writing to all shareholders whose names appear in the shareholder registration book.
- For Each dividend payment, the company must allocate a reserve fund of at least 1 in 20 of the profit until the reserve reaches 1 in 10 of the company's capital. The company's directors may propose to the general meeting of shareholders. Request to approve the allocation of other reserves more that is possible in the business management of the company.
- The Board of Directors may pay interim dividends to shareholders from time to time, as the Board of Directors deems that the company has sufficient profits to do so.
- If the Company still has accumulated losses, payment of dividends is prohibited.



2. Risk Factors

2.1 Risk Management Policy and Plan

The company realizes the importance of risk management under the changes from the internal and external factors that may affect the company's business. Therefore, the company determines a risk management policy that all employees must comply.

The company conducts risk management in its business operations in order to ensure that the company's operations are in line with the objectives and goals at an acceptable risk level. The company's risk management process consists of 3 main steps: 1) Risk Identification and Assessment, 2) Risk Management, and 3) Risk Monitoring and Review. The company assigns a person to be in charge of risk assessment, determining plans and measures to manage the risks to an acceptable level, as well as regularly monitoring and reporting risk management results.

The Company has set up an appropriate risk management structure by appointing a Risk Management Officer (RMO) consisting of company's senior executives to determine the criteria used in risk assessment, including risk impact levels, risk likelihood, and risk appetite, and then report the results of risk management to Risk Management and Corporate Governance Committee (RM&CGC), which is responsible for determining policies and frameworks for risk management, as well as monitoring the risk management results and reporting them to the Board of Directors quarterly.

2.2 Business Risks

The company has a risk of customer concentration because the company has the Provincial Waterworks Authority (PWA) as its only major customer, which approximately 95% of the company's total revenues are from selling tap water to PWA. However, PWA's credit status that is a state-owned enterprise ensures that the company has a low counterparty risk. In addition, the risk factors that may have a significant impact on the achievement of the company's goals are as follows:

2.2.1 Company's Business Operations Risks

Current Risk Factors

1. Strategic Risks

- Risk from the Water Supply Volume Does Not Meet the Goals

The company has a tap water purchase agreement with the PWA, which has to rely on the PWA's policies and the limited opportunities to expand the business in the company's current service areas. In addition, PWA is regarded as the company's major competitor because it has a water treatment plant and a water distribution network in the areas close to the company's service areas.

Therefore, in order to mitigate such risks, the company has the measure to support the project of pressure pipe installation and/or to expand the area to increase the PWA's water sales in the service area according to the contract, including monitoring the movements of other tap water producers, both government and private sectors, that may affect the water supply volume of the company currently and

in the future. In addition, the company manages the machinery and main equipment maintenance and electrical systems and determines the solutions and preventive measures for ensuring continuity in the tap water production and distribution.

2. Operational Risks

- Risk from Changes in Raw Water Quality

At the moment, climate change has a high probability of having a more severe impact, and the impact of such changes will affect the raw water quality used in the production process. Therefore, the company determines a plan to monitor the quality of raw water appropriately, including random water sampling for water quality analysis, adjusting the water production plan to keep up with changes in raw water quality, and coordinating and exchanging information with relevant agencies such as the Royal Irrigation Department, the Metropolitan Waterworks Authority, the Provincial Waterworks Authority, and the Office of the Environment and Pollution Control 5.

3. Financial Risks

- Risk from Investment of New Businesses in Water, Energy, and Environment

Due to the tap water production and distribution contract between the Provincial Waterworks Authority (PWA) and Pathum Thani Water Company Limited (subsidiary) will expire in October 2023, which the PTW's revenue is 30% of the company's total revenue.

Therefore, the company look for new businesses in terms of water, energy, and environment to compensate for lost revenues if the contract is not renewed. The company determines measures to follow up on information and movements in business related to the company both domestically and internationally and the laws of the government that have changed, as well as conducting studies and development of investment projects in the utility business in accordance with government investment policies and plans.

Systematic Risk

- Risks from the Business Operations under Agreements with Government Sector and Government Policy

The company and Pathum Thani Water Company Limited (PTW) operate its business with government agencies according to the Agreements. The Agreements of tap water production and distribution between PTW and the Provincial Waterworks Authority (PWA) will end in October 2023, according to the condition of the Agreement specifying that PTW has the right to renew the Agreement, which PTW has confirmed the request for such rights, which is pending the consideration and negotiation with PWA.

New Potential Risk Factors

- Risk from Cyber Security Threat

Nowadays, business operations and communications both within and between organizations need to use technology to increase work efficiency, which may lead to risk factors from cyber threats to the water

production system, water distribution system, and operational network that must be connected to the Internet network.

A cyber attack can affect the continuity of a company's business operations by disrupting the production or operating systems, which can lead to the leakage of essential operational data that may affect the credibility and image of the company.

Therefore, the company has invested in an internal communications network system for the data link control in business operations to increase work efficiency and secure the data from loss and theft. Furthermore, the company has firewall security measures to prevent unauthorized persons from entering the network, as well as a backup system and new data storage technologies to improve work efficiency and data security.

2.2.2 Investment Risks of Securities Holders

The issuance of company's financial instruments such as debentures, the securities holders may have the risk that the issuer may not be able to pay interest or repay principal. If the financial instrument issuer defaults on debt payments and the offered financial instrument is not protected by the Deposit Protection Agency, the securities holders will have the same right to request repayment as unsubordinated creditors and other unsecured creditors. However, in assessing the credit risk of the financial instrument issuer, the securities holders can examine the credit rating provided by a credit rating agency for investment decisions, for example, the performance and financial position of the issuer. The securities holders should follow up on information and credit ratings from the website of the Securities and Exchange Commission (SEC) or the credit rating agencies.

In 2022, the company was rated the credit rating by TRIS Rating Co., Ltd. at the level "AA-" with a "Stable" outlook on November 29, 2022, which reflects the company's solid business position.

Moreover, in 2022, the company assessed "Sustainability Risks" which covers environmental, social, and governance risks. The company intends to conduct its business sustainably on the basis of environmental responsibility. Thus, the company is aware of the necessity of participating in solving climate change problems, as well as supporting and promoting the management of greenhouse gases for the benefits of the organization, society, and environment. The sustainability risks are as follows:

- Environmental Risks

The company places an importance on the compliance with environmental laws and regulations, and has a unit responsible for following up on the changes in laws and regulations related to environmental impact.

The company manages the environmental work with the ISO 14001 system by setting an environmental policy and preparing an environmental manual as a guideline for operating and strictly monitoring the operations according to the emergency plan.

- Climate Change Risks

Climate change may cause droughts, flash floods, and saltwater intrusion, all of which can disrupt production process, affect the company's reliability, and raise costs.

The company has continually followed up and assessed the risk of drought and floods and set up a business continuity management plan for the drought and flooding situations to ensure that the company can operate continuously in case of natural disasters, including closely monitoring the water situation and determining the preventive measures and continuing training according to the plan.

- Low-Carbon Economy Risks

In response to the government's policy to reduce the greenhouse gas emissions, the company has announced its greenhouse gas management policy as follows: 1) Commit to being an organization with GHG reduction management, 2) Improve organizational processes for energy efficiency, 3) Promote the use of renewable energy and clean energy to reduce the use of natural resources, 4) Promote waste management in the organization to reduce the amount of waste, and 5) Raise climate change awareness among employees and stakeholders.

The company has appointed a working group to prepare greenhouse gas emission reports to ensure the efficiency of the company's greenhouse gas emissions operations, and the company has a clear action plan to reduce the greenhouse gas emissions.



3. Driving Business for Sustainability

3.1 Sustainable Management Policies and Goals

Sustainable Development Policies

TTW realizes and focuses on sustainable business operations according to the company's vision "To be Thailand's Leading Company in Water, Energy, and Environment" by conducting business with good corporate governance, along with social responsibility and nature and environmental conservation, in order to build stakeholder trust through transparent and verifiable processes. Therefore, the company has developed a sustainable development policy as a framework for managing the sustainable development of the organization.

Corporate Governance

The company follows the principles of good corporate governance, transparency, and accountability in accordance with the organization's corporate governance & business code of conduct handbook, personal information protection, and risk management, which cover the organization's value chain to ensure that business operations have continuity and shared value, including taking care of the stakeholders' benefits in a balanced and fair manner.

Business Process Development

The company intends to operate the full service business of raw water management, tap water production, and wastewater treatment, as well as explore opportunities in the energy and environmental sectors by focusing on long-term product and service value creation, customer and stakeholder satisfaction, and promoting the development and creation of business, social, and environmental innovations to achieve sustainable business goals.

Social Value

The company focuses on efficient and fair human resource management as well as developing the essential knowledge and skills in accordance with the employee development plan, which includes encouraging work creativity and maintaining an occupational health and safety management system. In addition, the company encourages executives and employees to respect and comply with international human rights principles by adhering to the principle of equality and non-discrimination, which includes supporting the participation of the company, communities, and related stakeholders to create employee, stakeholder, and community satisfaction by building relationships, understanding, and strong cooperation to reduce future conflicts.

Sustainable Environmental Management

The company realizes and focuses on business operations that do not affect the environment, energy conservation, climate change, and water resource management. In addition, the company supports sensible resource use and biodiversity management, including cooperation and participation between the organization and external agencies to conserve natural resources and the environment, as well as strictly complying with environmental laws.

In addition, the company has applied a sustainable development policy to set sustainability issues and the company's sustainable development goals as a framework for conducting business and taking social and environmental responsibility to achieve continuous and sustainable growth. Sustainability issues can be categorized into 24 issues, which can be linked to the United Nations Sustainable Development Goals (UN SDGs), 15 out of 17 goals. Therefore, the company has set sustainable development goals covering corporate governance, economic, social, and environmental operations that are shown in the following table.



Sustainable Development Goals

Policies	Sustainability Issues	Goals	Goal Achievement Duration	Indicator	SDGs
Corporate Governance	<ul style="list-style-type: none"> Good Corporate Governance Risk Management and Business Continuity Crisis Management in the COVID-19 Situation 	<ul style="list-style-type: none"> Creating guidelines for working under the principles of good corporate governance until it becomes a culture. Managing the company's risks to an acceptable level. 	<ul style="list-style-type: none"> Year 2022 onwards Year 2022 onwards 	<ul style="list-style-type: none"> The number of violations of the company's code of conduct is 0. The number of risk situations that have an impact on the company's business operations is 0. 	
Business Processes Development	<ul style="list-style-type: none"> Good Performance Goods and Services Responsibility Innovation and Technology Supply Chain Management 	<ul style="list-style-type: none"> The water supply volume increases from the year 2021. The number of tap water users increases from the year 2021. The number of work process improvement issues through Kaizen activities (Kaizen) increases from the year 2021. 	<ul style="list-style-type: none"> Year 2022 Year 2022 Year 2022 	<ul style="list-style-type: none"> The water supply volume that supplied to customers: <u>TTW</u> is 157.10 million cubic meter. <u>PTW</u> is 140.25 million cubic meter. The number of tap water users increased at least 580,777 people. 	

Policies	Sustainability Issues	Goals	Goal Achievement Duration	Indicator	SDGs
		<ul style="list-style-type: none"> ● TTW's cost of electricity decreased from year 2015 (before the production process was modified to Hybrid). ● There were no complaints from stakeholders who were affected by the company's business operations. 	<ul style="list-style-type: none"> ● Year 2022 ● Year 2022 onwards 	<ul style="list-style-type: none"> ● The customer satisfaction survey results is not less than 90%. ● The number of work process improvement issues through Kaizen activities (Kaizen) is not less than 368 issues. ● TTW's cost of electricity decreased from year 2015 (before the production process was modified to Hybrid) ● The number of stakeholder complaints is 0. 	
Social Value	<ul style="list-style-type: none"> ● Employee and Personnel Development ● Occupational Health and Safety ● Social and Community Development ● Social Contributions and Charities ● Roles and responsibilities of the Board of Directors and Executives on Human Rights ● Employment and Human Rights Respect ● Human Rights Communication and Training ● Human Rights Risk Assessment ● Human Rights Complaints and Ameliorations Management ● Cooperation with Partners on Human Rights 	<ul style="list-style-type: none"> ● Employee satisfaction increases from the year 2021. ● The number of resigned employees decreases from the year 2021. ● The number of training hours increases from the year 2021. ● All employees receive an annual health check. ● There are no accidents from the work of employees and contractors. ● There are no chemical leakage accidents (chlorine) from employees and contractors operations. ● There were no complaints from stakeholders who were affected by human rights violations. 	<ul style="list-style-type: none"> ● Year 2022 ● Year 2022 ● Year 2022 onwards 	<ul style="list-style-type: none"> ● The employee satisfaction survey results is not less than 80%. ● employee turnover rate is not more than 4%. ● The number of training is not less than 3,273 hours. ● 100% of training according to the Company's safety training plan . ● The employees who receive the annual health checks is 100%. ● The number of accidents from employees and contractors operations is 0. ● The number of chemical leakage accidents (chlorine) from employees and contractors operations is 0. 	       

Policies	Sustainability Issues	Goals	Goal Achievement Duration	Indicator	SDGs
<p>Sustainable Environmental Management</p>	<ul style="list-style-type: none"> • The Eco-Friendly Process of Manufacturing Goods and Services • Climate Change and Energy Conservation • Waste Management • Water Management • Biodiversity • Cooperation for Environmental Conservation between organizations • Compliance with Environmental Laws 	<ul style="list-style-type: none"> • Greenhouse gas emissions from electricity consumption (Scope 2) per product unit of all 3 water treatment plants continuously decrease. • Electricity consumption per product unit of all 3 tap water plants continuously decreases. • Waste and residual materials of all 3 water treatment plants decrease from the year 2021. • Water reuse that is added into the production process increases from the year 2021. • There were no complaints from stakeholders about the impact of the company's business operations on conservation areas or natural resources. • Preparing an internal audit of environmental system management under ISO 14001:2015. • To receive ISO 14001:2015 environmental system certification from a reliable external agency. • There were no violations of environmental laws. 	<ul style="list-style-type: none"> • Year 2022-2025 • Year 2022-2025 • Year 2022 • Year 2022 • Year 2022 onwards • Year 2022 onwards • Year 2022 onwards 	<ul style="list-style-type: none"> • Greenhouse gas emissions from electricity consumption (Scope 2) per product unit of 3 water treatment plants decrease by not less than 0.03%. • Electricity consumption per product unit of the 3 tap water plants decreases by not less than 1%. • The sludge amount of the 3 water treatment plants decreases by not less than 0 tons. • Water reuse is not less than 2% of the total water volume that is added into the production process. • The number of stakeholder complaints that were affected by the company's business operations on conservation area or natural resource is 0 • The number of internal audit of environmental system management under ISO 14001:2015 is not less than once per year. • To receive the certification of an environmental system from SGS Thailand Company Limited. • The number of violations of environmental laws is 0. 	

3.2 The Impact Management on Stakeholders in the Business Value Chain

From the company's vision "To be Thailand's Leading Company in Water, Energy, and Environment" towards a full service of eco-friendly business operations. To conduct the business with stakeholders is a critical issue that the company will continuously address in accordance with the vision by applying the information about operations with stakeholders into the company's strategic planning excepts from other strategic planning frameworks and tools, to respond to the stakeholders' needs and expectations, including creating a balance between value and worth of business operations for stakeholders and building good relationships and confidence in the operations between the company and stakeholders.

The company has classified the stakeholders in the business value chain into 6 groups, which have been sorted in order of importance: 1. Employees, 2. Shareholders / Investors, 3. Customers, 4. Partners/Suppliers, 5. Communities / Societies, and 6. Environmental Agencies

As of 2022, the company can summarize the operating results of responding to the stakeholders' expectations or needs as follows:

Needs / Expectations	Participation	Result
Employees		
<ul style="list-style-type: none"> - Paying reasonable compensation and benefits. - Work safety. - Knowledge and potential development. - Independently expressing opinions and suggestions. - Equality and Fairness. - Stability and career advancement. - Good working environment. - Taking care and supporting the prevention of the COVID-19 pandemic appropriately and effectively. 	<ul style="list-style-type: none"> - Executives and staff meeting activities. - Kaizen activities. - Exchanging knowledge and experiences in the water treatment plant management. - Training to develop personnel competencies at the executives and employees level. - Health and safety activities. - Various communication channels. - Listening to employee complaints and opinions. - Providing scholarships to employees' children. - Monthly employee birthday activities. - Preparing of a place and environment for good working atmosphere. - Preparing of a workplace and equipment to prevent the COVID-19 pandemic. - Preparing a New Year's party for staff in all business areas in accordance with the COVID-19 prevention policy . 	<ul style="list-style-type: none"> - The statistics of the lost time injury was 0 time. - The number of training hours increased by 87% from year 2021 or 2,844 hrs. - Employee satisfaction survey results increased by 92% from the year 2021. - The number of promoted employees increased by 33% from year 2021. - The number of employee complaints is 0.

Needs / Expectations	Participation	Result
Shareholders / Investors		
<ul style="list-style-type: none"> - The company's performance has continuous improved. - Business growth. - Consistently earning good returns - Business stability. - Good corporate governance. - Equitable treatment of shareholders. - Receiving an accurate and complete information in a timely manner. - Appropriate and effective risk management. - Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively. 	<ul style="list-style-type: none"> - The annual general meeting of shareholders . - An annual report - Quarterly performance reports.. - Listed companies and investors meeting activities. - Inviting investors to visit the production processes. - The disclosure of information via various communication channels. - Securities analyst meeting. - Equitable treatment of retail investors and institutional investors. - Determining the duration of the accurate information disclosure equally in accordance with the relevant regulations - Communicating information and appropriately preparing an annual general meeting of shareholders under the preventative measures for COVID-19 pandemic. 	<ul style="list-style-type: none"> - The net sales of the company's business operations decreased by 2% from the year 2021. - The company was listed on the list of Thailand Sustainability Investment (THSI) for the 7 consecutive years. - The assessment result of good corporate governance was in excellent level. - The company had received the Sustainability Discloser Award for the 4 consecutive years.
Customers		
<ul style="list-style-type: none"> - The tap water is of the expected quality with adequate amount and continuity. - Correctly receiving product and service information . - Keeping contracts or agreements with fairness. - Continuously supporting the customer's activities. - Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively. 	<ul style="list-style-type: none"> - Suppling of high-quality tap water as specified in the contract with adequate quantity and continuity. - Supporting for installing water supply pipes and enhancing the water supply pressure. - Preparing meeting in accordance with the specified circle. - Preparing meeting to listen to problems and complaints. - Inviting customers to visit the tap water production processes. 	<ul style="list-style-type: none"> - The customer satisfaction score in 2022 is 95% - The water supply volume decreased by 8% from the year 2021. - The number of water users increased by 6% from the year 2021. - The number of customer complaints is 1 times in the subject of quality of water.

Needs / Expectations	Participation	Result
	<ul style="list-style-type: none"> - Providing the information of raw water quality, tap water quality, and other information via appropriate channels. - Supporting training for customer's potential. - The off-site meeting. - Preparing the workplace and the good quality of life for customers. - Providing scholarships to employees' children . - Organizing social activities with the company. - Surveying customer satisfaction and responding to the customer needs. - Communicating information and appropriately preparing the meeting under the preventative measures for COVID-19 pandemic. 	
Partners / Suppliers		
<ul style="list-style-type: none"> - Complying with commercial terms - Keeping contracts or agreements with fairness. - Participating in solving problems and developing operational processes. - Promoting and supporting of various activities. - Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively. 	<ul style="list-style-type: none"> - Fairly complying with commercial terms and agreements. - Communicating accurate and clear information. - Regularly preparing meetings to discuss operational improvements. - Cooperating in solving partner issues. - Organizing training to improve partners' knowledge. - Visiting the partners' business. - Communicating information and appropriately preparing the meeting under the preventative measures for COVID-19 pandemic. 	<ul style="list-style-type: none"> - The ratio of goods received on time as agreed with the buyer and seller or as stipulated in the purchase order was 95%. - The number of partner complaints is 0.

Needs / Expectations	Participation	Result
Communities / Societies		
<ul style="list-style-type: none"> - Supporting activities that are beneficial to the community. - Do not make a negative impact on the community. - Participating in solving community problems. - Conducting the business with transparency. - Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively. 	<ul style="list-style-type: none"> - Preparing meeting to listen to community opinions. - Visiting thr communities in business areas. - Participating in activities with government agencies and private agencies to carry out social activities. - Conducting the opinion and complaints surveys. - Setting up the project to enhance the quality of life and well-being of the communities. - Providing scholarships to students in service areas. - Supporting the communities to prevent the COVID-19 pandemic situation. 	<ul style="list-style-type: none"> - The number of communities that gain the benefits was 90 communities. - The number of projects or social responsibility activities was 4 projects. - The communities earn revenue from the production of bottled water in the amount of 248,000 baht. - The number of community's complaints that were affected by the company's business operations was 0.
Environmental Agencies		
<ul style="list-style-type: none"> - Participating in solving problems and conserving energy and the environment. - Do not make a negative impact on the environment. - Supporting activities that are beneficial to the environment. - Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively. 	<ul style="list-style-type: none"> - Setting up projects/activities to conserve energy and the environment both internal and external organization. - Publicizing of environmental conservation projects/activities. - Preparing a meeting with environmental agencies to discuss problems. - Conducting a project to assess greenhouse gas emissions from business processes by employing a consultant is Green Style Co., Ltd. and has been verified by the Research School of Energy and Environment, University of Phayao. - Conducting a project to restore the water quality of the Bang Sue Canal 	<ul style="list-style-type: none"> - The number of projects or activities in environmental conservation was 4 projects. - Greenhouse gas emissions per product unit of the organization covered the 1, 2, and 3 scopes representing 0.0003 tons of carbon dioxide equivalent. - The amount of electricity consumption per product unit decreased by 8.90% from the year 2021. - The number of communities that gain the benefits from sediment-derived products is

Needs / Expectations	Participation	Result
	<p>to conserve the Tha Chin River with the Rai Khing Municipality, Office of Environment and Pollution Control 5, and Phasi Charoen Water Transmission and Maintenance Project, Regional Irrigation Office 11.</p> <ul style="list-style-type: none"> - Supporting the environmental agencies to prevent the COVID-19 pandemic situation. 	<p>2 communities:</p> <p>Wat Sukwattanaram School and Thairath Wittaya 4 School.</p> <ul style="list-style-type: none"> - Certified for Carbon Footprint for Organization (CFO) by Thailand Greenhouse Gas Management Organization (Public Organization : TGO). - Having operated in Phase 1 in the project “Restore water quality in Khlong Bang Sue to conserve the Tha Chin River” and holding a Memorandum of Understanding (MOU) signing ceremony, and also training to improve the community representatives and entrepreneurs knowledge on the water quality restore of the Bang Sue Canal. - The number of complaints from the environmental agency was 0.

3.3 Sustainability Management in Environmental Dimensions

3.3.1 Environmental Policies and Practices

The company intends to conduct business on the basis of environmental responsibility by integrating the sustainable development guidelines and the prevention and reduction of environmental impacts into the business operations, so the company sets up the sustainable development policy titled “Sustainable Environmental Management”, which is in accordance with laws, regulations, international standards, and the United Nations sustainable development goals (UN SDGs), as can be seen from the company’s performance, covering upstream to downstream, such as raw materials purchasing with partners, water conservation, eco-friendly production and service processes, water management, climate change, energy conservation,

waste management, biodiversity, cooperation for environmental conservation between the company and agencies, and compliance with environmental laws. The guidelines for environmental practices are as follows:

1. Realize and focus on business operations that do not affect the environment.
2. Conserve energy and combat climate change by taking measures to reduce electricity consumption and greenhouse gas emissions from business processes according to the specified goals.
3. Manage the water resources by raising awareness of the importance of water usage and also setting measures and goals to bring wastewater from the water production process to reuse in water production.
4. Manage waste and residual materials by bringing the sediment to research into products and use it for social benefits including promoting the use of recycled materials to promote the wise use of resources.
5. Manage biodiversity for the benefit and value of the organization by establishing preventive measures for the water supply and wastewater treatment systems that will not have a negative impact on creatures in the ecosystem.
6. Encourage cooperation and participation between the organization and external agencies to conserve natural resources and the environment.
7. Realize and focus on strictly complying with environmental laws by setting up an environmental management system (ISO 14001) that must be inspected and certified by external agencies as planned.

The company recognizes that climate change is one of the most important risks to life, which the world is facing today and it is a long-term environmental problem. Climate change is inevitable and is having a huge impact on businesses. Following the conclusion of the 21st session of the United Nations Convention on Climate Change (COP21) Conference of States Parties, the Company anticipated the increasing environmental, social, political and economic impacts. Risks and Chances of Climate Change At the same time, the situation was assessed as an opportunity, in order to change the rules and pushing the company to improve and develop work processes that reduce greenhouse gas emissions from business operations, such as setting targets to reduce electricity consumption and greenhouse gas emissions. Procurement of products and services that are environmentally friendly (Green Procurement) using energy-saving lamps. Supporting the use of clean energy by using solar energy. Save water use, reuse, reduce the purchase of new items. Make compost from organic waste/food waste, etc.

In addition, global warming also causes the loss of biodiversity. Affects saltwater intrusion of freshwater over a longer period of time. The problem of raw water shortage is linked to the allocation of water resources between different watershed areas. Various incidents pushing the company to review policies and adjust operational strategies including integrated coordination from many relevant sectors to fix the problem at the source especially government agencies. The agency responsible for the production of tap water and people who are water users. This will require understanding and cooperation of many sectors to

manage problems in a systematic and coordinated manner. In order for the chosen approach to truly lead to problem solving and to be able to operate business continuously (Business Continuity Management).

In 2022, the company has set up a project to assess greenhouse gas emissions from the business operations by assessing greenhouse gas emissions covering 3 scopes, namely

1) Direct Greenhouse Gas Emissions (Scope 1) from the organization's various activities such as machine combustion, corporate vehicles uses (owned by the organization), chemicals consumption in wastewater treatment, chemicals leakage from organization's processes or activities, etc.

2) Indirect Greenhouse Gas Emissions from Energy Consumption (Scope 2), such as purchasing of electrical, heat, and steam energy used in the organization.

3) Other Indirect Greenhouse Gas Emissions (Scope 3), such as employees' traveling by their private vehicles, traveling to off-site seminars, and using various materials, etc.

The company employs a consultant from Green Style Co., Ltd., which is registered with the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO, to assess greenhouse gas emissions and prepare a report on the amount of greenhouse gas emissions. The data collection cycle is from October 1, 2021 to September 30, 2022, for a period of 12 months, which has been verified by the Research School of Energy and Environment, University of Phayao, and has been certified for Carbon Footprint for Organization: CFO by the TGO. The company's carbon footprint for the present year is 69,429 tCO₂e/year because this is the first year of assessment. The company's carbon footprint of the base year is 69,429 tCO₂e/year and the carbon intensity (Scope 1+2) of the base year is 0.0003 tCO₂e /m³ and the present year is 0.0003 tCO₂e/year.

In addition, the company emphasizes the importance of water management in the community by establishing a the project "Restore water quality in Khlong Bang Sue to conserve the Tha Chin River" with Rai Khing Municipality, the Office of Environment and Pollution Control No.5, and the Phasi Charoen Water Transmission and Maintenance project with Regional Irrigation Office 11, which has held a Memorandum of Understanding (MOU) signing ceremony and trained to improve the community representatives and entrepreneurs knowledge on the water quality restore of the Bang Sue Canal, including annually collecting water samples to assess the water quality of Bang Sue Canal. In 2023, the company will install grease traps for the target groups that are communities and entrepreneurs living along the Bang Sue Canal and install the equipment to improve water quality: the air blowers and solar turbines, including installing floating rafts to plant wastewater treatment plants and improving the landscape along the Bang Sue Canal in the area where the equipment is installed to improve water quality, etc.

3.3.2 Environmental Performance

1. Energy Management

TTW emphasizes the importance of the most efficient consumption of energy. Therefore, the company has set the energy conservation measures according to the energy management report to reduce the amount of greenhouse gases emitted from the electricity consumption rate, which is the only type of main energy used in the company's business operation, as well as the selection of eco-friendly technologies and raw materials, which will be in line with the company's greenhouse gas emission reduction goals.

Goals : Electricity Consumption

Electricity consumption at the Banglen water treatment plant, the Krathumbaen water treatment plant, and the Pathum Thani water treatment plant decreases by no less than 1.0%.

The company has measures to control electricity consumption in order to reduce the amount of greenhouse gases emitted from the electricity consumption rate as follows:

- Managing the operation of water production and distribution systems to ensure appropriate energy consumption.
- Improving the machine efficiency of the Pathum Thani water treatment plant.

The above measures are continuously monitored to ensure that the energy consumption rate and greenhouse gas emissions of the Banglen water treatment plant, the Krathumbaen water treatment plant, and the Pathum Thani water treatment plant can be effectively controlled to reduce.

In 2022, the Company's electricity consumption in the water production process of the Banglen and Krathumbaen water treatment plants was 81,843,743 kWh or 0.577 kWh/m³ and the Pathum Thani water treatment plant was 58,179,668 kWh or 0.436 kWh/m³ as shown in the table below.

Energy Used in Production	Year (Unit : kWh)			Increase / Decrease (%)
	2020	2021	2022	
Banglen and Krathumbaen water treatment plants	112.62	102.24	81.84	Decrease 19.95
Pathum Thani water treatment plant	70.28	61.42	58.18	Decrease 5.28
Total	182.90	163.33	140.02	Decrease 14.27
GHG Emission Rate per Product Unit (Per Cubic Meter)				
Banglen and Krathumbaen water treatment plants	0.679	0.667	0.577	Decrease 13.49
Pathum Thani water treatment plant	0.459	0.445	0.436	Decrease 2.02

2. Water Resource Management

TTW is aware of the risks associated with water resources that may affect future business operations since water resources are the main raw materials for tap water production. The Company determines to be a part of the conservation of water resources and to drive operations toward the Sustainable Development Goals (SDGs) No. 6 on "Ensure Availability and Sustainable Management of Water and Sanitation for All" by

promoting and supporting the efficient consumption of water resources to reduce water shortage problems that may occur in the future.

TTW has 3 water treatment plants, namely the Banglen water treatment plant in Nakhon Pathom province, the Krathumbaen water treatment plant in Samut Sakhon province, and the Pathum Thani water treatment plant in Pathum Thani province. The company uses 2 surface water sources to produce the tap water, namely the Tha Chin River and the Chao Phraya River.

In order to use water resources to achieve the highest value and meet the company's goals. Therefore, the Company has designed the tap water production system to bring water back into the production process with maximum efficiency based on the principle of Water Discharge Minimization, including measures to control water loss in the production system (Production Loss), and has designed the tap water distribution system (Transmission Loss) to be appropriate, which will not release any water loss, whether it is the water separated from the sludge removal system or the water that has gone through the backwash process of a sand filter. The system is designed to collect sludge from the water production process to separate water from sludge, which is then returned to the water production system again. The process for reusing water is as follows:

1. Sludge Balancing Tank is responsible for receiving sludge from the clarifier system. The sludge that is collected in the clarifier system will be pumped to the Sludge Thickener Tank.

2. Wash Water Tank is responsible for receiving water and sludge from the backwash process. In this section, the clear water that was separated from the sludge will be pumped back into the water production system in order to reuse water for maximum benefit, called "Recovery Water". The thicker sludge will be pumped through the Sludge Thickener Tank.

3. Sludge Dewatering is the final system for removing water from the sludge to make the sludge as dry as possible, and it also involves the use of recovery water to be reproduced again.

Goals : Water Reuse

The proportion of water reuse compared to the total amount of water that is added to the production process is not less than 2%.

In 2022, the Banglen and Krathumbaen water treatment plants reused 2.72 million cubic meters of water, accounting for 1.83% as compared to the total amount of water that is added to the production process, and the Pathum Thani water treatment plant reused 3.94 million cubic meters of water, accounting for 2.90% as compared to the total amount of water that is added to the production process. The proportion of water reuse in the Banglen water treatment plant, the Krathumbaen water treatment plant, and the Pathum Thani water treatment plant are shown as follows:

Unit : Percentage

The Proportion of Water Reuse	2020	2021	2022	Increase / Decrease (%)
Banglen and Krathumbaen water treatment plants	2.05	2.30	1.83	Decrease 0.47
Pathum Thani water treatment plant	2.29	3.06	2.90	Decrease 0.16
<u>Average</u>	<u>2.17</u>	<u>2.68</u>	<u>2.36</u>	<u>Decrease 0.32</u>

3. Waste Management

TTW places an importance on waste management from the tap water production process with the aim of managing the waste for maximum efficiency and reducing the cost of hiring an external agency to eliminate it, so the company employs appropriate methods or further develops it as products. Sludge is classified as a non-hazardous waste from the tap water production process. The amount of non-hazardous waste in this report is the operations result from the Banglen water treatment plant, the Krathumbaen water treatment plant, and the Pathum Thani water treatment plant. The tap water production process consists of the raw water pumping process, the chemical dosing process, the coagulation process, the filtration process, the disinfection process, and the pumping process.

If the waste management is inefficient, it will increase the amount of waste and could lead to complaints from nearby communities due to the waste leakage. TTW systematically controls and manages waste from the tap water production process. TTW has set up an ISO 14001 environmental management system, which takes measures to monitor waste leakage to external communities in order to reduce the potential environmental impacts of the sludge leakage. In 2022, the Banglen and Krathumbaen water treatment plants have 18,765 tons of sludge from the tap water production process, and the Pathum Thani water treatment plant has 20,016 tons of sludge from the tap water production process, depending on the quality of the raw water used to produce tap water, such as turbidity. The information is shown as follows:

Amount of Waste	Year (Unit : Ton)			Increase / Decrease (%)
	2020	2021	2022	
Banglen and Krathumbaen water treatment plants	18,677	21,986	18,765	Decrease 14.65
Pathum Thani water treatment plant	9,909	9,280	20,016	Increase 115.69
<u>Total</u>	<u>28,586</u>	<u>31,266</u>	<u>38,781</u>	<u>Increase 24.04</u>

3.4 Management in Social Dimensions

Social Policy and Practice

The company realizes the importance of society, which is a critical part of supporting sustainable development. Therefore, the Sustainable Development Policy "Creating Shared Social Value" has been announced, which focuses on social operations in education and various social value aspects that are in line with the Sustainable Development Goals (Un SDGs), including strongly conducting social operations both

internal and external organization. This is evident in the operations results such as employee care and personnel development, occupational health and safety, and social and community care, including in the normal and critical conditions such as natural disasters and epidemics. The guidelines for social practice are as follows:

1. Manage human resources effectively and fairly in accordance with the practice standards of the requirements of relevant international labor laws and charters.
2. Encourage personnel to develop the required knowledge and skills according to the employee development plan, as well as encourage creativity in the workplace through Kaizen activities.
3. Support a good system by stipulating the operating manual and safety standards in accordance with the nature of work risks and creating a safe workplace culture in the organization.
4. Establish human rights and labor policies and encourage executives and employees to respect and comply with international human rights principles by adhering to the principle of equality and non-discrimination.
5. Create employee and community satisfaction in the company's business areas.
6. Encourage the participation of the company, communities, and related stakeholders to build a relationship, understanding, and strong cooperation to reduce future conflicts.

In addition, the company conducts business in accordance with other social policies such as human rights and labor policies, which includes establishing a structure of people who are responsible for human rights operations, a process for reviewing human rights operations, and a whistle-blowing channel for people who are affected by human rights. These policies will be communicated to all employees for acknowledgement and publicized to continuously encourage them.

Furthermore, the company also conducts business in accordance with the personal data protection, quality, environment, occupational health and safety, and supplier code of conduct policies, which focus on the operations that comply with laws, regulations, human rights, and labor practices, including the operations that reduce the environmental impact of the partner's operations.

The information on the company's sustainable development can be found in the Sustainability Report 2022, which the Sustainable Development Report is in accordance with the Global Reporting Initiative (GRI), GRI Standards, published on the company's website at <https://www.ttwpplc.com/th/download/sd-report>

4. Management Discussion and Analysis : MD&A

Revenue Analysis

Revenue from Tap Water Sales

The majority of tap water sales revenue was generated from the sale of tap water by the Company and Pathum Thani Water Co., Ltd. (PTW) to the Provincial Waterworks Authority in accordance with the contract, as well as from sales by the Company to business operators in the Bang Pa-In Industrial Estate under the contract granting rights for the production and distribution of tap water. In 2020, 2021, and 2022, the tap water sales revenue of the Company and its subsidiaries equaled THB 6,059.4 million, THB 5,682.4 million and THB 5,574.9 million respectively, with a decrease in 2021 and 2022 of 6.2% and 1.9%, respectively, compared to the same period of the previous year. Revenue from tap water sales that decreased in 2021 and 2022 can be explained as follows:

In 2021, revenue from tap water sales decreased by THB 377.0 million, or 6.2%, due to the following reasons:

1) Revenue from tap water sales of the Company decreased by THB 164.9 million, or 4.0%, as a result of a 12.6 million cubic meter decrease in the volume of tap water sold, as well as a decrease in tap water prices compared to the previous year, representing a decrease in tap water sales revenue of THB 164.4 million. Also, tap water sales in Bang Pa-In Industrial Estate were close to the same period last year, representing a decrease in tap water sales revenue within Bang Pa-In Industrial Estate of THB 0.5 million, or 0.3%.

2) Revenue from the tap water sales of PTW decreased by THB 212.1 million, or 10.8%, as a result of a 15.1 million cubic meter, or 9.9%, decrease in the amount of tap water sold by PTW, as well as a decrease in tap water prices compared to the previous year

In 2022, revenue from tap water sales decreased by THB 107.5 million or 1.9% due to the following reasons:

1) Revenue from tap water sales of the Company decreased by THB 58.4 million, or 1.5%, as a result of a 11.4 million cubic meter decrease in the volume of tap water sold. This represented a decrease in tap water sales revenue of THB 52.9 million. Tap water sales in the Bang Pa-In Industrial Estate decreased by 0.2 million cubic meter, representing a decrease in tap water sales revenue within Bang Pa-In Industrial Estate of THB 5.5 million, or 2.7%

2) Revenue from tap water sales of PTW decreased by THB 49.1 million, or 2.8%, as a result of a 4.5 million cubic meter, or 3.3%, decrease in the volume of water sold by PTW.

Revenue from Services

Revenue from services comprises revenue from tap water production services, wastewater treatment services, water pipe system maintenance at Amata Industrial Estate, and wastewater treatment services at Bang Pa-In Industrial Estate. In the years 2020, 2021, and 2022, the services revenue of the Company and its subsidiaries equaled THB 120.2 million, THB 123.7 million, and THB 116.6 million respectively, with an increase of 2.9% in 2021 and a decrease of 5.7% in 2022 as compared to the same periods last year. For revenue from services, the increases in 2021 and the decreases in 2022 can be explained as follows:

In 2021, revenue from services increased by THB 3.5 million, or 2.9%, as a result of an increase in service revenues in the Amata Industrial Estate.

In 2022, revenue from services decreased by THB 7.1 million, or 5.7%, as a result of a decrease in service revenues in the Amata Industrial Estate.

Other Revenues

Other revenues of the Company and its subsidiaries consist mainly of returns from mutual funds and others.

In 2020, 2021, and 2022, other revenues of the Company and its subsidiaries equaled THB 13.3 million, THB 11.7 million, and THB 9.7 million, respectively, with a decrease of 12.0% in 2021 and 17.1% in 2022 compared to the same periods of the previous year. For revenue from services, the decreases in 2021 and 2022 can be explained as follows:

In 2021, other revenues decreased by THB 1.6 million, or 12.0%, due to decreased returns on mutual funds.

In 2022, other revenues decreased by THB 2.0 million, or 17.1%, due to decreased returns on mutual funds.

Expense Analysis

(Unit: MB)

Description	2022	2021	2020
Cost of sales of treated water and services	1,974.5	1,844.6	1,861.7
Administrative expenses	289.3	255.3	263.9
Finance cost	168.7	249.5	274.5
Income tax expenses	656.5	651.0	685.4
Total	3,089.0	3,000.4	3,085.5

Cost of Sales of Treated Water and Services

The tap water sales and service expenses of the Company and its subsidiaries consist mainly of the depreciation of assets for tap water production, amortization of assets for tap water production, electrical costs, chemical fees, land rental fees for pipeline installation, expenses related to production personnel, maintenance costs, other production expenses, etc.

In 2020, 2021, and 2022, the tap water sales and service expenses of the Company and its subsidiaries equaled THB 1,861.7 million, THB 1,844.6 million, and THB 1,974.5 million, respectively, accounting for 30.1%, 31.7%, and 34.6% of total revenue, respectively. The rate of the decrease in 2021 and the increase in 2022 compared to the same period of the previous year was 0.9% and 7.0%, respectively, which can be explained as follows:

In 2021, the principle cost of tap water sales and services decreased by THB 17.1 million due to a decrease of 27.7 million cubic meters in the volume of tap water sold, resulting in a decrease of THB 56.9 million in electricity costs, THB 23.5 million in chemical costs, and THB 1.1 million in other production expenses. While the depreciation expenses increase by THB 57.7 million due to the expansion of the

subsidiary's production capacity, there was an increase of THB 4.3 million in production personnel expenses, and an increase of THB 2.4 million in maintenance and spare parts costs.

In 2022, the principle cost of tap water sales and services increased by THB 129.9 million due to an increase of 105.0 million in the depreciation expenses from the expansion of the subsidiary's production capacity. The chemical costs increase by THB 18.7 million due to the increase in chemical price. there was an increase of THB 3.0 million in production personnel expenses, an increase of THB 0.9 million in electricity costs, and an increase of 2.3 million in other production expenses .

Administrative Expenses

In 2020, 2021, and 2022, the administrative expenses of the company equaled THB 263.9 million, THB 255.3 million, and THB 289.3 million, respectively. The rates of decrease in 2021 and increase in 2022 compared to the same period of the previous year was 3.3% and 13.3%, respectively, which can be explained as follows:

In 2021, administrative expenses of the Company decreased by THB 8.6 million compared to the same period of the previous year due to CSR expenses for community, social, and environmental activities.

In 2022, administrative expenses of the Company increased by THB 34.0 million compared to the same period of the previous year due to personnel expenses, bank fees, consulting fees, and other.

Share of Profits from Investment in Associate Companies

The share of profits from investment in associate companies in 2020, 2021, and 2022 was THB 101.1 million, THB 544.3 million, and THB 608.6 million, respectively, The rate of increase in 2021 and 2022 compared to the same period of the previous year was 438.4% and 11.8%, respectively, which can be explained as follows:

In 2021, the share of profits from investment in associate companies increased by THB 443.2 million, or 438.4%, due to an increase in the electricity sales of the subsidiaries of said associate companies compared to the same period of the previous year.

In 2022, the share of profits from investment in associate companies increased by THB 64.3 million, or 11.8%, due to an increase in the amount of water in the associated company's dams and the increase in fuel costs for cogeneration power generation from an increase in average natural gas prices as compared to the same period last year.

Finance Income

Finance income in 2020, 2021, and 2022 was THB 10.2 million, THB 4.6 million, and THB 3.7 million, respectively. The decrease in finance income in 2021 and 2022 compared to the same period of the previous year can be explained as follows:

In 2021, the finance income of the Company decreased by THB 5.6 million, or 54.9%, due to decreased interest income on bank deposits.

In 2022, the finance income of the Company decreased by THB 0.9 million, or 19.6, because the company used cash for the matured debentures redemption of THB 2,000 million in February 2022.

Financial Costs

Finance costs in 2020, 2021, and 2022 were THB 274.5 million, THB 249.5 million, and THB 168.7 million, respectively. The decrease in financial costs compared to the same period of the previous year can be explained as follows:

In 2021, the financial costs of the Company decreased by THB 25.0 million, or 9.1%, due to the repayment of the principal of the loan in the amount of THB 760 million.

In 2022, the financial costs of the Company decreased by THB 80.8 million, or 32.4%, due to the redemption of the matured debentures in the amount of THB 2,000 million and the repayment of the loan in the amount of THB 560 million.

Income Tax Expenses

Income tax expenses in 2020, 2021, and 2022 were THB 685.4 million, THB 651.0 million, and THB 656.5 million, respectively. The corporate income tax, that decreased in 2021 and increased in 2022 as compared to the same period of the previous year, can be explained as follows:

In 2021, income tax expenses decreased by THB 34.4 million, or 5.0%, due to reduced profit before tax expenses compared to the same period of the previous year.

In 2022, income tax expenses increased by THB 5.6 million, or 0.9%, due to the deferred tax liabilities.

Net Profit

In 2020, 2021, and 2022, the Company and its subsidiaries recorded a net profit of THB 2,971.8 million, THB 3,120.0 million, and THB 2,978.8 million, respectively, accounting for 47.91%, 53.59, and 52.21%, respectively, of the total revenue of the Company and its subsidiaries. The rate of net profit of total revenue in 2022 decreased from the previous year had the reasons mentioned in each topic above.

Financial Position Analysis

(Unit: MB)

Description	31 Dec 2022	31 Dec 2021	31 Dec 2020
Total assets	21,489.9	22,503.9	22,842.4
Total liabilities	6,739.6	8,308.7	9,142.8
Total shareholders' equity	14,750.3	14,195.2	13,699.6

Assets Analysis

The majority of the assets of the Company and its subsidiaries are non-current assets, which represent approximately 79-82% of total assets. As at December 31, 2022, the Company and its subsidiaries had total assets of THB 21,489.9 million, a decrease of THB 1,014.0 million compared to December 31, 2021.

This decrease in assets was from the increase and decrease of other assets, which can be explained as follows:

Cash and Cash Equivalents

As of December 31, 2022, the Company and its subsidiaries held cash and cash equivalents totaling THB 61.9 million, a decrease of THB 4.9 million compared to December 31, 2021.

Trade and Other Receivables

As of December 31, 2022, the trade and other receivables of the Company and its subsidiaries totaled THB 511.8 million, a decrease of THB 2.4 million compared to December 31, 2021, due to a sales volume decreased from the same period of the previous year. The majority of trade receivables in the amount of THB 483.6 million are from the Provincial Waterworks Authority, which had a collection period of no more than 7-15 days from the date of invoice.

Raw Materials and Supplies

As of December 31, 2022, the raw materials and supplies of the Company and its subsidiaries were valued at a total of THB 27.6 million, most of which consisted of chemicals used for tap water production at THB 6.7 million and spare parts for maintenance of the water production and distribution system at THB 20.9 million. The main chemicals had an average turnover rate of no more than 3 months, while the spare parts for maintenance and repairs were kept in stock in accordance with the specified plan.

Other Current Financial Assets

As of December 31, 2022, the other current financial assets of the Company and its subsidiaries were valued at THB 3,300.9 million, a decrease of THB 296.0 million compared to December 31, 2021, because the company and its subsidiaries had increased their investment in financial assets.

Other Noncurrent Financial Assets

As of December 31, 2022, the other noncurrent financial assets of the Company and its subsidiaries were valued at THB 4.3 million, a decrease of THB 0.1 million compared to December 31, 2021.

Investments in Associate Companies

As of December 31, 2022, the Company and its subsidiaries had investments in associate companies totaling THB 6,648.3 million, an increase of THB 428.7 million compared to December 31, 2021, because the recording of profit shares from investments in associated companies according to the accounting standards increased from the operating results of the associated companies.

Property, Plant, and Equipment

As of December 31, 2022, the Company and its subsidiaries held property, plant, and equipment assets in the amount of THB 969.3 million, a decrease of THB 3.9 million compared to December 31, 2021, due to depreciation recorded for the period.

Assets in the production of tap water with the government sector which are owned by the company and must be transferred at the end of the concession of subsidiary.

As of December 31, 2022, the Company and its subsidiaries had Company-owned assets for the government sector tap water production that must be transferred at the end of concession of subsidiary. Said assets were valued at THB 8,736.8 million, a decrease of THB 892.0 million compared to December 31, 2021, due to the depreciation recorded for the period and the classification of assets for tap water production with the government sector that must be transferred at the end of the concession in October 2023 of the subsidiary as current assets in the financial position statement.

Rights to Operate Tap Water Production and Distribution and to Provide Wastewater Treatment Services from Private Sector Agencies

As of December 31, 2022, the Company and its subsidiaries held rights to operate tap water production and distribution and to provide wastewater treatment services from private sector agencies, totaling THB 978.5 million, a decrease of THB 50.6 million due to amortization recorded for the period.

Rights to Operate Production and Distribution of Tap Water from Business Acquisition

As of December 31, 2022, the Company and its subsidiaries held the rights to operate production and distribution of tap water from business acquisition valued at THB 153.3 million, a decrease of THB 194.9 million due to amortization recorded for the period.

Liability Analysis

The majority of the liabilities of the Company and its subsidiaries consists of bank loans and the issuance of debentures, accounting for approximately 88-90% of total liabilities. As of December 31, 2022, the Company and its subsidiaries had total liabilities equaling THB 6,739.7 million, most of which were loans and debentures totaling THB 5,938.4 million. The loans amount to THB 2,540 million are borrowed with floating interest rates and a quarterly principal payment. Debentures, totaling THB 3,400 million, have fixed interest rates.

As of December 31, 2022, the Company and its subsidiaries had total liabilities amounting to THB 6,739.7 million, a decrease of THB 1,569.0 million compared to December 31, 2021, due to the Company's repayment of long-term loans and the redemption of the matured debentures.

Shareholder Equity Analysis

As of December 31, 2022, the Company and its subsidiaries had shareholder's equity of THB 14,750.3 million, an increase of THB 555.1 million compared to December 31, 2021, due to the Company's annual net profit of THB 2,978.8 million and dividend payment of THB 2,393.8 million in 2022.

Net Cash Flow

(Unit: MB)

Description	2022	2021	2020
Net cash from operating activities	3,673.8	3,772.2	4,081.9
Net cash used in investment activities	301.4	(610.6)	(639.3)
Net cash used in financing activities	(3,980.0)	(3,186.8)	(3,427.2)
Net increase (decrease) in cash and cash equivalents	(4.8)	(25.2)	15.4

Cash Flow from Operating Activities

In 2021, the Company and its subsidiaries had a net cash flow from operating activities totaling THB 3,772.2 million, a decrease of 309.7 million, or 7.6%, compared to the same period of the previous year because the tap water sales of the company and its subsidiaries decreased in 2021.

In 2022, the Company and its subsidiaries had a net cash flow from operating activities totaling THB 3,673.8 million, a decrease of 98.4 million, or 2.6%, compared to the same period of the previous year because in 2022, the tap water sales of the company and its subsidiaries decreased, and the tap water production cost increased, namely the depreciation of subsidiaries and the increased cost of chemicals.

Cash Flow Used in Investment Activities

In 2021, the Company and its subsidiaries had cash flow used in investment activities totaling THB 610.6 million, a decrease of THB 28.7 million, or 4.5%, compared to the same period of the previous year. Since in 2020 and 2021, the Company and its subsidiaries had improved the water production and distribution systems increased by THB 27.6 million.

In 2022, the Company and its subsidiaries had cash flow used in investment activities totaling THB 301.4 million, an increase of THB 912.0 million, or 149.4%, compared to the same period of the previous year. Since in 2022, the Company and its subsidiaries have disposed of financial assets (short-term investment) of THB 300.4 million for the matured debentures redemption.

Cash Flow Used in Financing Activities

In 2021, the Company and its subsidiaries had cash flow used in financing activities totaling THB 3,186.8 million, a decrease of THB 240.4 million from the same period of the previous year. This is because in 2021, the Company repaid long-term loans totaling THB 260 million more than the previous year.

In 2022, the Company and its subsidiaries had cash flow used in financing activities totaling THB 3,980.0 million, an increase of THB 793.2 million from the same period of the previous year due to the repayment of matured debentures of THB 2,000 million and the long-term loan drawdown of THB 1,000 million in 2022.

Key Financial Ratios

Liquidity Ratio

The liquidity ratio for 2020, 2021, and 2022 was 2.86%, 1.40%, 2.00%, respectively. The Company and its subsidiaries have a good liquidity ratio overall, and the majority of the current assets of the Company and its subsidiaries are cash and cash equivalents, current investments, and trade and other receivables. The liquidity ratio in 2022 increased because the debentures matured within 1 year decreased as compared to the same period of the previous year.

The average collection period for 2020, 2021, and 2022, was 33 days, 33 days, and 32 days, respectively. The liquidity ratio of the Company and its subsidiaries is such that outstanding debts can be collected from debtors within the period of time specified from the date of invoice.

Profitability Ratio

The gross profit margin of the Company and its subsidiaries in 2020, 2021, and 2022 was 69.9% , 68.2%, and 65.3%, respectively, with a decrease in the gross profit margin for 2022 because the water sales revenue decreased from the same period last year.

The net profit ratio of the Company and its subsidiaries in 2020, 2021, and 2022 was 47.9%, 53.6%, and 52.2%, respectively. The net profit ratio increased in 2022 due to the decrease in the water sales revenue and the increase in water production and distribution costs due to increased depreciation and chemical costs from the same period of the previous year.

Operating Efficiency Ratio

The return on total assets ratio of the Company and its subsidiaries in 2020, 2021, and 2022 was 12.9%, 13.8%, and 13.5%, respectively, while the return on fixed assets of the Company and its subsidiaries in 2020, 2021, and 2022 was 22.6%, 25.2%, and 26.1%, respectively. The decrease in the return on assets and the increase in the return on fixed assets was due to the decrease in the assets of the Company and its subsidiaries compared to the same period of the previous year.

Financial Policy Ratio

The debt to equity ratio of the Company and its subsidiaries in 2020, 2021, and 2022 was 0.7%, 0.6%, and 0.5%, respectively, with a decrease in the debt to equity ratio at the end of 2022 as compared to the end of 2021 due to the gradual loans repayment under contracts and the matured debentures redemption of the Company.

Dividend payout ratio in 2020, 2021, and 2022 was 80.5%, 76.7%, and 80.4%, respectively.

Contingent Liabilities

The Company has commitments as detailed in Notes to Financial Statements: Article 34.1: Capital Expenditure Commitments, Article 34.2: Service Commitments and Other Commitments, and Article 34.3: Letter of Guarantee. The Company has prepared funding sources from borrowing and/or issuing debentures and/or cash from the Company's operations.

The Auditor's report

Ms.Kunlapee Piyawannasuth, Certified Public Accountant No. 6137 of EY Office Limited has examined the Company's financial statements and the consolidated financial statements of the company and its subsidiaries for the year ended 31 December 2022. The financial statement present fairly, in all material respects, the financial position of the Company's and its subsidiaries as at 31 December 2022, the financial performance and cash flows for the year ended and of the separate Company in accordance with Thai Financial Reporting Standards.

Summary of Financial Statement

The Financial statements so presented comprising the audited statement of financial position, statement of comprehensive income and cash flow statement for the year ended 31 December 2022, compared with the audited financial statements for the years ended 31 December 2021 and 2020 are shown as follows:

Statement of financial position

Description	Consolidated financial statements					
	2022		2021		2020	
	Baht	%	Baht	%	Baht	%
Assets						
Current assets						
Cash and cash equivalents	61,923,764	0.28	66,762,188	0.29	91,969,201	0.40
Trade and other receivables	511,774,629	2.38	514,176,972	2.28	557,910,547	2.44
Raw materials and supplies	27,604,944	0.13	25,043,636	0.11	26,184,756	0.11
Assets to be transferred at the end of contract term of subsidiaries	456,028,094	2.12	-	-	-	-
Other current financial assets	3,300,909,187	15.36	3,596,937,742	15.98	3,311,925,335	14.50
Other current assets	33,558,557	0.16	25,775,192	0.11	29,039,472	0.13
Total current assets	4,391,799,175	20.44	4,228,695,730	18.79	4,017,029,311	17.58
Non-current assets						
Other non-current financial assets	4,250,000	0.02	4,350,000	0.02	12,775,000	0.06
Investment in associate	6,648,263,116	30.94	6,219,581,998	27.64	5,954,960,757	26.07
Property, plant and equipment	969,311,031	4.51	973,209,214	4.32	870,535,587	3.81
Assets for production of treated water with public sector agency:						
Assets that are owned by the Company	8,280,816,145	38.53	8,589,844,176	38.17	8,965,354,337	39.25
Assets that must be transferred at end of concession of subsidiary	-	-	1,039,022,681	4.62	1,346,521,003	5.89
Rights to produce and sell treated water and treat waste water from private sector agency	978,451,795	4.55	1,029,071,471	4.57	1,081,618,436	4.74
Rights to produce and sell treated water from business acquisition	153,286,614	0.71	348,233,006	1.55	542,693,038	2.38
Intangible assets	10,199,936	0.05	10,799,525	0.05	11,958,702	0.05
Deferred tax assets	5,295,312	0.02	4,916,736	0.02	5,270,213	0.02
Advance payment to subcontractor - related party	12,967,398	0.06	36,344,230	0.16	23,268,100	0.10
Other non-current assets	35,279,487	0.16	19,827,983	0.09	10,453,049	0.05
Total non-current assets	17,098,120,834	79.56	18,275,201,020	81.21	18,825,408,222	82.42
Total assets	21,489,920,009	100.00	22,503,896,750	100.00	22,842,437,533	100.00

Description	Consolidated financial statements					
	2022		2021		2020	
	Baht	%	Baht	%	Baht	%
Liabilities and shareholders' equity						
Current liabilities						
Trade and other payables	145,813,855	0.68	129,712,834	0.58	204,991,415	0.90
Current portion of long-term loans	660,000,000	3.07	460,000,000	2.04	760,000,000	3.33
Current portion of debentures	1,000,000,000	4.65	2,000,000,000	8.89	-	-
Current portion of lease liabilities	11,285,059	0.05	11,059,693	0.05	11,165,584	0.05
Income tax payable	283,751,428	1.32	291,118,055	1.29	296,782,239	1.30
Accrued interest	33,732,277	0.16	63,536,058	0.28	63,607,016	0.28
Other current liabilities	65,395,033	0.30	66,169,405	0.29	69,512,922	0.30
Total current liabilities	2,199,977,652	10.23	3,021,596,045	13.43	1,406,059,176	6.16
Non-current liabilities						
Long-term loans, net of current portion	1,880,000,000	8.75	1,640,000,000	7.29	2,100,000,000	9.19
Debentures, net of current portion	2,398,424,749	11.16	3,397,806,704	15.10	5,396,523,382	23.62
Lease liabilities, net of current portion	45,383,954	0.21	51,047,071	0.23	60,578,185	0.27
Provision for long-term employee benefits	81,708,615	0.38	73,379,121	0.33	62,271,119	0.27
Deferred tax liabilities	134,164,722	0.63	124,908,676	0.56	117,397,423	0.52
Total non-current liabilities	4,539,682,040	21.13	5,287,141,572	23.50	7,736,770,109	33.87
Total liabilities	6,739,659,692	31.36	8,308,737,617	36.93	9,142,829,285	40.03
Shareholders' equity						
Share capital						
Registered						
3,990,000,000 ordinary shares of Baht 1 each	3,990,000,000	18.57	3,990,000,000	17.73	3,990,000,000	17.47
Issued and fully paid-up						
3,990,000,000 ordinary shares of Baht 1 each	3,990,000,000	18.57	3,990,000,000	17.73	3,990,000,000	17.47
Share premium	2,637,769,601	12.27	2,637,769,601	11.72	2,637,769,601	11.55
Retained earnings						
Appropriated - statutory reserve	399,000,000	1.86	399,000,000	1.77	399,000,000	1.75
Appropriated - other reserve	1,691,230,767	7.87	1,691,230,767	7.52	1,691,230,767	7.40
Unappropriated	6,721,759,510	31.28	6,148,710,378	27.32	5,441,831,795	23.82
Other components of shareholders' equity	(730,250,083)	(3.40)	(712,824,379)	(3.17)	(504,584,818)	(2.21)
Equity attributable to owners of the Company	14,709,509,795	68.45	14,153,886,367	62.90	13,655,247,345	59.78
Non-controlling interests of the subsidiaries	40,750,522	0.19	41,272,766	0.18	44,360,903	0.19
Total shareholders' equity	14,750,260,317	68.64	14,195,159,133	63.08	13,699,608,248	59.97
Total liabilities and shareholders' equity	21,489,920,009	100.00	22,503,896,750	100.00	22,842,437,533	100.00

Statement of comprehensive income

Description	Consolidated financial statements					
	2022		2021		2020	
	Baht	%	Baht	%	Baht	%
Profit and loss:						
Revenues						
Sales of treated water to public sector agency:						
Sales of treated water - minimum offtake quantities	5,180,928,446	90.82	5,092,028,057	87.46	5,126,926,939	82.65
Sales of treated water - above minimum offtake quantities	197,253,029	3.46	388,149,113	6.67	729,810,640	11.77
Sales of treated water to private sector agencies	196,756,115	3.45	202,222,569	3.47	202,679,433	3.27
Total sales of treated water	5,574,937,590	97.72	5,682,399,739	97.60	6,059,417,012	97.69
Service income	116,561,486	2.04	123,673,267	2.12	120,237,398	1.94
Other income	9,705,589	0.17	11,681,278	0.20	13,291,821	0.21
Total revenues	5,701,204,665	99.94	5,817,754,284	99.92	6,192,946,231	99.84
Expenses						
Cost of sales of treated water and services	1,974,536,150	34.61	1,844,646,460	31.68	1,861,674,233	30.01
Administrative expenses	289,287,774	5.07	255,301,401	4.38	263,911,682	4.25
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	50,619,676	0.89	51,874,965	0.89	51,415,245	0.83
Amortisation of rights to produce and sell treated water from business acquisition	194,946,391	3.42	194,460,032	3.34	195,480,491	3.15
Total expenses	2,509,389,991	43.99	2,346,282,858	40.30	2,372,481,651	38.24
Net Profit before share of profit from investment in associate, finance cost and income tax expenses	3,191,814,674	55.95	3,471,471,426	59.62	3,820,464,580	61.60
Share of profit from investment in associate	608,567,616	10.67	544,317,400	9.35	101,097,638	1.63
Profit before finance cost and income tax expenses	3,800,382,290	66.62	4,015,788,826	68.97	3,921,562,218	63.23
Finance income	3,655,273	0.06	4,631,501	0.08	10,170,447	0.16
Finance cost	(168,726,157)	(2.96)	(249,486,104)	(4.28)	(274,534,160)	(4.43)
Net Profit before income tax expenses	3,635,311,406	63.72	3,770,934,223	64.77	3,657,198,505	58.96
Income tax expenses	(656,537,396)	(11.51)	(650,959,542)	(11.18)	(685,387,474)	(11.05)
Net Profit for the year	2,978,774,010	52.21	3,119,974,681	53.59	2,971,811,031	47.91
Other comprehensive income:						
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>						
Share of other comprehensive income from associate	(17,425,704)	(0.31)	(208,619,561)	(3.58)	16,210,698	0.26
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>						
Actuarial Gains and Losses - net of income tax	-	-	(3,129,627)	(0.05)	-	-
Other comprehensive income for the year	(17,425,704)	(0.31)	(211,749,188)	(3.64)	16,210,698	0.26
Total comprehensive income for the year	2,961,348,306	51.91	2,908,225,493	49.95	2,988,021,729	48.17

Description	Consolidated financial statements					
	2022		2021		2020	
	Baht	%	Baht	%	Baht	%
Profit attributable to:						
Equity holders of the Company	2,967,046,942	52.01	3,103,911,658	53.31	2,951,464,151	47.58
Non-controlling interests of the subsidiaries	11,727,068	0.21	16,063,023	0.28	20,346,880	0.33
	2,978,774,010	52.21	3,119,974,681	53.59	2,971,811,031	47.91
Total comprehensive income attributable to:						
Equity holders of the Company	2,949,621,238	51.70	2,892,162,470	49.67	2,967,674,849	47.84
Non-controlling interests of the subsidiaries	11,727,068	0.21	16,063,023	0.28	20,346,880	0.33
	2,961,348,306	51.91	2,908,225,493	49.95	2,988,021,729	48.17
Basic earnings per share						
Profit attributable to equity holders of the Company	0.74		0.78		0.74	

Cash flows statement

Description	Consolidated financial statements		
	2022	2021	2020
	Baht	Baht	Baht
Cash flows statement			
Cash flows from operating activities			
Net cash from operating activities	3,673,788,927	3,772,228,029	4,081,947,353
Cash flows from investing activities			
Net cash from (used in) investing activities	301,352,869	(610,604,084)	(639,306,543)
Cash flows from financing activities			
Net cash used in financing activities	(3,979,980,220)	(3,186,830,958)	(3,427,242,345)
Net increase (decrease) in cash and cash equivalents	(4,838,424)	(25,207,013)	15,398,465
Cash and cash equivalents at beginning of year	66,762,188	91,969,201	76,570,736
Cash and cash equivalents at end of year	61,923,764	66,762,188	91,969,201

Financial Ratio

Description	Unit	Consolidated financial statements		
		2022	2021	2020
Liquidity ratios				
Current ratio	Time	2.00	1.40	2.86
Quick ratio	Time	1.76	1.38	2.82
Receivable turnover	Time	11.10	10.83	11.01
Average Collection Period	Day	32	33	33
Profitability ratios				
Gross profit margin	%	65.31	68.23	69.87
Net profit margin	%	52.21	53.59	47.91
Return on equity	%	20.58	22.37	22.16
Efficiency ratio				
Return on assets	%	13.54	13.76	12.92
Return on fixed assets	%	26.09	25.15	22.63
Debt service coverage ratio				
Debt / Equity	Time	0.46	0.59	0.67
Dividend / Net Profit	%	80.37	76.72	80.54

5. General Information and Other Information

5.1 General information

Reference Persons

Security Registrar : **Thailand Securities Depository Company Limited**
The Stock Exchange of Thailand Building
93 Ratchadapisek Road, Dindaeng, Dindaeng, Bangkok 10400
Tel : 0 2009 9382
Fax : 0 2009 9476

Auditor : **EY Office Limited**
193/136-137, 33rd floor, Lake Ratchada Office Complex,
Ratchadapisek Road, Klongtoey, Bangkok 10110
Tel : 0 2264 0777
Fax : 0 2264 0789

Legal Advisor : **Offices of N&K Ltd.**
990 Abdulrahim Place, 9th Floor, Rama IV Road, Silom,
Bangrak, Bangkok 10500
Tel : 0 2636 1111
Fax : 0 2636 0000

Bond Registrar and Paying Agent **CIMB Thai Bank Public Company Limited**
44 Langsuan Road, Lumpini, Pathumwan, Bangkok 10330
Tel : 0 2626 7503
Fax : 0 2626 7543

Investor Information

Investors should contact the Investor Relations Department to request information about TTW Plc:

Investor Relations : **TTW Public Company Limited**
30/130 Moo 12, Buddha Monthon 5 Road, RaiKhing,
Sampran, Nakhon Pathom 73210
Tel : 0 2019 9490 ต่อ 1108, 1110
Fax : 0 2420 6064
Email : ir@ttwplc.com
Website : www.ttwplc.com
Social Media : Facebook : TTWPLC, Instagram : TTWPLC

5.2 Other Information

- None -

Legal Dispute

As of December 31, 2022, the Company and its subsidiaries There are no legal disputes or litigation that may cause damage or adversely affect assets. or that may significantly affect the Company's business operations both able and unable to assess the impact numerically

5.4 Secondary market

The company has only one securities listed on the Stock Exchange of Thailand.

5.5 Financial institutions that are in constant contact

Bangkok Bank Public Company Limited

333 Silom Road, Silom, Bangrak,

Bangkok 10500 Tel: 0 2230 1036

Krung Thai Bank Public Company Limited

35 Sukhumvit Road, Khlong Tan Nuea , Watthana,

Bangkok 10110 Tel: 0 2208 4631

Bank of Ayudhya Public Company Limited

1222 Rama III Road, Bang Phongphang, Yan Nawa,

Bangkok 10120 Tel: 0 2296 4632

TMB Thanachart Bank Public Company Limited

3000 Phahonyothin Road, Chomphon, Chatuchak,

Bangkok 10900 Tel: 0 2299 2469

CIMB Thai Bank Public Company Limited

44 Langsuan Road, Lumpini, Pathum Wan,

Bangkok 10330 Tel: 0 2626 7503-4

Capital Nomura Securities Public Company Limited

25 Bangkok Insurance Building, 15th -17th Floor, South Sathorn Road,

Thung Maha Mek, Sathorn, Bangkok 10120

Tel: 0 2638 5472

RHB Securities (Thailand) Public Company Limited

98 Sathorn Square Office Tower, 8th, 10th Floor,

North Sathorn Road, Silom, Bang Rak,

Bangkok 10500 Tel: 0 2088 9999



Corporate Governance Policy

6. Corporate Governance Policy

Business management with good corporate governance is an important factor, which demonstrates the management system that is efficient, fairness, transparency, accountability, and ensures responsibility towards the community, society, and environment, to build trust and confidence of shareholders, investors, and all stakeholders

To enable the Company to achieve its vision and mission with both stability and sustainability. The Board of Directors has assigned the Risk Management and Corporate Governance Committee to review, promote, supervise, and monitor the Company's good corporate governance practices, including placing importance on the environment, social, and governance (ESG), from internal to external business processes to achieve the mission according to the set goals. Therefore, the corporate governance policy is reviewed regularly and updated so that it remains current and timely, as well as in compliance with international standards, laws, rules, statutes, regulations, and the requirements of relevant agencies. It is also in accordance with the Corporate Governance Code for Listed Companies 2017 (CG Code 2017) of the Securities and Exchange Commission (SEC), the principles of the Corporate Governance Report of Thai Listed Companies (CGR), the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard), and all related best practices of the Stock Exchange of Thailand (SET), etc.

6.1 Overview of Policies and Corporate Governance Practices

The Board of Directors recognizes the importance of good corporate governance and has established a corporate governance policy in written form to serve as a guideline for the Board of Directors, executives, and employees of the company to adhere to so that management of the Organization may be carried out with fairness, transparency, accountability, and efficiency.

1. The Board of Directors strives to create more value for the company in the long run by supervising and operating with care and carefulness according to the capacity for the maximum benefit of shareholders while taking care to prevent conflicts by taking responsibility for decisions and actions as directors of the Board of Directors.
2. The Board of Directors will treat the shareholders and all parties equally.
3. The Board of Directors will operate with sincerity and can be checked by disclosing information to all concerned parties accurately, and completely in timely manner.
4. The Board of Directors will always regard the risk that could occur in the business. It will be controlled and managed the risk appropriately.
5. The Board of Directors will provide an Ethics of working for directors, executives, and employees. The Board of Directors must be an example of Ethics and a good role model for executives and employees according to the corporate governance principles of the company.
6. The Board of Directors must have an annual self-evaluation on a regular basis to be used as a framework to monitor the performance of the committee of the company.

6.1.1 Policies and Guidelines Related to the Board of Directors

The Company has specified policies and practices related to the board of directors and executives in the corporate governance policy under the category of the board of directors' responsibilities, which can be summarized as follows:

Nomination and Appointment of Directors

The nomination and appointment of directors will be based on appropriate qualifications and experience under the following principles:

- Qualifications in accordance with legal requirements, SET and SEC regulations, and Company regulations. Qualifications of all Directors must be consistent with the strategies and policies of the Company and must adhere to the principles of good corporate governance for the benefit of the business development and success of the Company.
- Gender diversity, age, knowledge, ability, experience, and expertise in various fields as needed by using Director Qualifications and Skills Matrix for consideration.
- Educational and work background that is beneficial to corporate governance, transparency, morality, responsibility, maturity, and professionalism.

The Nomination and Remuneration Committee is responsible for screening all candidates for director positions, whether for positions as representatives of shareholders or positions as independent directors. The Committee shall consider the suitability of said candidates based on the appropriateness of their skills and experience according to the above criteria. As the Company gives the right to its shareholders to nominate directors of the Company, the Committee shall consider candidates from the list of names proposed by shareholders and from the Director Pool of the Thai Institute of Directors (IOD) and shall present these to the Board of Directors for consideration. However, the appointment of new directors to replace directors whose tenures are expired must be approved by individual shareholders, and voting must be carried out according to the Company's regulations.

Director's Remuneration

The company has criteria for determining the remuneration of the board of directors that take into account the board's duties and responsibilities as well as the board's performance. The Nomination and Remuneration Committee will consider the types of remuneration, guidelines and methods for paying compensation, including the amount of remuneration and other benefits for the Board of Directors and sub-committees that are suitable with their duties and responsibilities, and in accordance with the company's operations as well as market conditions at all times.

Independence of the Board of Directors from the Management

The Board of Directors has clearly separated roles, duties, and responsibilities between the Board of Directors and the management, and has a policy on segregation of duties between the Chairman of the Board

of Directors and the Managing Director shall not be the same person, in order to maintain a balance of power and transparency. The duties of supervision and management are separated as follows:

The Chairman of the Board of Directors must be an independent director and have no relationship with the management in order to take responsibility as the leader of Directors and act as the chairman of the Board of Directors' meetings and shareholders' meetings by encouraging all directors to participate in the meetings, including helping, advising, and monitoring the management of the Board of Directors and sub-committees to achieve success in accordance with the approved business plan.

The Managing Director is the leader of the management by determining the roles and responsibilities of the management in operating and managing the company in accordance with the policies, plans, goals, regulations, and company rules, including the resolutions of the Board of Directors meeting with the budget that has been approved strictly and honestly, and to protect the interests of the company and the shareholders according to the principles of good corporate governance by reporting the progress from operations in accordance with resolutions and significant matters to the Board of Directors meeting quarterly.

Directors' Development

The Company encourages the members of the Board of Directors to develop their knowledge and experience by attending educational and observational trips, training, and seminars covering a variety of courses that will aid in enhancing their knowledge and understanding of the role of a director and any other matters related to the performance of the Board of Directors and for effective management in accordance with the principles of good corporate governance. All new-appointed directors and executives will receive a company orientation in order to be adequately briefed on the company's information, code of conduct, policies and business information prior to assuming their responsibilities.

Evaluation of the Board of Directors

The Company has specified in the corporate governance policy and the principles of good corporate governance of the Company that the Board of Directors shall conduct an annual self-assessment of the Board of Directors as a whole and individual directors in order to use the assessment results to improve the Board of Directors' performance to be more efficient.

6.1.2 Policies and Practices related to Shareholders and Stakeholders

The Company has determined policies and practices related to all shareholders and stakeholders in the Corporate Governance policy under the category of Equitable Treatment of Shareholders and the Roles of Stakeholders, which are summarized as follows:

1. Rights of Shareholders

The Company shall treat each and every shareholders equally, whether minor shareholders, major shareholders, or institutional investors, regardless of gender, age, disability, race, nationality, religion, or political opinion, and that all shareholders have the right to be treated equally and fairly.

The Company encourages shareholders to exercise their basic legal rights such as receiving a share of the business' profits in the form of dividends equally, trading or transferring the company's shares as specified by law, receiving the business information sufficiently and timely for making decisions, attending meetings to exercise voting rights in appointing and/or removing directors, determining directors' remuneration, appointing auditors and determining audit fees, and other rights according to the provisions specified by laws and relevant regulations, including the company's regulations.

In addition, the Company supports and treats shareholders equally in all matters such as providing important and up-to-date information via the Company website, providing opportunities for shareholders to propose an agenda item for the annual general meeting of shareholders and nominate candidates for directorship, arranging the company visits for shareholders, and providing opportunities to participate in social responsibility activities of the Company. The Company refrains from taking any action that would violate or infringe upon the rights of shareholders in any way.

2. Shareholders' Meeting

The Board of Directors considers the Annual General Meeting of Shareholders (AGM) is a very important event. AGM is held within 4 months from the Company's closing date of an accounting period to accommodate shareholders' participation in monitoring the Company's performance. An extraordinary general meeting of shareholders can be held by the Board of Directors on a case-by-case basis to consider a special agenda that affects or involves the shareholders' interests and requires the shareholders' approval. TTW's AGM was arranged in accordance with the AGM checklist issued by the Thai Investors Association, Listed Companies Association, and SEC.

Due to the coronavirus disease 2019 (Covid-19) pandemic which has continued to spread until the year 2022, the company is aware and concerned about the health and safety of all attendees. Therefore, the Company continues to strictly monitor and maintain social distancing and has considered holding the 2022 Annual General Meeting of Shareholders in Electronic Means (E-AGM) with details as follows:

2.1 Before the Shareholders' Meeting Date

The 2022 Annual General Meeting of Shareholders had to be held by Electronic Means, and the Company engaged Inventech System (Thailand) Limited to provide the service and system in accordance with the Emergency Decree Governing E-Meeting B.E.2563 (2020), including related laws and regulations, by using the Inventech Connect system for registering to attend the meeting (e-Request) and voting (e-Voting), which mentioned system standard and criteria were in line with the conditions and procedures as stipulated in the Emergency Decree Governing E-Meeting B.E.2563 and the announcement of the Ministry of Digital Economy and Society.

The Company placed great emphasis on the security of shareholders' personal information, by preparing a Personal Data Protection Notice for the 2022 Annual General Meeting of Shareholders, in order to

ensure the shareholders that the company realized the importance of Personal Data Protection with the standards stipulated by the Personal Data Protection Act.

The Company has prepared meeting documents that contain complete information of all important matters for consideration of the shareholders' voting, along with guidelines for shareholders, registration, proxy form, and rules for attending shareholders' meetings via electronic media, by disseminating information to shareholders in advance and encourage shareholders to participate in the annual general meeting of shareholders as well as facilitating the exercise of voting rights in the event of being unable to attend the meeting in person as follows:

2.1.1 Provided an opportunity for shareholders to propose an agenda item for the annual general meeting of shareholders and nominate candidates for directorship in advance from September 1, 2021 to December 31, 2021. The company disclosed the criteria and procedure on the company's website and notified the shareholders via the SET Link system.

2.1.2 The meeting schedule and agenda were distributed via the SET Link system of SET and company's website on February 22, 2022, that the shareholders could plan their schedule for attending the meeting. The record date for the rights to attend the meeting and receive dividends was also detailed in the meeting notice.

2.1.3 Prepared the meeting notice with details of each agenda in Thai and English versions by separating each agenda clearly. The appointment of directors and the consideration of directors' remuneration were separate agenda items. Each agenda item consisted of background, objective and rationale, Board's opinions, number of votes needed, policy and criteria of determination of remuneration, policy and criteria of director nomination, profiles of nominated directors, details of previous minutes, conditions and procedures of attending the meeting, 3 proxy forms (forms A, B, and C), as required by the Department of Business Development, Ministry of Commerce.

2.1.4 Disseminated the meeting notice and relevant documents together with the 56-1 One Report form on the company's website and notified shareholders via the SET Link since March 11, 2022, 30 days before the shareholders' meeting, so that the shareholders had sufficient time to study the information in advance of the meeting date.

2.1.5 Meeting notices were delivered to shareholders by post on March 21, 2022, 21 days prior to the AGM date. Contact numbers were also provided for further inquiries and for proposing additional information relating to the appointment of directors, as in compliance with the best practice guidelines by SEC and SET.

2.1.6 The Company encourages and supports all shareholders and institution investors participation and voting in the shareholders' meeting.

2.1.7 Provided an opportunity for shareholders to submit questions about the shareholders' meeting in advance of the meeting date by clearly determining the criteria for submitting questions in advance,

and disseminated such criteria on the company's website in order for shareholders to get maximum benefits and legal rights.

2.1.8 Ensured that no action was taken that limits the opportunity for shareholders to attend the meeting or creates unreasonable burdens on shareholders.

2.2 On the Shareholders' Meeting Date

TTW strongly encouraged all shareholders to exercise their rights by attending and voting at the shareholders' meeting by facilitating the shareholders' attendance and conducting the meeting transparently. The company used efficient technology in the shareholders' meeting, including registration, vote counting for the result announcement, in order to not violate or deprive the shareholders' rights. Shareholders' inquiries and opinions were welcomed and taken into consideration as follows:

2.2.1 The company informed shareholders of the guidelines for the registration method, proxy method, and procedures for attending the AGM via electronic media (e-AGM) in the meeting notice and facilitated information to shareholders via telephone and e-mail.

2.2.2 Encouraged shareholders who are unable to attend the meeting in person to appoint other persons to attend the meeting and vote on their behalf by using proxy forms in which shareholders could determine their voting rights that the company attached with the meeting notice. However, in the AGM, the company would nominate at least 1 independent director for shareholders to consider as their proxy to attend and vote on their behalf at the meeting instead of attending the meeting in person.

2.2.3 The company conducted meetings via electronic media by using the Inventech Connect system for registering to attend the meeting (e-Request) and voting (e-Voting). The meeting would present information on each agenda in the order specified in the meeting notice, and the presentation of the agenda would start with the background, supporting rationale, and recommendation. The significant information and details were included in the meeting notice delivered to shareholders without any ad-hoc agenda during the meeting.

2.2.4 Provided an opportunity for shareholders to express their opinions and raise questions at the meeting before voting on each agenda that shareholders could raise questions during the meeting after completing each agenda. The company secretary would read the shareholders' questions, so that the meeting would answer all questions, which would be completely recorded in the minutes of the meeting.

2.2.5 Encouraged to use the voting cards for all agendas. In the event that there are many items in an agenda, the resolution should be made for each item separately and the results of voting for agreeing, disagreeing, and abstaining for each item should be disclosed to the meeting and recorded in the minutes of the meeting for transparency and accountability.

2.2.6 Encouraged directors, executives, and auditors to attend the AGM altogether in order to answer shareholders' questions and acknowledge their opinions. For the AGM 2022, 12 directors included the Chairman and directors attended the meeting, which accounted for 100 percent of the total number of the Board

members (Mr. Phongsarit Tantisuvanitchkul attended the meeting via VDO Conference as per the minutes of 2022 AGM). The Chairman of the Board, the Chairmen of all subcommittees, and the Managing Director together with Executives also attended the meeting and explained details of information regarding agenda items and answered shareholders' questions.

2.2.7 TTW identified the names of directors having conflicts of interest in respect to any agenda item in the meeting notice. Those directors were not present in the meeting while any given agenda item was considered.

2.2.8 The 2022 AGM, Ms. Nitipan Wittayakul, a shareholder rights protection volunteer from the Thai Investors Association (TIA), was invited to monitor the vote-counting process via electronic means.

2.2.9 Provided auditors who did not perform the audit duties of the company and lawyer who was not the company's legal advisors witnessed the meeting.

2.2.10 Shareholders, who registered after the meeting had already started, were allowed to vote for the ongoing and remaining agenda items.

2.2.11 Offices of N & K Co., Ltd. was hired as an inspector to audit shareholders' or their representatives' registration documents, meeting quorum, compliance of the voting and vote-counting procedures with the Company's Articles of Association, as well as to inspect shareholders' ballot collection and voting results. In this regard, the inspector reported that the meeting and the voting procedures were transparent and in compliance with the Company's Articles of Association, relevant laws, and SET's best practices of good governance. In addition, the inspector reported that TTW highly respected the rights of its shareholders to actively participate in the meeting and voice out their opinions, as well as efficiently facilitated shareholders in all matters.

For the 2022 AGM, there were 188 shareholders attended the meeting, which 33 shareholders attended the meeting by themselves and 155 shareholders by proxies, represented 2,841,822,289 shares which accounted for 71.22% of the total issued shares.

2.3 After the Shareholders' Meeting Date

2.3.1 After the 2022 AGM, TTW concluded resolutions for each agenda item to shareholders and SET via SET Link according to SET's criteria of information disclosure. In 2022, the meeting resolutions were notified on April 11, 2022, immediately after the meeting.

2.3.2 TTW prepared the minutes of the meeting which recorded the name list of directors and executives together with their titles, auditors and meeting inspector attending the meeting, voting and vote counting procedures, voting card instructions, the Board's recommendations, inquiries and recommendations of shareholders, and clarifications from the management. Details on the number of approvals, disapprovals, abstentions and voided ballots, and resolutions of each agenda item were included and published on the company's website: www.ttwplc.com on April 20, 2022 which occurred within 14 days after the meeting date as required by SET's criteria.

2.3.3 TTW disseminated images and sounds recorded in the meeting on its website for absent shareholders' acknowledgement.

2.3.4 The shareholders' meeting approved the dividend payment, the company notified the meeting resolution including, details of dividend payment to shareholders through the SET Link system and coordinated with the TSD and announced the dividend payment on Newspaper to ensure that shareholders received the complete and accurate dividend rights.

3. Equitable Treatment of Shareholders

The Board of Directors recognizes the importance of ensuring fairness and equality in the interests and treatment of all shareholders, foreign shareholders, and institutional investors, and to this end, has set forth a policy regarding the equitable treatment of shareholders in the good corporate governance policy of the Company. In addition to those practices prescribed by law, the policy includes the following practices:

- The right to vote at the meeting is in accordance with the number of shares held by the shareholders. One share is equal to one vote.
- Provide an opportunity for shareholders to propose items for the agenda for the annual general meeting of shareholders and nominate candidates for director positions in advance from September 1 to December 31 of each year. All criterias and procedures disclosed on the Company's website and notification sent to shareholders via the SET Link system of the SET.
- The Company has the policy to protect the rights of all shareholders that is no agenda point may be added to the meeting agenda without advance notification of all other shareholders. This is to provide shareholders with the opportunity to study meeting agenda information ahead of time before voting. All shareholders of the Company have the right to vote according to their number of shares. Each share equals one vote. No shares have any special privileges that would restrict or limit the rights of any other shareholders.
- Ballots were employed in vote counting for all agenda items for transparency and accountability. The appointment of an individual director was done by shareholders. Offices of N & K Co., Ltd. was invited as an inspector to ensure that the shareholders' meeting was conducted transparently and in compliance with the laws and the Company's Articles of Association. Shareholders, who were unable to attend the AGM in person, could vote through proxy. The 3 proxy forms as introduced by the Department of Business Development, Ministry of Commerce were provided, and 2 Company's independent directors who did not have conflicts of interest with the AGM agenda could be alternatively appointed as volunteer proxies. The proxy forms were made available for shareholders on TTW's website.

- Since most shareholders attended the AGM were Thai, the meeting was conducted in Thai. However, in order to facilitate foreign shareholders, TTW prepared the meeting notice and supporting documents in both Thai and English versions.
- Ballots were employed in vote counting for all agenda items, especially in the appointment of individual directors was done by shareholders, the votes equaled the number of shares held for the election of one director.
- The Board of Directors has established measures to prevent the use of inside information (insider trading) by any involved persons, including the Board of Directors and other executive management of the Company, as well as any employees in agencies with access to said information (including the spouse and minor children of said persons). Key principles of such are detailed in the guidelines for the prevention of the use of inside information.

4. The Prevention of the Use of Inside Information

The company has a written guidelines to prevent the use of inside information strictly in the Corporate Governance and Code of Conduct Handbook of the Company, in order to prevent the use of inside information for improper benefits for oneself and others. It is the duty and responsibility of the supervisor to control and ensure the maintenance of internal information according to principles. The use of inside information that has not been disclosed to the public or general shareholders for the benefit of trading securities by themselves or others is considered an unethical act of the company.

In addition, the company has defined the securities trading procedures for all directors and executives which requires to report one business day in advance before trading, including prohibiting any buying or selling of the Company's securities for a period of one month prior to the disclosure of financial statements to the public, along with communications to raise awareness to directors, executives and employees via email in order to ensure the correct practice in accordance with good corporate governance principles. The company discloses the Securities Trading or Changing by Directors and Executives Policy on the company's website at www.ttwplc.com in the section of "Corporate Governance" > "Securities Trading or Changing by Directors and Executives Policy".

5. Responsibility to Stakeholders

In addition, to protect the rights of shareholders, the Board of Directors has the policy to protect the rights of all stakeholders, which emphasized the issues that might affect business operation directly, and matters considered as duties that should be done to the society as a whole. Therefore, the Board of Directors has clearly determined policies and guidelines for each group of stakeholders in the company's good corporate governance policy and business ethics for directors, executives, and employees to adhere, which can be summarized as follows:

5.1 Responsibility to Shareholders

The Company takes into account the rights and equitable treatment of stakeholders in line with the Company's corporate governance policy and code of conduct. The Company is committed to representing shareholders by conducting business in a transparent manner with regard to the long-term growth of the Company's value, consistent returns, and providing information to all parties equally.

5.2 Responsibility to Employees

The Company and its subsidiaries have established employee policies and provided a manual of such policies so that all employees are clearly aware of the policies and the welfare practices that employees deserve, including fair and equal treatment of all employees without exception regardless of birthplace, race, religion, gender, marital status, language, or position. The Company does not use or support child labor, human trafficking, or any form of fraud or corruption. The Company also offers opportunities for employment for persons with disabilities. The Company has in place policies and guidelines regarding fair employee compensation and welfare at a level comparable to other businesses in the same industry.

The Company also provides a variety of benefits in addition to those prescribed by law, such as the establishment of a provident fund at suitable rates according to the length of employment, annual health checkups, medical expenses, health insurance, life insurance, accident insurance, etc. The Company provides office cars for executive management, allowing them to have greater flexibility and convenience in performing their jobs. The Company also promotes various activities for employees, such as the establishment of the TTW Running Club and participation in running events organized by external agencies, and has provided a first aid room, a gym and exercise equipment, in order to promote good health among employees.

During the coronavirus disease 2019 (Covid-19) pandemic, the Company provided preventive measures in the workplace such as Coronavirus 2019 screening for employees using the Antigen Test Kit (ATK), temperature monitoring before entering the workplace, social distancing, mask-wearing at all times while working. In addition, the company has provided additional group insurance for the coronavirus disease 2019. The Company also provided sufficient alcohol sanitizing gel and facemasks to employees and also carried out disinfectant spray sterilization to sanitize workplaces and water production plants, ensured workers were safe from the spread of Covid-19.

Throughout the year 2022, the Company and its subsidiaries had no disputes, litigation, or complaints between the Company and its employees. This also includes no accidents requiring time off work. Annual statistics of occupational accidents and sickness rates are disclosed in the Sustainable Development Report.

5.3 Responsibility to Customers

The company adheres to its obligations with customers as a manufacturer and distributor of tap water by adhering to the principles of treating every customer by delivering goods and services that are clean, sufficient, and continuous on the basis of fairness, can be verified, free from bribery and corruption, and to build

lasting relationships between each other. The company has set out policies and guidelines with customers. Regarding actions and responsibility to customers in concrete.

1. Provide accurate, sufficient, and up to date information for customers about the products and services without saying exceeding the truth that causes customers misunderstand about the quality, quantity, or any conditions of that product or service.
2. Comply with various conditions strictly for customers. In case that any conditions cannot be met, customers must be notified to find the solutions to solve the problems.
3. Contact with customers politely, effectively and should be reliable for customers.
4. Provide systems and processes for customers to make complaints about the quality, quantity, and safety of products and services, including the speed of response or delivery, and to take the utmost action in order to provide customers with quick response.
5. Maintain the confidentiality of customers and do not use it for the benefit of themselves or those involved wrongfully.
6. Do not request, accept, or pay any benefits, which indicates actions that are dishonest to customers.

In 2022, there is no dispute between the company and the customer. In the tap water production and distribution business, TTW can produce tap water for customers according to the contract. Overall, the availability of tap water is higher than the criteria specified in the tap water purchase contract, and able to produce tap water in accordance with the World Health Organization (WHO) standards, and from the satisfaction survey, customers are satisfied with the operations of the company with a total average of 94 percent.

5.4 Responsibility to Creditors

TTW observes the obligated commitment it has for all creditors by strictly conforming to terms and conditions of loan contracts without concealing actual financial status and by providing financial information to creditors periodically. TTW operates its business based on solid principles and in a disciplined manner. The company manages its capital in line with the proportion of the debts. TTW has defined the policy and practiced guidelines on how to deal with creditors properly, so to establish confidence and reliability in the eyes of creditors. The company adheres to the principles of practice as below:

1. The company shall make the repayment of all debts, loans, and interests; and fulfill the responsibilities for all collaterals. The company shall strictly comply with the terms and conditions of contracts and agreements.
2. In the case that TTW cannot fulfill the conditions set in agreements, TTW shall notify the creditors in advance in order to mutually find a solution.

In 2022, TTW and its subsidiary companies were able to completely fulfill all the terms and conditions that had been agreed with the creditors; and never committed any defaults on loans.

5.5 Responsibility to Business Counterparts

The major stakeholders of TTW are business counterparts from outside (external service providers). TTW selects its counterparts by considering whether their business strategies are consistent with that of TTW, which may involve competitiveness, continuity of business, customer protection and service, and risk management methods. TTW has formulated policies for dealing with counterparts properly, which emphasize fair treatment to them, as overseen and directed by the company in accordance with its by laws. The counterpart selection criteria of TTW are as follows:

1. Follow the quality policies, environment, sanitation health, and safety of the company.
2. Comply strictly with the regulations in order to work safely with the contractor.
3. Do not use child labor under the age of eighteen years to work.
4. In the case of business partners use foreign workers in the workplace, documents or permits must be allowed from the relevant government agencies to show to the company. They should have received permission or approval from the company and/or those of the company assign only.
5. Treat their workers with equality and must not violate human rights or good humanitarian principles
6. Act or take care of their labor as appropriate and in accordance with the Labor Protection Act that was enforced at that time.

With these areas of selection criteria, TTW has been able to maintain the excellent quality of tap water manufacturing and distribution, free from any potential risks to customers.

In 2022, no dispute occurred between TTW and its subsidiary companies and business counterparts or contractual counterparties to resist bribery and corruption.

5.6 Responsibility to Competitors

TTW treats business competitors within a frame of proper competition and does not take advantage of the competitors through an illegal method. TTW has defined rules, criteria, and standards that are favorable for working together with competitors. For example, TTW shall not search for business information about counterparts and competitors in a wrongful way; and shall not destroy the reputation of competitors by making a negative accusation towards them. TTW has adopted a concrete policy about how to treat its competitors fairly and responsibly. The company is Thailand's largest producer and distributor of tap water by producing and distributing tap water to the Provincial Waterworks Authority that is its business counterpart without any direct competitors. However, the Company has set policies and guidelines for competitors as follows:

1. Treat competitors within the framework of fair and fair competition etiquette.
2. Do not make agreements with competitors that restrict inappropriate competition, such as discussions about costs or pricing with competitors.
3. Do not destroy the reputation of business competitors by malicious and without false information.
4. Do not seek confidential information of business competitors by dishonest methods or by using inappropriate methods.

5. Do not take any action that is an infringement of intellectual property and the copyrighted work of others or competitors.
 6. Be careful in participating in research, exchanging information or participating in any activities with competitors; if they wish to use any information, do use from the public sources first.
 7. Do not make any agreements which limit business opportunities without unfair treatment to business partners, dealer, or another person.
 8. In the event that the company will join the business overseas by joint investment, merger, or acquisition of other operators, the responsible agency must check the laws and regulations about the prevention of non-discrimination or trade competition of that country.
 9. Do not discriminate in any actions of the company to stakeholders to be affected by that operation.
- In 2022, no dispute occurred between TTW or its subsidiary companies and the competitors.

5.7 Responsibility to Community and Society

TTW operates its business with a cautious concern about communities and society, especially the communities where TTW has an operation. It has been included in the mission of TTW that the company shall be a good member of society and extend attentiveness towards communities. Therefore, this has been a part of duties and responsibilities to be performed and taken by the management and all employees, starting from providing true and updated information, living with communities peacefully by paying respect to their cultures and traditions, taking part in developing the good quality of life for community people, and cooperating with communities in developing lively environment of localities, which would lead to sustainable development for society as a whole, as well as participation in the enhancement of a quality of life and co-operate with local creative communities and society for sustainability.

5.8 Responsibility to Society and Environment

The Company places great importance on sustainable business practices and operations. As the Company's mission is clearly stated; "To grow on a firm, continuous, and sustainable basis in order to accomplish our vision through the balance of interests among customers, employees, business partners, shareholders, communities, and environments". The Company, therefore, is as committed to protect and preserve the environment as it does its business.

The Company understands that only compliance with regulations is not enough to protect and conserve the environment and that there are a wide variety of important factors that must be observed and practiced in addition to following established rules and guidelines. This includes the development of internal plans to support emergency situations, good quality control systems, continue search for modern technological advances that can reduce environmental impact, the compliance with regulations regarding emergency situations, the conducting business with environmental and safety standards, and the management of waste and noise per the International Standard System ISO 14001.

In addition, the company has educated and trained employees on environmental management to make employees truly understand. The operation results and various environmental and safety quality tests will be stored systematically and regularly monitored by the safety inspection department, including the treatment of stakeholders as well as participation in social and community development in the areas where the company operates by conducting business with good governance as a basis for the management system that is efficient, fair, transparent and accountable, it does not only build confidence for shareholders, stakeholders, and all parties involved but also lead the business to growth and increase the capability of long-term competitiveness for the organization. The company reports the social and environmental responsibility performance in the Sustainability Report of the year 2022 disclose on the company's website <https://www.ttwplc.com/th/download/sd-report>.

5.9 Human Rights

TTW supports the conduct in compliance with “Universal Declaration of Human Rights” and other international standards of human rights by refraining from formulating any policies that would violate the human rights; and by operating its business in line with international standards of human rights. TTW also organized training for new employees regarding the code of ethics and human rights policy of the company. In 2016, TTW announced a whistleblower policy as the channel for employees to submit complaints about corruption, the violation of rules and regulations, or unfair treatment, to related work units. The activities defined by TTW in relation to human rights indicates very well that TTW gives a serious concern on transparency and compliance with good corporate governance principles.

In 2022, TTW did not receive any complaints regarding the violation of human rights from employees, business counterparts, and local people in TTW's operating areas. So, there is a certain level of confidence that TTW operation has not imposed (or does not have a potential to cause) any effects on local communities. The policies defined by the Board of Directors for all the management and all employees to refrain from violating human rights and comply with Universal Declaration of Human Rights, are as follows:

- Give priority to basic human rights to promote respect for rights and freedoms by not discriminating against or with views on race, color, religion, sex, nationality, age, education, disability, or any other status that is considered international human rights.
- Equally treat every process of employment, from recruitment to compensation, including working hours and holidays, performance evaluation, training and development progress planning, and others aspects without discrimination.
- The company does not use forced labor, child labor, and/or illegal foreign workers including punishment that is physical and psychological abuse of employees regardless of whether it is threatening, detaining, or any form of abuse or violence.
- The company will treat all employees with equality, provide equal opportunities to work under the rules and regulations of work laws and make announcements from the company which is lawful

including allowing employees to express opinions, complaints, rights to access the process of hearing, and clarification before disciplinary action within the organization.

- The company encourages employees to exercise their rights as citizens by constitutionality and other relevant laws associated. And will not violate human rights of any stakeholders related to the company when there is a conflict or political instability.
- The company and all employees do not support corruption related to any business of partners, customers or other stakeholders which violate International Human Rights' principles and/or corruption.

The Company has established penalties for offenders in said matters at the highest level and has provided channels for whistleblowing through the Human Resources Department or the Company Secretary. All said complaints would be kept confidential.

5.10 Anti-corruption practices and Bribery

TTW has adopted a zero-tolerance policy regarding the corruption and bribery disclosed on the Company website. Board of Directors, executive management, supervisors, employees at all levels, or any related persons are prohibited from involving in all forms of corruption in any business transactions; and they shall comply with rules, regulations, and laws of any countries that TTW has been dealing a business. This policy shall be reviewed on a regular basis to identify a necessary revision for catching up with the new amendments of rules, regulations, standards, and laws; and with the changes the in business. TTW has adopted a policy on anti-corruption and bribery and defined the principles in the code of business ethics prohibiting the employees from requesting or receiving any benefits or assets that may motivate them to perform their duties in a wrongful way, omit the performance of some duties, or cause the company to lose a rightful benefit. Employees are also prohibited from offering or presenting benefits or assets to outsiders to motivate such persons to commit or omit action illegally in favor of a malpractice in his/her position.

5.11 Political activities

The Company has set a policy of respecting the law and human rights principles by requiring directors, executives, and employees to operate the company's business in accordance with relevant laws, rules, and regulations, as well as not taking part in knowing, assisting, or taking any action that violates the laws or regulations.

5.12 Conflict of Interest

The Board of Directors has the policy to prevent conflicts between personal interests and the interests of the company as defined in the Code of Conduct for directors and employees as follows:

1. Take care of the company compliance with the rules, procedures, and disclosure of connected transactions as strictly required by law or regulatory agency and according to the company's regulations.
2. Avoid making transactions that are related to oneself or persons / juristic persons. That may cause conflicts of interest with the company.

3. In the case of a transaction that is a connected transaction that does not comply with general trading conditions according to the principles approved by the Board of Directors or the nature and size of the transaction, is not within the authority of the management, must be reviewed and commented by the Audit Committee before proposing for approval from the Board of Directors or shareholders.
4. In the event that it is necessary to make a connected transaction, the transaction must be in accordance with general trading conditions according to the principles approved by the Board of Directors with transparency and fairness, as if making transactions with third parties and taking into account the maximum benefits of the company.
5. Stakeholders must not take part in considering the items that they have a conflict of interest.

5.13 Intellectual Property Rights

TTW has adopted the policies and practice guidelines regarding the non-infringement of intellectual property or copyright. TTW has a team of risk management officers chaired by the Managing Director. This team shall submit the report on the implementation of this matter to the Risk Management and Corporate Governance Committee for review, which covers the mandatory requirement for all employees to sign their names in an agreement that they shall not commit any crimes related to computer use, and any infringement of intellectual property. TTW has adopted a policy regarding the use of the information technology system of TTW Group and subsidiary companies. The work applications or software programs of employees are inspected to prevent the use of infringed or non-work-related software. Therefore, the company has established an intellectual property management policy for the executives and employees of the company and its subsidiaries to comply.

1. Comply with the laws related to intellectual property rights in Thailand and every country where the company has operated business, which is considered the elementary norm.
2. Disclose performance, invention, and any knowledge resulting from operating duties or supporting by the company to the supervisor to acknowledge accurately, completely, and immediately.
3. Maintain and protect the company's intellectual property rights both inside and outside of the country, including respecting and not infringing on other people's intellectual property.
4. Keep important documents, trade secrets, and any other confidential information of the company, business partners, and stakeholders in a secure place and with appropriate and standardized access methods, including not disclosing to other people who are not related. This duty will continue to be effective even if the company's executives or employees have retired.
5. Do not use intellectual property and confidential information of the company, business partners, and stakeholders to reproduce, modify, or use by any means for personal or others' benefits without permission.

6. Report to the supervisor when seeing any actions that infringe on intellectual property, may lead to infringement of intellectual property, or any actions that may cause any dispute regarding intellectual property of the company or other people.
7. Support the intellectual property cooperation with external agencies, both in the public and private sectors.

5.14 Whistle-Blowing

TTW has provided measures for complaints and clues by disseminating such measures in the Principles of Corporate Governance and on the website of the company and reviewed this measure in order to ensure that complaints are effective and complete. And also helps in tracking and monitoring the performance of directors, executives, and employees of the TTW Group to comply with laws, regulations, principles of corporate governance, and Business ethics and do not take any action that may indicate fraud.

6. Disclosure and Transparency

The Company recognizes the importance of disclosing financial information, non-financial information, and other important information in an accurate, comprehensive, timely, and transparent manner via equal and easy-to-access channels, according to the rules and regulations set forth by regulatory agencies, the principles of good corporate governance of the SEC, and the criteria for the evaluation of good corporate governance, in a manner that is suitable to the changing environment that responds to the role of online media technology. Disclosure of Company information includes written information in both Thai and English and non-written information covered all methods of communication that allow shareholders and stakeholders to acknowledge the dissemination of various types of information through communication channels such as in-person meetings, telephone conferencing, interviews, and various online media such as websites, Facebook, etc.

6.1 Information Disclosure Channels

TTW constantly updates significant information via the following channels:

- TTW's website at www.ttwplc.com
- Form 56-1 One Report
- Regulators agencies, SET's website, SEC's website
- Management Discussion and Analysis (MD & A)
- TTW's Online Media
- Mass media: PR News, Newspaper, advertising media, journals and television
- Shareholders, individual investors, securities analysts and institutional investors
 - Press conference to investors and analysts (Analyst Meeting)
 - Providing information for investors and analysts via phone
 - VDO Conference
 - Company Visit
 - Delivery of meeting notice by post

6.2 Responsible Units and Persons for Information Disclosure

- Responsible Units for information disclosure
 - Company Secretary Department: To SEC, SET, and major shareholders
 - Investor Relations Department: To minor shareholders, securities analysts, institutional investors, and individual investors
- Responsible Persons for information disclosure
 - Managing Director
 - Senior executives assigned by the Managing Director

6.3 Information Disclosure of Concerned Units

Company Secretary Department

The Corporate Secretary Division is responsible for disclosing information as required by SET and SEC in a correct, complete, and transparent manner and proceeded through procedures. In 2022, 17 notifications were submitted to SET.

All information published by the Company is comprehensive, accurate, and complete. For efficient disclosure of said information, the Company ensures information on its website is up-to-date and complete, allowing shareholders and investors to search quickly for any publicly available information. Said information is presented on the Company website in both Thai and English. Key information available is as follows:

- Company Profile, Vision and Mission, Organization Structure, and Company's subsidiaries data.
- Corporate Governance consisting of the principles of good corporate governance, corporate governance policy, and risk management policy.
- Board of Directors and Sub-Committee, Executives, Board's Charter, Responsibility and Term of Office of Board of Director.
- Information for investors consisting of significant financial information, the structure of shareholders, and major shareholders.
- Meeting notice, an invitation to attend the Annual General Meeting of Shareholders and Extra General Meeting of Shareholders, Form 56-1, and Annual Report.
- News and movements of the organization consisting of news about the business operation and CSR activities.
- Investor Relations and Company Secretary's contact.
- Providing information to analysts or investors who visit and consult with TTW executive management.
- Provide an on-site presentation to investors.
- Organize an Analysts Meeting.
- Providing information via public media such as newspapers, magazines, journals, and televisions.

Investor Relations Department

The Investor Relations Department is responsible for communicating with institutional investors, shareholders, and analysts, according to the fundamental principles of accuracy, adequacy, timeliness, equality, fairness, integrity, honesty, and compliance with the company's good corporate governance policy and principles, including has established an annual investor relations plan continuously. Due to TTW's emphasis on caution in disclosing information and equally treat all stakeholders. By determining the "Silent Period" that is, a period during which the investor relations do not conduct any direct investor relations activities, including meetings or calls with any investor or analyst two weeks before results announcements. If there is an analyst meeting conduct, it will be executed after the financial statements disclosed.

To ensure adherence to Principle 7: Ensure Disclosure and Financial Integrity of SEC's CG Code, the Board assigned the Investor Relations Department to develop a Code of Conduct for TTW's Investor Relations practitioners. The significant issues were as follows:

1. Accurate, adequate, and timely disclosure of essential and necessary information for investment decisions.
2. Retention of inside information.
3. Equal and fair disclosure of information by means of access and inquiry by all parties concerned.
4. Performance of duties with integrity in the profession on the basis of equal treatment without any discrimination and commission as personal incentives for personal gains other than for the benefit of the Company and relevant stakeholders.

TTW also emphasizes information disclosure via investor relations activities. The executive's management has participated in the activities by presenting and meeting with investors to create a good understanding of the company's management, foster good relationships with investors as well as encourage the continuous exchange of opinions. In 2022, during the spread of coronavirus disease 2019 (COVID-19), other ongoing activities as follows:

Activities	Times
Seminars and meetings with investors and securities analysts.	1
Communicate information to investors and securities analysts Via online media (Social Media) including Facebook Fanpage, Instagram, Youtube Channel, LinkedIn.	1-2 times/week
Communication Via emails and phones	5 times/day
Communicate information via Factsheet (on the Company's website)	1 time/quarter
Communicate information via Listed Company Snapshot (SET Link)	1 time/quarter

7. Financial Statement Preparation

TTW is responsible for preparing financial reports that are accurate, complete, and transparent and protecting the Company's assets against loss or utilization of unauthorized persons, and preventing corruption and unusual operations in line with Thailand's generally accepted accounting standards, and regular

implementation of appropriate accounting policy, as well as considering the reasonability and prudence in the preparation of the company's financial statements to enhance stakeholders' confidence in financial reports. The Board has then assigned the Audit Committee to oversee the preparation of TTW's financial reports which must be correct, complete and in compliance with relevant laws, notifications, and regular implementation of appropriate accounting policy. The Board has also prepared a report on the Board's responsibility towards the financial reports, which covers significant matters according to the SET Code of Best Practice for Directors of Listed Companies as shown in the auditor's report in the annual report.

In 2022, the Company allowed the auditor from EY Office Company Limited to be the auditor of the Company, that is knowledgeable and professional. And received approval from the SEC by the financial statements of the company certified without conditions and correct as it should be in essence according to generally accepted accounting principles and approved by the Audit Committee / the Board of Directors before disclosing to the shareholders.

The Company has prepared a Management Discussion and Analysis (MD&A) report to provide an in-depth, analytical disclosure of financial status, performance factors affecting financial status, and any significant financial changes to shareholders and investors on a quarterly basis. Said report is disclosed via the SET portal system of the SET along with financial statements. It is also disclosed on the Company's website to facilitate the access by any other interested parties. Thus far, the Company has disclosed such information by quarterly and annual financial statements in advance before the due date. In addition, there has never been any history of amendment of said disclosed financial statements in any way.

In this regard, the Board of Directors carries out a review of internal control system efficiency via the Audit Committee in order to reasonably ensure that all recording of financial and accounting data is accurate, complete, and sufficient for maintaining assets and identifying any weaknesses so as to prevent any significant fraud or unusual operations.

6.2 Business Code of Conduct and Employee Ethics

The Board of Directors has established business code of conduct and ethics of directors, executives, and all employees of the company for relevant person to comply it as a guideline to perform duties with honesty and fairness to the company, all groups of stakeholders, shareholders, investors, society, community, and the government and population to provide clarity and convenience for directors, executives and employees of the company to be informed about the guidelines that the company expected in business ethics, which covers the following issues:

- To persuade, encourage, and motivate the executives and employees to collaborate to create value for the business.
- To create of confidence that the legal rights of stakeholders will be protected.
- To treat all stakeholders and all related parties with honesty, transparency, and fairness.

- To encourage everyone to be responsible for getting familiar and complying with the business code of conduct and ethics and company's related policies.

Follow-up of Compliance with Corporate Governance & Business Code of Conduct Handbook

If the company found the violation or non-compliance with the Corporate Governance & Business Code of Conduct Handbook, the company would handle according to the processes as follows:

1. Record of non-compliance with the Corporate Governance & Business Code of Conduct Handbook.
2. Present to the executives in each division for consideration.
3. Operate in accordance with the company's regulations.
4. Report the performance to the Risk Management and Corporate Governance Committee for acknowledgment to report to the Board of Directors.

Report of Non-Compliance

Directors, executives and staff have the duty to report an action which may violate the Code of Conduct. In case witnessing or being put under pressure/forced to take any action which violates the Code of Conduct, the person shall report the case to superior or senior executive or Internal Audit Department or Audit Committee, depending on whatever case may be. Besides, the report can be submitted via the company website <https://www.ttwplc.com/th/cg/whistle-blowing>. The report will then be forwarded to the Company Secretary and the Audit Committee. Alternatively, the report can be submitted via email: cg@ttwplc.com.

The Company has a policy to protect whistleblowers and related persons. They will receive appropriate and fair protection from the company. The company will keep information about the complaints as confidential which such information will not be disclosed to unrelated persons unless be required by law.

The full version of the corporate governance and business code of conduct's policies and guidelines are shown at <https://www.ttwplc.com/storage/cg/cg/files/20200513-ttw-cg-code-of-ethics-th.pdf>

6.3 Major Movements and Developments of Policies, Practices and Corporate Governance in the Past Year

6.3.1 Major Movements and Developments in the Past Year's Review of Policies, Practices and Corporate Governance or Charters of the Board and its Sub-Committees

In 2022, the Risk Management and Corporate Governance Committee and the Board of Directors have annually reviewed the Corporate Governance Policy and opined that the current Corporate Governance Policy of TTW is up-to-date and complied with the principle of good corporate governance under CG Code and other regulations. The Board of Directors therefore approved the latest amendment to the Corporate Governance Policy on June 2022 to add the information and re-arranged the items related to the Sub-Committees in the Corporate Governance Policy, by focusing on the roles and responsibilities of the Board for each aspect of governance which is used as a guideline for directors, executives, and staff for the best practice of the Company.

The Updates of Sub-Committees' Charters

The Company has assigned appropriate roles and responsibilities of the Sub-Committees, to be consistent with the current situation and be up-to-date.

In 2022, the Board of Directors has reviewed and approved the charters of all sub-committees, such as the Executive Committee, Audit Committee, Risk Management and Corporate Governance Committee and Nomination and Remuneration Committee, to be in line with current corporate governance.

Communication of the Corporate Governance Policy

The company has prepared the Corporate Governance & Business Code of Conduct Handbook in writing, which consists of the main contents such as corporate governance principles, corporate governance policies, business code of conduct, and employee ethics, in order to communicate with the Board of Directors, Executives and Employees, to adhere as a good practice for the performance of their responsibilities, including signing for acknowledgment and compliance with the corporate governance & business code of conduct handbook. In addition, when new employees are hired, the company will provide such handbook for employees to read, understand, and sign for acknowledgment and compliance as well.

In 2022, the company reviewed the good corporate governance practices, related risk management, and anti-corruption, and monitored, evaluated, and reported on compliance with good corporate governance practices. The company also communicated and disclosed the corporate governance policy to the directors, executives, and employees at all levels, as well as all stakeholders through the company's website at www.ttwplc.com to create awareness and adherence to the correct practices, which will create confidence for all stakeholders. In addition, various media and activities are organized in order to enhance the understanding of good corporate governance among the company's employees by adhering to the key principles of corporate governance. In the past year, there were various activities as follows:

- Improve and prepare the corporate governance and business code of conduct handbook for employees to read and sign that they will comply with the company's code of conduct, including when new employees are hired, they will receive the manual for employees to read, understand, and sign that they will comply with the company's code of conduct.
- Prepare for the employee orientation to provide advice and create an awareness of the corporate culture and the good corporate governance and business code of conduct, including the company's anti-corruption policy.
- Encourage all directors, executives, and employees of the Company to report the interests of self, family, and related legal entities. Including in the case of changes in information, such information must be notified as soon as possible in order to encourage transactions of the company's groups to be transparent, reasonable, and in the company's best interests.

- Disclose business ethics information, good corporate governance guidelines, and anti-corruption guidelines to directors, executives, and employees, in order to properly raise awareness of their duties through various channels and activities, such as:
 - Internal communication through the Company's intranet system, such as the publication of electronic mail for the request for cooperation to refrain from trading or changing possession of Company's security.
 - Corporate Communication on the topic of CG Corner via e-mail and news board of departments.
 - Prepare for the quarterly meeting activities between Employees, Executives, and Managing Director.
 - Prepare for lectures and internal training to educate employees and provide a test of knowledge before and after the lecture.
 - Provide self-assessment forms for employees in order to review compliance with the company's code of conduct.

6.3.2 Adherence to Corporate Governance Best Practice Policy

A review of the Corporate Governance Policy in 2022 by the Board of Directors showed strict compliance with the relevant policies and guidelines. However, some principles held by the Company are different from CG Code 2017. The differences are as follows:

Unaccomplished Items	Reasons
1. The Board of Directors should determine that independent directors can continually assume director positions for not longer than 9 years since the date of the first appointment.	The Board of Directors has not determined the period of office for an independent director, director, and sub-committee to assume, as it is believed by the Board of Directors that every director has the knowledge, ability, experience, and an understanding in the business operations, with independence in expressing opinions deemed beneficial for the company.
2. The Board of Directors should determine the maximum length that directors and members of committees can assume their positions.	

6.3.3 Other Practices in accordance with Good Corporate Governance Principles

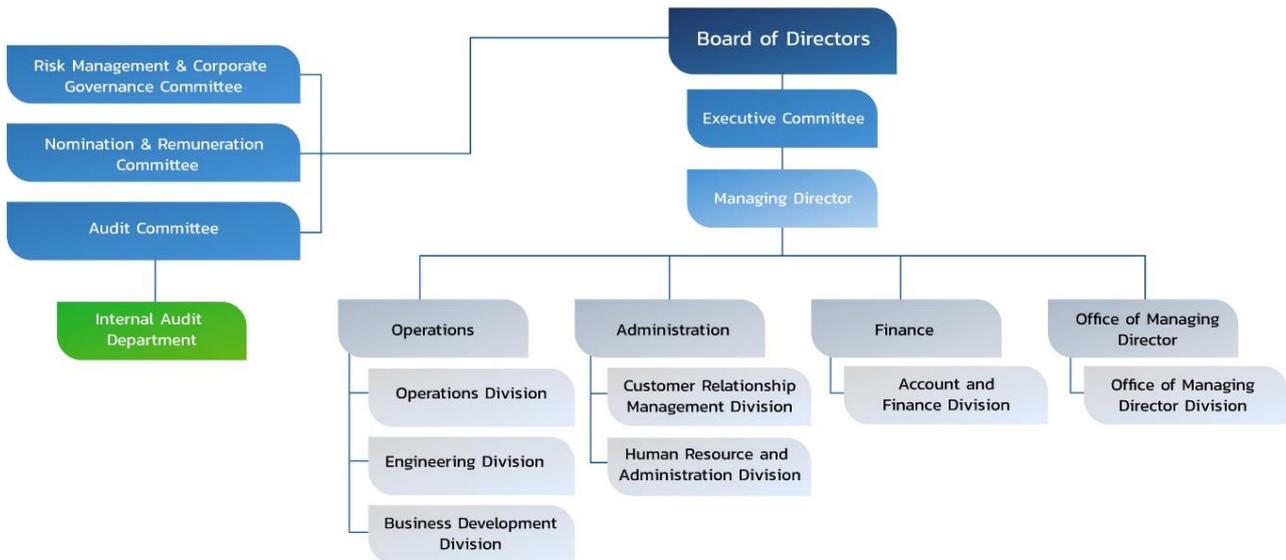
In the past year, the Company's Board of Directors and all employees consistently complied with good corporate governance policies. In 2022, there are no situations in which the operations do not comply with the policy. As a result of this commitment, the Company received a number of awards and accreditations for its good corporate governance for the year 2022 as follows:

1. The Thai Institute of Directors (IOD) announced the results of their Corporate Governance Report of Thai Listed Companies for 2022 (CGR), with TTW receiving a rating of "excellent".
2. TTW was selected for the Thailand Sustainability Investment (THSI) listing for the year 2022 in the SET market capitalization of THB 30 billion - THB 100 billion category.
3. The Thai Investors Association (TIA) announced that TTW received 100 points (Full score) in the quality assessment by the 2022 Annual General Meeting of Shareholders.
4. TTW was awarded the ASEAN Asset Class PLCs from the ASEAN CG Scorecard project for the year 2021.

7. Organizational Structure and Significant Information about the Board and Its Sub-Committee, Managements, Employees, and Others

7.1 Organizational Structure

TTW Public Company Limited As of 31 December 2022



Remark : – Legal and Compliance Department under the Office of Managing Director.

7.2 Information of Board of Directors

7.2.1 Composition of the Board of Directors

The Board of Directors (“Board”) has main responsibility to conduct business in a way that will benefit TTW, shareholders, and stakeholders included employees and communities where TTW operates its business. Additionally, the Board works with the Management in formulating TTW’s vision and policy and approving a corporate budget. The Board also monitors the Management’s performance and suggests sound resolutions to problems, in accordance with the law, objectives, and regulations of the company. As well as resolutions of the shareholders’ meeting that are lawful by establishing a structure for the board of directors and management that can be adequately inspected and balanced. The composition of the Board of Directors is as follows:

1. The Board shall be composed of experts with a wide range of experience in various fields. The Company has to additionally consider knowledge, ability, experience, and management expertise of that person (Board Diversity). There shall be sufficient directors to govern and supervise the corporation not less than five (5) directors shall sit on the Board. The Board shall have one Chairman and the remaining members shall be

directors. At least one director shall be experienced in the area of tap water production and infrastructure business, and at least one director shall be experienced in the area of finance and accounting.

2. Independent and non-executive directors must constitute a majority of the Board, and at least one-third of the member and not less than three (3) persons must be independent directors, in order to ensure balance between executive and non-executive directors and can express their opinion freely.

As of 31 December 2022, the Board of Directors, as per affidavit of the Company, consisted of the following 12 members; including

- 11 non-executive directors, 91.66% of total directors, comprising:
 - 4 independent directors, 33.33% of total directors,
 - 7 representative directors, 58.33% of total directors, and
- Managing Director, the only executive member, 8.33% of total directors.

The composition based on the diversity of gender, individual's skills, and experiences that would contribute to the balance of board composition and benefit to Company's business as follows:

- Diversity of gender

Gender	Number	Percentage
Male	10	83.33
Female	2	16.67
Total	<u>12</u>	<u>100.00</u>

- Diversity of expertise and experiences

Director	Water Business/Energy Business/Engineering	Accounting/Finance/Economics/Business Administration	Law	Strategic/Business Planning	Corporate Governance/Internal Control	HR Development
1. Dr.Thanong Bidaya	✓	✓	-	✓	✓	✓
2. Mr.Plew Trivisvavet	✓	✓	-	✓	✓	✓
3. Mr.Phongsarit Tantissuvanitchkul	✓	✓	-	✓	✓	✓
4. Mr.Phairuch Mekarporn	✓	✓	-	✓	✓	✓
5. Mr.Somnuk Chaidejsuriya	✓	-	✓	✓	✓	✓
6. Mr.Yuttana Yimgarund	✓	-	✓	✓	✓	✓
7. Dr.Sombat Kitjalaksana	✓	✓	-	✓	✓	✓
8. Mr.Suvich Pungchareon	✓	-	✓	✓	✓	✓
9. Mrs.Payao Marittanaporn	✓	✓	-	✓	✓	✓
10. Mr.Kaoru Umehara	✓	-	✓	✓	✓	✓
11. Mr.Hideo Matsumoto	✓	✓	-	✓	✓	✓
12. Ms.Walainut Trivisvavet	✓	✓	✓	✓	✓	✓
Total	12	8	5	12	12	12

In addition, the company has set other compositions related to the Board of Directors as follows:

Directors' Terms

1. The term which directors will serve is based on the Company's Articles of Association. In every Annual General Meeting of Shareholders, one-third of the directors must retire; moreover, if this number is not a multiple of three, then the number nearest to one-third. The directors who have been longest in office shall retire. The directors who have completed their terms may be re-appointed.

2. Independent directors shall not hold office continuously for more than 3 consecutive terms or 9 years, whichever is longer, unless the Board considers it necessary for such independent directors to continue in office, in which case the Board can extend the term.

Board of Directors Meeting

The company requires that the Board of Directors meet on a regular basis in order for the Board of Directors to successfully perform its duties and obligations as follows:

1. The Board's meetings are officially scheduled throughout the year and well in advance. Board members are informed of these meetings in advance.
2. The Board shall meet at least seven (7) times a year. Extraordinary meetings are allowed if they are required.
3. The Board of Directors may appoint sub-committees to review and approve operations within the allocated scope. Incorporating a timeline for reporting performance into the Board of Directors' meeting agenda. Monitoring the progress of operations and being prepared to provide comments if performance falls short of expectations or the approved budget.
4. The company policy stipulates that for the minimum quorum at the time that the Board of Directors is to pass a resolution in the meeting of the Board, at least two in third of the total number of directors must be present. Additionally, any directors who may have involvement or interests in any meeting agenda items must refrain from commenting on and must abstain from voting on said agendas.
5. In each meeting, the meeting agenda will be clearly specified in advance and a meeting invitation letter shall be sent to the attendees along with the agenda at least 10 days before the meeting. Any supporting documents will be submitted at least 7 days in advance so that the Board of Directors has sufficient time to study all related information before attending the meeting.
6. The company secretary shall be responsible for organizing all meetings, including shareholder meetings, Board of directors meetings, and subcommittee meetings, and shall provide advice regarding legal matters and compliance with policies, regulations, and rules set forth by the SET and the SEC regarding Board meetings.
7. The company secretary is also responsible for recording the minutes in writing, submit them to the Chairman of the Board for review, and then circulate them to each board member within 14 days of the meeting. The minutes must contain all the meeting resolutions along with sufficient background information, and be prepared in accordance with relevant laws.
8. The Board of Directors prescribes meetings of non-executive directors as appropriate without executive directors. or the management participated in the meeting to provide an opportunity to discuss various problems relating to the company's business or management matters that are of interest Then invite the executive directors to come to know the information discussed in the meeting for study and practice.

7.2.2 Board of Directors and the Authorized Directors of the Company

The Articles of Association of the Company specifies that the Company must have a Board of Directors which consists of no less than 5 persons with proper qualifications under the law. No less than half of the Board of Directors shall have residency in the Kingdom of Thailand. The Board of Directors shall perform their duties in conformity with the law, the company's objectives and the Articles of Association as well as the resolutions of shareholder meetings.

As of 31 December 2022, the company's Board of Directors comprises the following 12 members:

Director	Position	Date of Appointment
1. Dr.Thanong Bidaya	Independent Director and Chairman of the Board of Directors	17 December 2008
2. Mr.Plew Trivisvavet	Director and Vice Chairman of the Board of Directors	22 May 2008
3. Mr.Phongsarit Tantisuvanitchkul	Director, Chairman of the Executive Committee, and Nomination and Remuneration Committee	25 February 2019
4. Mr.Phairuch Mekarporn	Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee	22 May 2008
5. Mr.Somnuk Chaidejsuriya	Independent Director, Chairman of the Risk Management and Corporate Governance Committee, Audit Committee and Nomination and Remuneration Committee	22 May 2008
6. Mr.Yuttana Yimgarund*	Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee	7 December 2021
7. Dr.Sombat Kitjalaksana	Director and Executive Committee	22 May 2008
8. Mr.Suvich Pungcharoen	Director and Executive Committee	22 May 2008
9. Mrs.Payao Marittanaporn	Director and Risk Management and Corporate Governance Committee	17 February 2015
10. Mr.Kaoru Umehara	Director and Nomination and Remuneration Committee	20 August 2020
11. Mr.Hideo Matsumoto	Director, Executive Committee, and Risk Management and Corporate Governance Committee	21 December 2017
12. Ms.Walainut Trivisvavet	Director, Executive Committee, and Risk Management and Corporate Governance Committee, and Managing Director	1 March 2018

Ms.Sudarat Chiamchan, Assistant Managing Director, Office of Managing Director, as the Company Secretary.

Authorized Directors of the Company

- Any two of these six directors, Mr. Plew Trivisvavet, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana, Mrs. Payao Marittanaporn, Mr. Suvich Pungcharoen, and Ms. Walainut Trivisvavet jointly sign and affix the company's seal; or
- Either Mr. Plew Trivisvavet or Mr. Phongsarit Tantisuvanitchkul or Dr. Sombat Kitjalaksana or Mrs. Payao Marittanaporn or Mr. Suvich Pungcharoen, and or Ms. Walainut Trivisvavet either Mr. Kaoru Umehara or Mr. Hideo Matsumoto, totaling two directors, jointly sign and affix the company's seal.

Independent Directors

The Company has a policy to appoint independent director at least 1/3 of the total number of Board members and no fewer than 3 persons by the consideration of appointment of independent directors will consider the legal requirements, Notification of the Stock Exchange of Thailand and the Securities and Exchange Commission in Subject: Definition of Independent Directors As well as the Charter of the Board of Directors on the qualifications of the Board of Directors. The company has determined the qualifications of independent directors that more strict than the definition of independent directors of the SEC as follows:

1. Shall hold shares not exceeding 0.5% of the total number of voting shares of the Company, subsidiary, associate or juristic person that may be conflict.
2. Shall not be related to the management of the company, its subsidiaries and its associated companies, Moreover, shall not be a major shareholder, a temporary or full-time employees and an advisor regularly earning salaries from the company, its subsidiaries, its associated companies and its major shareholders.
3. Shall not be a person related by blood or legal registration as father, mother, spouse, sibling, or child, including spouse of child, of an executive, major shareholder, controlling person, or person to be nominated as executive or controlling person of the Company or its subsidiary.
4. Shall not have any direct or indirect conflicts of interest against the management of the company and its subsidiaries, and its associated companies for the period of not less than one year prior to nomination except the Board of Directors was attentively considered that such conflict of interest not affecting the operation and have independent decision-making of Independent directors.
5. Shall not be a director who has been appointed as representative of the company's director, major shareholder, or shareholders who are related to the major shareholder.
6. Shall be independently perform the duties and give the opinion or report on the result of duties as assigned by the Board of Directors, uncontrolled by the management or major shareholders and related person or relative of such person.
7. Shall be able to attend meetings of the Board of Directors and make an independent judgment.
8. Shall not operate any business which has the same nature as and is in significant competition with the business of the company or its subsidiaries or not be a principal partner in any partnership, or not be an executive director, employee, staff, or advisor regularly earning the salaries; or holding shares not exceeding 0.5 percent of the total number of voting right of any other company operating business which has the same as and is in significant competition with the business of the company or its subsidiaries.
9. Shall not have any characteristics which make him/her incapable of expressing independent opinion with regard to the company's business affairs.
10. Shall be able to look after the interests of all shareholders equally.
11. Shall be able to prevent conflicts of interest.

12. Shall not have been convicted of violating security or stock exchange laws, financial institution laws, life insurance laws, general insurance laws, anti-money laundering laws, or any other financial law of a similar nature, whether Thai or foreign, by an agency with authority under that certain law. Such wrongful acts include those involved with unfair trading in shares or perpetration of deception, fraud, or corruption.

As of December 31, 2022, the Company had four independent directors, who have the qualifications under the Notification of the Capital Market Supervisory Board, from a total of all 12 directors (one-third of all directors), as follows:

Name	Position
Dr.Thanong Bidaya	Chairman of the Board of Directors
Mr.Phairuch Mekarporn	Chairman of the Audit Committee and Risk Management and Corporate Governance Committee
Mr.Somnuk Chaidejsuriya	Chairman of the Risk Management and Corporate Governance Committee, Audit Committee, and Nomination and Remuneration Committee
Mr.Yuttana Yimgarund	Chairman of the Nomination and Remuneration Committee and Audit Committee

During the year, the independent directors provided the independent judgment and recommendations when considering and making a decision on significant issues such as investment projects, organization structure, and other issues related to the corporate governance, for the best interest of the Company. They also were concerned about all stakeholders and prevented any actions which caused conflicts of interest among the Company, executives, directors, and major shareholders.

Chairman

It is a policy of the Company that the Chairman of the Board of Directors and the Managing Director shall not be the same person and shall be independent directors, who have no interest in the Company's management, in order to clearly distinguish between the policy making, and the day-to-day management. The chairman has a leading role and controls the meeting of the board of directors to be efficient and effective by encouraging all directors to participate in meetings, help, advice, and supporting the business operations of the management through the Managing Director. In this regard, Dr. Thanong Bidaya, as an independent director and the Chairman of the Board of Directors, has knowledge and ability in line with the Company's business strategies, and also has acceptable experience, which can rest assured that he will be able to lead the Company to accomplish the Company's vision, mission, and strategic plans for the company, shareholders, and stakeholders to achieve long term benefits, monitoring the management operations, arranging for the preparation of financial statements and significant information presented to Board of Directors quarterly as well as encouraging the corporate governance policy, social and environmental responsibilities of the company.

Administrative Responsibilities

- a. Supervising overview of company's strategies and policies to constitute justice as well as supervising company's customer with equality.
- b. Emphasis on business operations by conforming with the law in terms of regulatory agencies and corporate governance as well as to the resolutions of shareholders' meetings.

Board of Directors Meetings

Presiding over as Chairman of the meeting and attending every meeting to constitute the Board of Directors Meetings efficiently as well as encouraging all directors to express their opinions by delegating administrative authority to the management appropriately, supervising and arranging all directors to receive correct, on-time, and clear information to be used for decision-making which shall lead to achievement of the organization efficiently, providing time management sufficiently for the Board of Directors to consult and express opinions widely in related issues during the important agenda. The Chairman of the Board utilizes the policy of enhancing good relations between Executive Directors and Non-executive Directors.

Development and Evaluation of Work Efficiency

- a) Providing Orientation Program and operation visit for all new directors which can assist new directors to understand and adapt themselves to the organization rapidly.
- b) Support and promoting all directors to attend skills development training, various fields of knowledge which are beneficial for performing director duties in well-known and recognized institutes such as Thai Institute of Directors (IOD) and Stock Exchange of Thailand (SET), etc.
- c) Support and promoting all directors working as a team which constitutes efficiency and effectiveness in working, and arranging evaluation of the Board's operations both self-evaluation, cross-evaluation, and group evaluation and taking such evaluation outcome used to improve and develop the Board's operations
- d) Providing monitoring system and assessment of the organization's operations being consistent to policy regularly and continuously.

Relationship between Shareholders

Supervising and arranging communications between shareholders of the company and providing opportunities for shareholders to communicate with the Board for exchanging opinions.

Shareholders Meeting

Presiding over as the Chairman of every Shareholders meeting and assigned a person to supervise the shareholders' meeting correctly as defined by law and related regulations as well as making sure that all directors are notified to attend the meeting. It is an opportunity for shareholders to exercise their rights openly in attending the meeting and voting in Shareholders Meeting, asking questions and additional explanation, acknowledgement of the annual report, approval of Financial Statements, approval appropriation of profits and dividends, director appointment and compensation paid to directors, auditor election and proposing remuneration of auditors, and approval of Company's Memorandum of Association amendment.

Other Roles of Chairman of Board of Directors

Performing duties with honesty, supervising structure of the Board appropriately, supervising in taking policies and the Board's decisions for operating effectively, promoting corporate governance, and social and environmental responsibility activities in all levels ranging from directors, top management to employees by operating in accordance with guidelines of the Board's structure to promote corporate governance of the company.

Appointment, Resignation, and Retirement from Directorship

The shareholders' meeting appoints directors who have the qualifications and do not have any prohibited characteristic as specified by law, and do not have any characteristic indicating a lack of appropriateness in respect of trustworthiness in management of a business whose shares are held by public shareholders as specified by the SEC Office. That is, the Board of Directors shall be composed of at least 5 directors, and at least one-third of all such directors must be independent directors, and at least half of all such directors must reside in Thailand. In case of a vacancy on the directorship position other than retirement by rotation, the Board of Directors may select any person who is qualified as a replacement director at the following meeting with the votes of 3 in 4 of the remaining number of directors. The replacement director will hold office only for the remaining term of the director whom he or she replaces. In each annual ordinary general meeting of shareholders, one-third of the total number of directors shall vacate their office, whereby those directors to vacate their office shall be the directors who have been in office for the longest term. Upon expiration of the term of office, a vacating director may be re-appointed under the resolution of the shareholders' meeting.

7.2.3 Roles and Responsibilities of the Board of Directors

1. Supervise the company's operations to ensure compliance with laws, objectives, and the Company's Articles of Association, as well as resolutions of the shareholders' meetings, and protecting the company's interests based on the good corporate governance principles.
2. Determine policies and directions of the company's operations and supervising the management to take actions to ensure compliance with the policy with efficiency and effectiveness so as to result in the optimum economic value to the business and great prosperity to the shareholders.
3. Approve vision, missions, corporate values as anticipated by the Company, and the business ethics.
4. Arrange for and supervising the administration in compliance with the good corporate governance principles.
5. Consider approval for budget for investment and budget for the company's annual business operations, including monitoring the use of the company's resources.
6. Provide complete, correct, and sufficient reports on financial information and general information which are important to shareholders, and affirming the certification of the reported information.
7. Arrange for the company to have an efficient internal control and audit system as well as appropriate and adequate risk management measures, including following on such matters on a regular basis.
8. The Board has also formulated a charter for the Executive Committee, the Audit Committee, the Risk Management and Corporate Governance Committee, and Nomination and Remuneration Committee as a guideline for their duties.
9. Supervise the Executive Committee, Sub-committees, and the management to comply with the specified policy.
10. Consider performance evaluation, determination of salaries, wages, welfare, bonuses, allowances, and other remuneration, including expenses and facilities of the Managing Directors, as well as determining a backup plan for nominating personnel to hold the major office of the management should the management become unable to perform the duties.
11. Consider revision of the scope of authorization, duties, responsibilities, and roles of the Executive Committee, Subcommittees, and the management as appropriate.

7.3 Subcommittees

The Board has established 4 Committees to study and screen tasks and reduce the workload of the Board. Each of these committees has a clear scope of duties, responsibilities, and authority as follows:

1. Executive Committee

As of December 31, 2022, the Executive Committee comprises 5 members as follows:

Name	Position
1. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Executive Committee
2. Dr.Sombat Kitjalaksana	Executive Committee
3. Mr.Suvich Pungchareon	Executive Committee
4. Mr.Hideo Matsumoto	Executive Committee
5. Ms.Walainut Trivisvavet	Executive Committee and Secretary to the Executive Committee

Scope of Authorized and Duties of the Executive Committee

At the Board of Directors Meeting, a resolution was made to designate the scope of authorized and duties of Executive Committee as follows:

- (1) Supervising the Managing Directors' performances to ensure compliance with resolutions, policies, and strategies as determined by the Board of Directors, as well as providing advice and suggestions to the Managing Directors.
- (2) Supervising the conduct of feasibility studies on new projects and approving the implementation of projects as it deems appropriate within the amount under (3).
- (3) Having authorized to approve execution of any juristic acts which would have a binding effect upon the company within an amount of not exceeding 50 (Fifty) Million Baht, provided that such approval shall involve neither any transactions giving rise to any conflict of interest against the company or its subsidiaries according to Declaration of Office of the Securities and Exchange Commission and Stock Exchange of Thailand.
- (4) Having authorized to consider, approve and/or determine policies on administration and business operations of the company or any actions which would have a binding effect upon the company, subject to the scope of policies and strategies as determined by the Board of Directors.
- (5) Having authorized to employ, appoint, impose disciplinary actions, terminate, dismiss, remove, determine salaries, bonuses, benefits and other remunerations, including expenses and facilities of the company's officers or staff in the position of Division Director or equivalent and higher, but excluding the Managing Director.
- (6) Having authorized to appoint, determine authorities and duties, delegate directions of the supervision policy, and determine remuneration, allowances, expenses, and facilities for special workgroups for carrying out specific works, including to approve proposals of special workgroups within the amount under (3).
- (7) Having authorized to appoint the chairman of the advisors, advisors, and/or advisory Board to the Executive Committee as appropriate whereby remunerations, allowances, expenses, and facilities for the chairman

of the advisors, advisors, and/or advisory Board as mentioned shall be determined by the Nomination and Remuneration Committee.

(8) Performing other duties as delegated from time to time by the Board of Directors.

The Executive Committee and the person authorized by the Executive Committee has no authorized to approve any matters or transactions in which the Executive Committee or persons who may have conflict, interests or a conflict of interests in any other manners, would enter into with the company or its subsidiaries, as defined by the Securities and Exchange Commission and Stock Exchange of Thailand.

2. Audit Committee

As of December 31, 2022, the Audit Committee comprises 3 independent directors as follows:

Name	Position
1. Mr.Phairuch Mekarporn	Chairman of the Audit Committee
2. Mr.Somnuk Chaidejsuriya	Audit Committee
3. Mr.Yuttana Yimgarund	Audit Committee

The Audit Committee is knowledgeable and experienced in finance, accounting, management, and financial statements review of the Company, Mr.Phairuch Mekarporn as the Chairman of the Audit Committee is responsible for reviewing the company's financial statements, and the Acting Internal Audit Manager as the Secretary of the Audit Committee.

Scope of Authorized and Duties of the Audit Committee

At the Board of Directors' Meeting, a resolution was made to designate the scope of authorized and duties of Audit Committee with further amendment regarding authorized and duties of Audit Committee according as following details:

- (1) Reviewing the Company's financial reports to ensure the correctness and adequate disclosure.
- (2) Reviewing the internal control and internal audit systems of the Company to ensure the suitability and efficiency by considering the independence of the Internal Audit Department and approving appointment, removal, and termination of Internal Audit Chief.
- (3) Reviewing the Company's operations to ensure its compliance with the laws on securities and exchange, the regulations of the Stock Exchange, or such laws, rules and regulations and policies related to the businesses of the Company.
- (4) Considering the Company's disclosure in respect of related party transactions or such transactions which may give rise to a conflict of interests, to ensure the accuracy, completeness, and timeliness.
- (5) Considering to approve Annual Internal Audit Plan and personnel of Internal Audit Department.
- (6) Considering, selecting, nominating for an appointment, and proposing remuneration for the Company's auditor to the Board of Directors for further submission to seek approval of the shareholders by considering

the independence of auditor as well as organizing the meeting with auditors without the management's involvement at least once a year.

- (7) Preparing the Audit Committee's corporate governance report to disclose in the Company's annual report whereby such report shall be signed by the Chairman of the Audit Committee.
- (8) Reviewing Audit Committee Charter and Internal Audit Department Charter as it is required and appropriate.
- (9) Performing other duties as delegated by the Board of Directors and with approval of the Audit Committee.

3. Risk Management and Corporate Governance Committee

As of December 31, 2022, the Risk Management and Corporate Governance Committee comprises 2 independent directors, 2 non-executive directors, and 1 executive director, totaling 5 persons as follows:

Name	Position
1. Mr.Somnuk Chaidejsuriya	Chairman of the Risk Management and Corporate Governance Committee
2. Mrs.Payao Marittanaporn	Risk Management and Corporate Governance Committee
3. Mr.Phairuch Mekarporn	Risk Management and Corporate Governance Committee
4. Mr.Hideo Matsumoto	Risk Management and Corporate Governance Committee
5. Ms.Walainut Trivisvavet	Risk Management and Corporate Governance Committee and Secretary to the Risk Management and Corporate Governance Committee

Scope of Authorized and Duties of the Risk Management and Corporate Governance Committee

At the Board of Directors Meeting, a resolution was made to designate the scope of authorized and a duty of Risk Management and Corporate Governance Committee as follows:

- (1) To set out the risk management policy and the overall framework for risk management of the Company, covering various types of material risks, especially in respect of finance, circumstances, marketing, tap water production, distribution, liquidity, labor market, contract, and risks giving rise to impact on reputation, etc.
- (2) To lay down such strategies in line with the risk management policies to be able to assess, monitor, and control the Company's overall risks to stay at an acceptable level.
- (3) To support and encourage cooperation in the Company's overall risk management and review the sufficiency of the risk management policy and system, the effectiveness of the system, and compliance with the policy.
- (4) To recommend good corporate governance practice to the Board of Directors.
- (5) To oversee the operations of the Board of Directors, Executive Committee, subcommittees, and the management to ensure compliance of the good corporate governance principles, business codes of conduct, and ethics.
- (6) To review the Company's good corporate governance practice by comparing with the good corporate governance principles of the international standard and the Stock Exchange of Thailand, and propose the same to the Board of Directors for consideration and regular update.

- (7) To supervise operations, including providing advice and suggestions for operations in economic, social, environmental, and corporate governance dimensions for sustainable business operations.
- (8) To monitor performance against various indicators and provide advice on reporting information related to sustainability.
- (9) To regularly report to the Board of Directors on what needs to be improved to comply with the specified policies and strategies.
- (10) The Risk Management and Corporate Governance Committee may engage external advisors for advice by using Company's expenses, with the approval of the Board of Directors.
- (11) To perform other duties as assigned by the Board of Directors.

4. Nomination and Remuneration Committee

As of December 31, 2022, the Nomination and Remuneration Committee comprises 2 independent directors and 2 non-executive directors, totaling 4 persons as follows:

Name	Position
1. Mr.Yuttana Yimgarund	Chairman of the Nomination and Remuneration Committee
2. Mr.Phongsarit Tantisuvanitchkul	Nomination and Remuneration Committee
3. Mr.Somnuk Chaidejsuriya	Nomination and Remuneration Committee
4. Mr.Kaoru Umehara	Nomination and Remuneration Committee

The Deputy Managing Director - Finance Group as the Secretary to the Nomination and Remuneration Committee.

Scope of Authorized and Duties of the Nomination and Remuneration Committee

At the Board of Directors Meeting, a resolution was made to designate the scope of authorized and duties of the Nomination and Remuneration Committee as follows:

- (1) Considering the criteria and procedures for recruiting persons qualified to take office as directors of the Company, including selecting persons in accordance with the specified nomination procedures for submission to the Board of Directors for consideration and appointment, or submission to the shareholders' meeting for consideration and appointment, as the case may be provided that such procedures for consideration and selection of qualified persons as aforementioned shall also allow minority shareholders to nominate persons for such consideration and selection.
- (2) Considering the criteria and procedures for recruiting persons qualified to take office as the Managing Director, including nominating and selecting such persons in accordance with the specified nomination procedures for submission to the Board of Directors for consideration and appointment.
- (3) Arranging for Succession Plan for key positions in management or persons eligible to take office of high-level executives, with regular reviews of such Plan, the criteria were as follow:
 - Determine the succession planning method in the organization.
 - Determine the main position for the successor.
 - Determine the appropriate qualification for the main position.

- Evaluate and select those with high capabilities and potential or who have accumulated experience to develop to be the successor.
 - Create a leadership development plan for people who were expected to be successors.
- (4) Determining the criteria for consideration of remuneration for directors and the Managing Director.
 - (5) Considering proposing remuneration of directors to the Board of Directors for approval and submission to the shareholders' meetings for further consideration and approval.
 - (6) Considering proposing salary and adjustment of salary rates, including other remuneration of the Managing Director to the Board of Directors for consideration and approval.
 - (7) Performing other duties as delegated by the Board of Directors.

Board of Directors of Subsidiaries

The Company had its subsidiaries, namely, Pathum Thani Water Company Limited and Thai Water Operations Company Limited. The Management Structures, Lists of Directors and Authorized Directors of Subsidiaries as of December 31, 2022, was as follows:

1. Pathum Thani Water Company Limited : PTW

PTW's Board of Directors consists of 4 directors as follows:

Name	Position
1. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Board of Directors
2. Dr.Sombat Kitjalaksana	Director
3. Mr.Somkiat Pattamamongkolchai	Director
4. Ms.Walainut Trivisvavet	Director and Managing Director

PTW's Authorized Directors

Either Mr. Phongsarit Tantisuvanitchkul or Dr. Sombat Kitjalaksana jointly sign with Ms.Walainut Trivisvavet or Mr.Somkiat Pattamamongkolchai, totaling two directors, and affix the company's seal.

2. Thai Water Operations Company Limited : TWO

TWO's Board of Directors consists of 3 directors as follows:

Name	Position
1. Mr.Ratn Santaannop	Chairman of the Board of Directors
2. Mr.Pipat Katikul	Director
3. Ms.Walainut Trivisvavet	Director and Managing Director

TWO's Authorized Directors

Any two of these three directors, Mr.Ratn Santaannop, Mr.Pipat Katikul, and Ms. Walainut Trivisvavet jointly sign and affix the company's seal.

7.4 Management

The Board of Directors clearly separates roles, duties, and responsibilities between the Board of Directors and Management, in order to clearly distinguish between the policy making and the day-to-day management of the company in accordance with the policies, plans, goals, regulations, and company rules, including to comply with the resolutions of the Board of Directors' meeting with a budget that has been approved strictly and honestly, and to protect the interests of the company and the shareholders to the best according to the principles of good corporate governance by reporting progress from operations in accordance with resolutions and significant matters to the Board of Directors meeting every quarter.

7.4.1 Name and Position of Management

As of December 31, 2022, the Company had a total of 9 executives as follows:

Name of Executive	Position
1. Ms.Walainut Trivisvavet	Managing Director
2. Mr.Phakpoom Thaweewittayarut	Deputy Managing Director, Administration Group
3. Mr.Somkiat Pattamamongkolchai	Deputy Managing Director, Finance Group
4. Mr.Pipat Katikul	Acting Deputy Managing Director, Operations Group and Operations Director
5. Ms.Sudarat Chiamchan	Assistant Managing Director, Office of Managing Director and Company Secretary
6. Mr.Hongthong Artit	Business Development Director
7. Mr.Chatchawan Tienprasertkij	Customer Relationship Management Director
8. Mrs.Busawan Pholprasert	Acting Human Resources and Administrative Director and Human Resources Development Manager
9. Mr. Prem Liemsakul	Acting Account and Finance Division Director and Account Manager

Remark: Information on qualification of persons holding position as the Company's executives appears in Attachment 1

Scope of powers, duties, and responsibilities of the Managing Director

At the Board of Directors Meeting, resolutions were made to designate the scope of authorized and duties of the Managing Director as follows:

- (1) Having authorized to approve execution of any juristic acts which would have a binding effect upon the Company within an amount of not exceeding Baht 5,000,000. (Five Million Baht only)
- (2) Having authorized to issue, amend, and adjust the Company's work rules, orders, and regulations, e.g., employment, appointment, demotion, discipline of staff and employees, determination of salaries, and other payments, including welfare and benefits.

- (3) Having authorized to delegate authority to the Company's executive staff, such as Assistant Managing Director to perform duties on behalf of the Managing Director in particular matters such as purchasing, employment, payment instruction as deemed appropriate.
- (4) Having authorized to appoint any person or group of persons to operate the business of the Company under the supervision of the Managing Director, or authorizing such person to take actions as the Managing Director deems appropriate, and also having authorized to change, amend, cancel, or revoke such authorization.
- (5) Having authorized for adjustment, transfer, closure, and merger or expansion of the organization structure at such levels lower.
- (6) Having authorized to determine salary rates and other remuneration, including expenses and facilities of Division Director or equivalent and higher to seek approval from the Executive Committee.
- (7) Having authorized to determine the structure of salary rates and other remunerations of staff at such levels lower than Division Director or equivalent provided that the salary rates (excluding other remunerations and benefits).
- (8) Having authorized to employ, appoint, impose disciplinary action, terminate, dismiss, remove, determine salaries, bonuses, welfare and other remunerations, including expenses and facilities of the Company's staff who receive salaries at the rate (only the salary rate, excluding any other benefits received) of not exceeding 200,000 Baht/month and/or the Company the Company's staff in such positions lower than Division Director or equivalent. Apart from those mentioned, the Managing Director shall seek approval from the Executive Committee. In this regard, the authority to take the following actions may be delegated, either in whole or in part to workgroups, the Board of Directors, the management, group of persons or any director, as appropriate.
- (9) Having duty to supervise all businesses of the Company to ensure compliance with resolutions and policies of the Board of Directors.
- (10) Having duty to submit balance sheets, financial statements, and income statements of the Company to the Board of Directors for approval.
- (11) Having duty to propose significant issues to the Board of Directors or the shareholders' meetings for consideration and approval or for any other purposes as appropriate.
- (12) Having duty to conduct feasibility studies on new projects and having authorized to approve such projects, as delegated by the Executive Committee.
- (13) In case the Managing Director is unable to perform duties, the Managing Director shall appoint a Division Director or another person to act for and on behalf of the Managing Director from time to time whereby such person shall have the authorized and duties equivalent to the Managing Director.
- (14) Performing other duties as delegated by the Board of Directors from time to time

However, the Managing Director and the person authorized by the Managing Director has no authorized to approve any matters or transactions in which the Managing Director or persons who may have conflict, have interests or may have conflict of interests in any other manners, would enter into with the Company or its subsidiaries, as defined by the Securities and Exchange Commission and Stock Exchange of Thailand.

7.4.2 Remuneration of Executive

The Company has the criteria and policy on remuneration for executives of the company as reasonable and in line with the company's operational results, duties, and responsibilities of executives according to performance. The Nomination and Remuneration Committee shall consider determining remuneration for the Managing Director for submission to the Board of Directors meeting for consideration and approval. For the positions of Assistant Managing Director downward, their remuneration shall be considered by the Managing Director propose the company's annual salary increment to the Executive Committee for consideration and approval. In this regard, such remuneration increment shall be in accordance with the criteria specified by the Company. The company has a policy on consideration of remuneration as follows:

7.4.3 Remuneration of Executive

a. **Monetary remuneration:** consisting of salary and bonus, of which the Company's policy on consideration is as follow:

- **Managing Director's remuneration** shall be considered every year based on remuneration policy specified by the Nomination and Remuneration Committee both short term and long term such as salary, bonus and long-term incentive compensation which must be consistent with the financial performance, long-term strategic and executive development including the business growth and profits of the company

- **Executives' remuneration at all level** shall be based on Key Performance Indicator (KPIs), consisting of performance appraisal and management competency, as jointly specified by the Executive Committee and the Managing Director, whereby there are performance indicators for executives in each position in line with his/her roles.

b. **Other remuneration and benefits:** the Company provides for a provident fund for saving of all executives and staff, whereby executives and staff can choose to contribute savings at a rate from 5 to 15 percent of their respective salaries and the company will then make the contribution at the rate of 5 to 10 percent to the fund.

Comparison of Compensations paid to Executives in 2022, 2021 and 2020

(Unit : Baht)

Description	2022		2021		2020	
	No. of Executives	Amount (Baht)	No. of Executives	Amount (Baht)	No. of Executives	Amount (Baht)
Compensation	9	23,563,440	9	20,894,440	8	19,645,200
Bonus	9	6,391,980	9	6,743,390	8	4,149,650
Provident Fund	9	2,252,840	9	1,889,684	8	1,704,180
Total	-	32,208,260	-	29,527,514	-	25,499,030

Remuneration for Executives of subsidiaries

- None -

7.5 Personnel

As of December 31, 2022, the company and its subsidiaries had a total of Executives and Employee as follows:

TTW Public Company Limited	138	persons
Pathum Thani Water Company Limited	29	persons
Thai Water Operations Company Limited	156	persons
Total	323	persons

A Number of Executives and Employees of the company and its subsidiaries divided by the company's structure as follows:

Company's Structure	TTW	PTW	TWO	Total
Managing Director	1	-	-	1
Office of Managing Director Group	1	-	-	1
Office of Managing Director	7	-	-	7
Internal Audit Section	2	-	-	2
Administration Group	1	-	-	1
Human Resources and Administrative Division	27	2	-	29
Customer Relationship Management Division	13	-	-	13
Finance Group	1	-	-	1
Account and Finance Division	12	-	-	12
Operations Group	-	-	-	-
Operations Division	72	27	156	255
Engineering Division	-	-	-	-
Business Development Division	1	-	-	1
Total	138	29	156	323

In 2022, the company and its subsidiaries had no significant changes in the number of personnel and the company had no labor dispute throughout the period from which the company was incorporated. In this regard, the company has set out the work rules for acknowledgment and compliance by the staff of the company and its subsidiaries which contain significant details comprising employment, recruitment, appointment, staff transfer, salary and wage, welfare and fringe benefits, discipline, disciplinary actions, submission of an appeal and grievance, etc.

Personnel Development Policy

The company and its subsidiaries are committed to developing all staff continuously by developing knowledge, skills, competencies, and cultivating corporate culture to increase knowledge, skills, and expertise including the work efficiency of employees for corporate growth and progress sustainably. Every new employee will receive an orientation to acknowledge the practices, corporate policies, business knowledge, Good corporate governance principles, and development of environmental potential, anti-Corruption including learning an overview of the company's business through a visit water treatment plant. While working with the

company, all employees will be developed and promoted by learning in different ways according to job characteristics and job levels by training both internal and external courses, etc. The company also encourages employees to learn by themselves by providing an Edutainment room consisting of books, magazines, and entertainment media. In addition, the company has the policy to send employees to study abroad and support personnel in various fields as follows:

- ▶ Knowledge Development
- ▶ Skill Development
- ▶ Ability Development

Knowledge and Skill Development

1. Activities that provide knowledge, experience and improve attitudes, Training, Job Instruction & Coaching.
2. Transferring, Job Rotation, Understudy, Acting, Study Tour/ Visit, Job Enrichment and Job Enlargement, Special Assignment.
3. Knowledge-seeking activities on duty - Afford handout on the job, Sending report the minutes, Representative to the meeting.

Ability Development to be in accordance with the strategic management plan through the process as follows:

1. Review various events that occurred in the past as a lesson.
2. Analyze the organization's environment both inside and outside.
3. Create a new vision and be ready to make changes to new working styles.
4. Executives have to change the attitude that people have seen as personnel assets as Human Capitals.
5. Adjust the strategy of human resource management in accordance with the organization's strategy.
6. Change the new role from the previous order Hold strict regulations to become a change agent. Focus on building flexibility, working systematically.
7. Bring the above 6 approaches to integrate and create new models to occur within the organization. From 7 strategic management tasks.

Competency Development

Due to the Coronavirus 2019 epidemic situation (Covid-19), the company has to consider preparing for training and seminars, both internally and externally as appropriate. However, the company still recognizes the importance of employee development. The Company and its subsidiaries encourage employees to attend training and seminars that will enhance their knowledge, abilities, and skills in working on both internal and external courses of the organization. The training courses within the human resources and administration division will be integrated with the executives of each division in order to consider and select the training courses that are necessary for the personnel in each group, and invite outside speakers to provide knowledge and skills to employees to gain expertise in their work and achieve maximum efficiency in their responsible

work. In addition, the company also gives employees the opportunity to propose the courses that they would like to train with outside reputable institutions for the benefit of work and capability development. In 2021, the Company has provided training to increase knowledge in various courses as follows:

Staff

- **Internal Training Courses** such as Personal Data Protection Act, B.E. 2562, Valve for Water Supply and Distribution Systems, Design Thinking, Basic of Mechanical Seal, etc., totaling 3,297 hours of training and seminar.

- **External Training Courses** such as Expense Problems for Non-Deductible Expense and Non-Creditable VAT, High Voltage Substation Equipment, Motor, and Generator: Safety, Operation and Maintenance, Cost Analysis for Procurement Development, Productivity Boosting with Karakuri Kaizen, etc., totaling 539 hours of training and seminar.

- **Online Training Courses** such as Kaizen Master Certificate, Moving forward with Cybersecurity and Privacy, CGR Workshop 2022, CGR 2023 Coaching, Techniques and Methods for Assessing Safety and Occupational Health Laws, Preparedness and Action Guidelines for Climate Change to Reduce Greenhouse Gases, etc., totaling 1,084 hours of training and seminar.

Executives

- **External Training Courses** such as GRI Professional Certification Program, PDPA For Internal Auditing, Supervisory Skill for Talent Management, Effects of Risk Management Corresponding to the COSO ERM 2017 Framework, etc.

In addition, the company also encourages employees to attend various training courses related to environmental conservation, which are the internal training courses as follows: Energy Conservation: Energy Management System and Energy Conservation: Internal Audit, etc.

Staff Remuneration and Benefits

Policy on Consideration of Staff Remuneration

The company and its subsidiaries have the criteria and policy on remuneration for staff by considering the appropriateness, fairness according to knowledge and ability, including each employee's performance and correspond to the average of the same industry. The company has determined to increase the salary rate for executives and employees once a year using Key Performance Indicator: KPI, which includes current performance (short-term) and long-term strategic performance, such assessment results in the compensation of executives and employees in line with the company's performance. In addition, the company has set a special bonus payment that is linked to the operating results for each year and linked to the performance of employees to motivate employees to work according to the organization's goals in that year.

Staff Remuneration

For Monetary remuneration such as salary including other incomes and professional fees. In addition, the company has stipulated a special bonus linked to the operating results of each year and the performance of employees in order to motivate employees to perform according to the organization's goals.

Comparison of Compensations paid to Employees in 2022, 2021 and 2020

Unit : Million Baht

Company	2022	2021	2020
TTW	95.24	84.60	78.97
PTW	12.73	11.71	11.43
TWO	57.56	55.65	59.54
Total	165.53	151.96	149.94

Staff Benefits

The company provides welfare higher than what is required by laws, in order to reduce the expense burden for the employees and promote the well-being which will benefit the operations and the living of the employees. These benefits have been communicated to all employees to inform of their rights through company regulations on employee benefits since the orientation on the first day of joining the company. The welfare can be divided into the following categories:

Employee Health Care such as health insurance and group life insurance with other care such as first aid room, medical expenses, dental expenses, prescription eyeglasses, 4 strains of influenza vaccination according to the World Health Organization's standards (WHO), annual health check-ups by providing a check-up program for employees of each age, gender, and working duties appropriately.

Financial aid such as scholarships for children, Financial support for employee's wedding, Maternity expense, Spouse or children of lawful employees or the parents of the employee died and grants in the event of an employee experiencing a fire, flood, or windstorm.

Provident Fund for its employees, to provide benefits to members in the event of retirement, resignation, termination, disability or death by accumulating money from part of member's income and the company contributed to other parts in accordance with the conditions specified in the provident fund regulations by appointed Kasikorn Asset Management Company as the fund manager.

Other Benefits such as staff uniforms and gym. In addition, in 2022, during the Coronavirus 2019 epidemic situation (Covid-19), the company provided vaccinations for employees to strengthen immunity and provided alcohol gel and surgical masks to employees adequately in order to prevent the Coronavirus 2019 pandemic (COVID-19), including the COVID-19 testing is carried out with an Antigen Test Kit (ATK) every week before all employees go to work to ensure that employees are safe from the COVID-19 pandemic.

Evaluation of work performance and career advancement opportunities

Employees in all levels who receive remuneration on a monthly basis are subject to a work performance evaluation at the end of each year. The goals and key performance indicators (KPIs) will be developed individually for each employee based on expected achievement of works, competency, and development. The results of the evaluation in three areas (including core competency, managerial competency, and functional competency in accordance with the regular development scheme of the company) will be used to set up a priority and the goals of the development. Individual development plan for each employee emphasizes the learning and development from hands-on experience, interpersonal relationships, and formal training.

Determination of Succession Plan

The Board of Directors realizes the significance of the succession of senior management, especially the position of managing director, by assigning the Nomination and Remuneration Committee to conduct the managing director succession plan details appear in the Nomination and Remuneration Committee Charter.

For the Executives' positions, the company has established a succession plan by specifying the person to act on its behalf. In the case that there is no person who can support immediately, there is a secondary development system to prepare including external selection, in order to maintain trust with shareholders, as well as employees that the company's operations will be carried on in a timely manner.

Work Safety

The company has formulated policies and managerial structure for occupational safety, health, and environment in accordance with the standards, stipulated in the Occupational Safety, Health and Environment Act B.E. 2545 and other work safety-related laws. We use these as basic practical guidelines to help our employees to ensure safety standards in their works ISO 9001 and ISO 14001, and a work safety management system by focusing on the participation of personnel. In addition, there are rules for working safety, Committee for Safety, Occupational Health, and Working Environment in order to consider the policy Operation plan and work safety training plans.

Occupational Health and Safety

TTW realizes that occupational safety and health program is an integral part of the business operation and is directly related to both qualitative and quantitative productivity. Its implementation also leads to a sustainable coexistence with the surrounding communities. The company, therefore, focuses the efforts on creating knowledge, understanding, realization, and conscience on occupational safety and health in all departments and among all levels of staff, including senior executives and operational-leveled staff.

The company has formulated policies and managerial structures for occupational safety, health, and environment in accordance with the standards stipulated in the Occupational Safety, Health and Environment Act B.E. 2545 and other work safety-related laws. We use these as basic practical guidelines to help our employees to ensure safety standards in their works.

Safety, Occupational Health, and Work Environment Policy

The executives realize the importance of safety, which consists of work safety, occupational health, work environment, security of system (machinery, equipment, and production processes), and security of buildings, which are the basis of efficient and effective management, leading to sustainability in business operations under the following actions:

1. The company will support the resources in terms of personnel, time, and budget to encourage and motivate the safety inspection training and other activities to improve working conditions and environment to be safe and create safety awareness.
2. The company will prevent accidents and illnesses at work as well as nuisance incidents by focusing on risk management and loss control.
3. The company will assess the safety performance and review the policy on safety, occupational health, and work environment at least once a year.
4. Safety is the first duty and responsibility of all employees. All employees must participate in activities related to safety, occupational health, and work environment.
5. All employees must consider the safety of themselves and others while working.
6. The company will comply with the law and requirements as well as the international standards related to safety, occupational health, and work environment, which are considered the basic criterion.
7. Identify, assess, and control risks in safety, occupational health, and work environment, including collecting dangerous information that causes the mentioned risks.
8. Be prepared and able to deal with any incidents that may occur as well as respond to incidents and recover after an incident efficiently to ensure that those incidents will not affect the personnel and internal and external assets of the company, and enable the company to conduct its business continuously and quickly.

The executives of all departments are responsible for promoting and supporting the implementation of policies on safety, occupational health, and work environment.

Occupational Safety in the Company Group

For the supervision and inspection of operations, to ensure safety standards are being met and that any accidents that could cause damage to a person or property while working with the Company are prevented or their effects minimized, the following occupational safety guidelines and rules have been established:

1. Clothing must be well-fitted and suitable for safe operation.
2. Personal protective equipment (PPE) must be worn in all specified work areas or job types.
3. The use of drugs, alcohol, or intoxicants is prohibited anywhere in the factory area. If intoxicated, do not enter the factory premises.
4. No smoking in the factory premises, except for in designated areas only.
5. No sparks are allowed on factory premises without prior permission from responsible parties.
6. Do not use company machinery and/or equipment without receiving prior permission from the responsible parties.

7. The machine must turn off completely and hang a sign. "Danger! Do not operate the machine" at the point where the machine is repaired or cleaned every time.
8. Do not hang, swing, or climb on forklifts. These are not for passenger transportation.
9. Do not tease, joke, and/or take any action which may cause danger to oneself or others or Company property.
10. Do not use air that is part of the operations of machinery or equipment to dry your body, clothes, personal belongings, or anything else.
11. Any areas marked with "No entry without permission" signs are strictly prohibited from entry by any non-related parties.
12. Work permits are required before starting any high-risk operation as stipulated by the Company.
13. Do not work or operate alone in any job that specifies more than one person is required.
14. Do not pull or press the fire alarm without due cause.
15. Report to a supervisor in any case whatever of a fire, accident, or near-accident.

All employees and stakeholders in the TTW Public Company Limited group must strictly comply in the event that an investigation identifies any violation with cause for punishment according to personnel management rules and regulations for employees and/or the manual for safe work procedures.

Safety, Occupational Health, and Environment Committee

TTW has elected and appointed the Occupational Safety, Health and Environment Committee to perform the duties that include the formulation of policies, action plans, and training on occupational safety in order to prevent and decrease the number of occupational accidents, injury, illness, suffering, or unsafety. The Committee's duties also include the submission of reports and recommendations on measures or guidelines to improve or correct the occupational safety standards so that they are in compliance with the occupational safety-related laws and occupational safety standard to the management. This is to ensure occupational safety for employees, contractors, and third parties who perform their works or use the services of the company, including the survey on occupational safety performance, the reviewing of injury statistics, the setting of occupational safety reporting system. The company requires that employees at all level comply with the guidelines under the supervision of the Safety, Occupational Health, and Environment Committee that composes of 1 Chairman and 4 Directors as follows:

Safety, Occupational Health, and Environment Committee

Name	Position	Position in OHSEC
1. Mr.Prem Liemsakul	Employer representatives, Executive level	Chairman of OHSEC
2. Mrs.Benjawan Rattalerngsak	Employer representatives, Commanding level	Committee
3. Mr. Manas Ruenroeng	Employee representative Operational level	Committee
4.Mr. Wasin Buraman	Employee representative Operational level	Committee
5. Mr.Nopadol Tangsuwan	Employer representatives, Commanding level	Committee and Secretary

Accident Statistics

Year	Number of accidents (times)	Injury Frequency Rate (IFR)	Injury Severity Rate (ISR)
2020	0	0	0
2021	1	1.08	6,505
2022	0	0	0

Remark: (1) IFR is Injury Frequency Rate.

(2) ISR is Injury Severity Rate.

7.6 Other Information

7.6.1 Lists of persons who have been assigned to be directly responsible for the supervision of Accounting, Company Secretary, Head of Internal Audit department, and Head of Compliance department of the Company

1) The Supervision of Accounting

The Board of Directors appointed Mr.Somkiat Pattamamongkolchai Deputy Managing Director, Finance Group, who had knowledge and abilities in the fields of accounting and finance, to hold the position of top management in accounting and finance (details of his profile appear in Attachment 1) with the duties and responsibilities of planning financial strategies and communicate the organization's significant financial information to enhance the understanding and trust of investors, and appointed Mr. Prem Liemsakul to hold the position of Account Manager, as the person supervising accounting, with duties and responsibilities by overseeing the preparation of accounts and inspecting close of accounts of the company in each period to ensure that they are made by properly and in accordance with the specified practices, overseeing and inspecting preparation of financial statements, balance sheet, income statement, and accounting reports, overseeing the company's budgeting and inspecting to ensure that the budget is utilized properly and in accordance with the budget plan as specified, and overseeing the preparation of relevant tax reports for submission to relevant government authorities.

2) Company Secretary

The Board of Directors' Meeting No.3/2012 on July 26, 2012, resolved to approve the appointment of Ms.Sudarat Chiamchan, Assistant Managing Director, Office of Managing Director, to hold the position of Company Secretary, with the duties and responsibility as prescribed in the Securities and Exchange Act (No. 4) B.E. 2551, Section 89/5 and Section 89/16. She was also appointed as Board's secretary to support Board activities such as Board Meetings, Board Orientation, including provide important information, rules, and regulations to the Board as well as to coordinate subsequent actions under the Board's resolution, details of duties and responsibilities as follows:

- (1) Giving advice primarily to the Board of Directors about regulations, rules, and requirements of the Company and follow up with correct and regular practices, including reporting changes with significance to Board of Directors.

- (2) Organizing the Shareholders meetings and Board of Directors meetings according to the Company's Articles of Association and codes of conduct.
- (3) Recording reports of AGM of shareholders and the Board of Directors meetings as well as making a follow-up with practices in compliance with the resolutions of AGM of shareholders and the Board of Directors meetings.
- (4) Supervising disclosure and reporting of information for the responsible parts in accordance with the regulations and requirements of The Securities Exchange of Thailand and The Securities and Exchange Commission.
- (5) Contacting and communicating with general shareholders so that they are informed of the rights of shareholders and information of the Company.
- (6) Supervising and coordinating in activities of the Board of Directors, including the orientation of directors.
- (7) Keeping the Company's important documents, such as a register of directors, invitational letters of the Board of Directors meetings, reports of the Board of Directors meetings, Annual Report, invitational letters of shareholders meetings, reports of shareholders meetings, and reports of interests of directors or executives. Details of Company Secretary appear in the Attachment 1.

3) Head of Internal Audit

The Company's Audit Committee has considered assigning Mrs. Naruemon Udomkiat, Internal audit manager, holding the position of Head of Internal Audit and Audit committee's secretary, to perform the internal audit by planning the audit to cover the company's business. When the audit is completed, the internal audit results will be reported to the person who was examined and the management to inform them about the operational guidelines that should be improved, including conducting audits of departmental issues in the organization that have been audited and advised by auditors. The internal audit head will follow up on the results that the management has implemented and report the results to the management initially. The results of the quarterly audit and the follow-up results will be submitted to the Audit Committee for acknowledgment, and then the Chairman of the Audit Committee will report the results to the Board of Directors. Details of Head of Internal Audit are enclosed in Attachment 3.

4) Head of Compliance

In term of the Head of Compliance, the Company appointed Mr.Natarat Intharat to ensure that operations are transparent according to the Board Resolution, Corporate Governance Policy and under the law including any relevant regulations of the Securities and Exchange and the Stock Exchange of Thailand as well as guidelines for Good Corporate Governance standard, as well as to provide guidance for Directors and Executives according to Good Corporate Governance Policy and Best Practice on their duties and responsibilities. In addition, to support Directors and Executives on transparent operationsto meet the expectationsof shareholders and in consideration of the best interest of the Shareholders and Stakeholders, and to monitor and evaluate on the implementation of the law including complying under the Good Corporate Governance Policy guidelines as defined. Details of the qualification of the Head of Compliance position can be found in Attachment 3.

7.6.2 Investor Relations

The Company appointed Mr.Chanon Inpithuk to hold the position of the Investor Relations, which can be contacted to request information about the Company as per detail below:

TTW Public Company Limited

30/130 Moo 12, Buddha Monthon 5 Road, Raikhing, Sampran, Nakhonpathom 73210

Tel : (66) 2019 0490

Fax : (66) 2420 6064

Email : ir@ttwplc.com

Websit : www.ttwplc.com

Social Network : Facebook: TTWPlc

7.6.3 Auditor Fees

The Board of Directors has appointed the auditor of the Company who was selected by the Audit Committee based on performance, experience, and preparedness in terms of personnel, and acceptable auditing service standards. Said auditor is certified by the Office of the Securities and Exchange Commission (SEC). The Company has hired EY Office Co., Ltd., comprising Ms.Manee Rattanabunnakit: Certified Public Accountant No.5313, Ms.Poonnart Paochareon: Certified Public Accountant No.5238, and Ms.Kunlapee Piyawannasuth: Certified Public Accountant No.6137, as the Company's auditors.

In this regard, the auditor appointed by the Board of Directors is also the auditor of the subsidiary companies, namely PTW and TWO, which have no relationship and interest with the company or subsidiaries, executives, major shareholders, or those related to such persons in a manner that will affect their duty independently, also the company does not receive any services other than auditing.

Comparative information of the auditor's remuneration in the past 3 years as follows:

(Unit : Baht)

Description	2022	2021	2020
Audit Fees	1,420,000	1,420,000	1,470,000

Definition of "Related Party Disclosure According to Accounting Standards"

A related party is a person or entity related to the entity that is preparing its financial statements.

1. A person or a close member of that person's family is related to a reporting entity if that person:
 - 1.1 had control or joint control over the reporting entity;
 - 1.2 has significant influence over the reporting entity; or
 - 1.3 is a member of the key management personnel of the reporting entity or the parent of the reporting entity.
2. An entity is related to a reporting entity if any of the following conditions apply:
 - 2.1 The entity and reporting entity are members of the same group (which means that each parent, subsidiary and fellow subsidiary is related to each other).
 - 2.2 One entity is an associate or joint venture of the other entity (or an associate or joint venture of a member of a group of which the other entity is a member).
 - 2.3 Both entities are joint ventures of the same third party.

2.4 One entity is a joint venture of a third entity, and the other entity is an associate of the third entity.

2.5 The entity is a post-employment defined benefit plan for the benefit of employees of either the reporting entity or an entity related to the reporting entity. If the reporting entity is itself such a plan, the sponsoring employers are also related to the reporting entity.

2.6 The entity has control by a person item 1.

2.7 The person on item 1 (1.1) has significant influence over the entity or members of entity management (or headquarter)

2.8 The entity member or members of the group service of the key management personnel of the reporting entity or the parent of the reporting entity.

8. Report on the Significant Activities on Corporate Governance

8.1 Summary of the Board of Directors' Performance in the Past Year

The Board of Directors (Board) is responsible for governing the Company's operations in accordance with the provisions of the law, Article of Association, and resolutions of the Shareholders' Meeting.

The Board has also assigned each sub-committee to help review on delegated matters under their scope of duties and responsibilities in accordance with its charter that was approved by the Board. In 2022, there were 4 sub-committees that directly report to the Board:

1. Executive Committee
2. Audit Committee
3. Risk Management and Corporate Governance Committee
4. Nomination and Remuneration Committee

In addition, the Board of Directors has assigned the management to manage business operations through the Executive Committee under the scope of authority that has been approved. In 2022, the Board of Directors was responsible for approving the following matters:

- Considered and approved the Company's strategic plan and budget.
- Considered and approved the annual Company's financial statements and operating results.
- Considered and approved the Report on the Board's responsibility for Financial Reporting.
- Considered and approved the disclosure of information of Forms 56-1 One Report.
- Considered the Company's risk management report and internal control evaluation results.
- Considered the annual dividend payment.
- Reviewed the structure and composition of the Board of Directors and Sub-Committees.
- Considered the selection and appointment of directors.
- Considered the Board's remuneration policy and budget for the year 2022
- Considered the appointment of the Company's auditor and fixed the audit fee of the year 2022.
- Called the Annual General Meeting of Shareholders for 2022.
- Considered the annual Board of Directors and the Sub-Committees performance evaluation results.

- Considered the Managing Director performance evaluation results
- Reviewed and approved the revision of the Company's Code of Conduct.

8.1.1 The Directors' Selection, Development, and Evaluation

1. Nomination and Appointment of Directors

The Company recognizes the importance of the appropriate recruitment and appointment of directors to oversee business operations and set policies and operational plans for the maximum benefit of the Company and its shareholders and thus takes great care to consider the qualifications and experience of any candidate according to the following principles:

- Qualifications in accordance with legal requirements, SET and SEC regulations, and Company regulations. Qualifications of all Directors must be consistent with the strategies and policies of the Company and must adhere to the principles of good corporate governance for the benefit of the business development and success of the Company.
- Gender, age, knowledge, ability, and experience diversity and expertise in various fields as needed by using Director Qualifications and Skills Matrix for consideration.
- Educational and work background that are beneficial to corporate governance, transparency, morality, responsibility, maturity, and professionalism.

The Nomination and Remuneration Committee is responsible for screening all candidates for director positions, whether for positions as representatives of shareholders or positions as independent directors. The Committee shall consider the suitability of said candidates based on the appropriateness of their skills and experience according to the above criteria. As the Company gives the right to its shareholders to nominate directors of the Company, the Committee shall consider candidates from the list of names proposed by shareholders and from the Director Pool of the Thai Institute of Directors (IOD) and shall present these to the Board of Directors for consideration. However, the appointment of directors to replace directors whose tenures are expired must be approved by individual shareholders, and voting must be carried out according to the Company's regulations as follows:

- Each shareholder holds a number of votes equal to the number of shares held in the Company.
- Shareholders may exercise the right to select one or more person to be a director, but it must not exceed the number of directors that was elected at that time.
- In case a shareholder exercises his or her votes to elect more than one person as a director, the shareholder may exercise all votes to each such person and may not allot this or votes to any person in any number.
- The persons who received the highest numbers of votes in descending order shall be elected as directors according to the number of directors who were elected at that time. In the case of equal votes between persons voted on in descending order whereby the number of directors who were

elected at that time is exceeded, the chairman of the meeting shall have the casting vote so that the correct number of directors shall be achieved.

- The selected persons must be elected by a vote of no less than four in fifths of the total number of votes of the shareholders who attended the meeting and have the right to vote.

Along with the meeting invitation letter sent to the shareholders, the Company shall include pertinent information about directorship candidates for consideration by the shareholders. Said information shall consist of educational background, work experience, any directorship positions held in other companies, and legal disputes (if any). In the case of directors whose tenures have expired and who are nominated again for another term in a directorship position, additional information shall also be included for consideration by the shareholders, such as the number of meetings attended and work performance throughout the previous year.

In the event that a directorship position becomes vacant for reasons other than expiration of said director's term, the Nomination and Remuneration Committee shall nominate a candidate with the appropriate qualifications and without any characteristics that would be prohibited by law at the meeting of the Board of Directors of the Company for their consideration and approval by a vote of not less than 3 out of 4 votes of the remaining directors. Any newly appointed directors shall hold office for the remaining term of the outgoing director.

The Company recognizes the important rights and participation of its minor shareholders. In order to assure all shareholders that they will be treated with equality, the Board of Directors, therefore, provides shareholders with the opportunity to propose items for the agenda of the Annual General Meeting of Shareholders and to nominate candidates with appropriate qualifications for directorship positions from September 1 to December 31 each year. All steps and procedures for said proposals are set forth in a clear and transparent manner and details can be found on the Company website.

On 4 January 2022, the Company notified the Stock Exchange of Thailand and the shareholders that the period for the nomination of persons to be elected as the Company's directors had expired and none of the shareholders nominated suitable and qualified persons to be elected as a director of the Company.

Nomination and Appointment of Independent Directors

The Company has specified the criteria for the selection and appointment of independent directors, in that they must meet both Company qualifications for recruitment of directors and also the qualifications of independent directors according to the definition of "independent director" of the SEC. Company policy requires at least 1/3 of the total number of Board members and not less than 3 persons to be Independent Directors. The Company currently has 4 independent directors. Company policy also requires that the Chairman of the Board must be an independent director and that the Chairman of the Board must not also hold the position of Managing Director. This is to provide a clear distinction of responsibilities between the establishment of regulatory policies and the daily management of the Company, thus resulting in an appropriate balance of power, transparency, and verifiability according to the principles of good governance. Additionally, the Audit Committee is made up entirely of independent directors and is appointed by the Board of Directors or in the

General Meeting of Shareholders of the Company. At least one Audit Committee member must have accounting and/or financial experience and knowledge in order to examine and supervise the Company's operations properly, as well as to oversee financial reports, the internal control system, the selection of auditors, and consideration of any conflicts of interest.

All current independent directors possess all qualifications as specified by the Company, for any persons serving in the position of independent director for several consecutive terms, this does not affect the performance of duties or independent opinion of said director.

Appointment of Senior Executives

The Board of Directors has appointed the Nomination and Remuneration Committee to consider and select candidates for positions as senior executives or the position of Managing Director of the Company by evaluating the appropriate qualifications for senior executive positions according to the Succession Plan and screening suitable candidates who have the knowledge, abilities, skills, and experience beneficial to the Company's operations, as well as those who understand the business of the Company and have the ability to manage tasks to achieve the Company's objectives and goals. After said selection and screening process is complete, the Nomination and Remuneration Committee will then propose the names of suitable candidates to the Board of Directors for further evaluation and approval.

For the recruitment of senior executives at the level of a department head or higher, the Managing Director shall present candidates for these positions to the Executive Committee for appointment and approval. For the recruitment of senior executives from the position of section manager or below, this is within the scope of authority of the Managing Director to consider and appoint said candidates.

2. Development of Directors

The Company encourages the members of the Board of Directors to develop their knowledge and experience by attending educational and observational trips, training, and seminars covering a variety of courses that will aid in enhancing their knowledge and understanding of the role of a director and any other matters related to the performance of the Board of Directors and for effective management in accordance with the principles of good corporate governance. The Company also promotes membership in the Thai Institute of Directors (IOD) for its directors for the benefit of receiving important news and information from the IOD.

In 2022, the Company encouraged 2 Directors and Company Secretary to attend the following IOD training courses.

- Seminar on the Roles of Company Directors in a Changing Global Context
- CGR Workshop 1/2022: CGR 2023 Coaching
- IOD Open House 1/2022: Reporting and Disclosure
- Director's Briefing 9/2022: Geopolitical Risk and Opportunity
- Director's Briefing 12/2022: ESG as a vehicle for Business Transformation

- Company Secretary Forum 1/2022: Company Secretary Challenges in Building Trust in the Boardroom

Training Courses for Directors Organized by the Thai Institute of Directors (IOD).

Director	Courses	Director Accreditation Program (DAP)	Director Certification Program (DCP)	Finance for Non-Finance Director (FND)	Advanced Audit Committee Program (AACP)	Role of the Compensation Committee (RCC)
1. Dr.Thanong Bidaya		DAP 25/2004				
2. Mr.Plew Trivisvavet		DAP 18/2004	DCP 50/2004	FND 13/2004		
3. Mr.Phongsarit Tantissuvanitchkul			DCP 155/2012	FND 35/2007		
4. Mr.Phairuch Mekarporn			DCP 81/2006		AACP 17/2007	
5. Mr.Somnuk Chaidejsuriya		DAP 9/2004	DCP 46/2004		AACP 9/2005	
6. Mr.Yuttana Yimgarund			DCP 208/2015			
7. Dr.Sombat Kitjalaksana		DAP 36/2005	DCP 81/2006			
8. Mr.Suvich Pungchareon			DCP 37/2003			
9. Mrs.Payao Marittanaporn			DCP 48/2004			RCC 9/2009
10. Mr.Kaoru Umehara						
11. Mr.Hideo Matsumoto			DCP 256/2018			
12. Ms.Walainut Trivisvavet			DCP 201/2015		AACP 20/2015	

Orientation for New Directors

The Board of Directors provides orientation for every new director in order to create a clear understanding of the business and operations of the Company and ensure directors are well-prepared to perform their duties, in terms of corporate governance, business management, technology, and new innovations, so as to support the efficient performance of their duties, with the Company Secretary as coordinator in various matters, as follows:

1. Business structure, Board structure, scope of authority, and related laws.
2. Business strategies, including on-site visit to view the production process.
3. Arrangement of a meeting with the Chairman of the Board to facilitate inquiry regarding more in-depth information about the Company's business operations.

The Board of Directors' Meeting No. 4/2021 held on December 7, 2021 resolved to appoint Mr. Yuttana Yimgarund as an independent director, chairman of the Nomination and Remuneration Committee, and Audit Committee Member. Therefore, the company arranged an orientation for new directors on February 3, 2022 at the Banglen Water Treatment Plant by providing a lecture on the company's business, directors' structure, scope of authority, including visiting the production process.

3. Self-Assessment of the Board of Directors

The Company has specified in the corporate governance policy and the principles of good corporate governance of the Company that the Board of Directors must carry out an annual performance assessment. This assessment is divided into 6 main topics according to the guidelines of the SET, including (1) The Structure

and Qualifications of Directors, (2) The Roles, Duties, and Responsibilities of the Board, (3) Board Meetings, (4) The Directors' Performance, (5) Relationship with the Management, and (6) The Self-Development of Directors and Development of Executives. This assessment is used as a framework for evaluating the performance of the Board and as an opportunity to jointly consider performance and other issues in order to improve the overall performance of the Board of Directors. The Board has agreed upon the Board Assessment Form, which has also been reviewed by the Risk Management and Corporate Governance Committee. The assessment process is as follows:

1. The Board of Directors assesses the performance evaluation forms of the Board and Subcommittees.
2. The Company Secretary is responsible for delivering the assessment forms to all directors for the assessment of performance and to return to the Company for analysis and assessment of the results, which shall be prepared, summarized, and presented to the Nomination and Compensation Committee for consideration of the evaluation results and the development of guidelines for improving operational efficiency.
3. The Nomination and Remuneration Committee shall present said assessment results and guidelines for the development and improvement of operational efficiency to the Board of Directors for their information in order to acknowledge and support the Board's performance and operations.

In 2022, the Board of Directors has approved the assessment form for the whole Board by giving importance to the duties and responsibilities of the Board of Directors and Good Corporate Governance. The assessment form covers the duties of the Board of Directors in all aspects and consistent with the attribute and environmental, including having business ethics of the company. The assessment form is divided into 3 types, consisting of Self-Assessment of the Board of directors as a whole, Self-Assessment of committee as a whole, and Self-Assessment of the board of directors and of committee member on an individual basis which has the evaluation criteria as follows:

- 0 : Strongly disagree or No action was taken on that matter.
- 1 : Disagreement or slight action on that matter.
- 2 : Agreement or Proceeding on that matter.
- 3 : Agreement quite a lot or well done on that matter.
- 4 : High Agreement or Execute on that matter excellent

The Board of Directors meeting no.5/2022 on December 13, 2022, resolved to acknowledge the self-assessment of the Board of Directors and Subcommittee for the year 2022 consisting of 6 topics as follows:

Self-Assessment of the Board of directors as a whole

Description	Full Score	Avg. Evaluated Score	
		2022	2021
1. Board structure and qualifications	4	3.9	3.9
2. Roles, duties, and responsibilities of the Board	4	3.9	3.8
3. The Board meeting	4	3.9	3.9
4. Duties of directors	4	3.9	4.0
5. Relationship with management	4	3.9	3.9
6. Director's self-improvement and management training	4	3.8	3.8
Overall Assessment	4	3.9	3.9

Self-Assessment of committee as a whole

Descriptions	Full Score	Avg. Evaluated Score	
		2022	2021
1. Board structure and qualifications	4	3.8	3.9
2. The committee meeting	4	3.9	3.9
3. In line with the duties and responsibilities of particular committee, the member give priority and devotes sufficient time	4	3.9	3.8
3.1 Executive committee	4	3.9	3.9
3.2 Audit committee	4	3.8	3.8
3.3 Nomination and remuneration committee	4	3.9	3.9
3.4 Risk Management and Corporate Governance committee			
Overall Assessment	4	3.8	3.9

Self-Assessment of the Board of directors and of committee member on an individual basis

Descriptions	Full Score	Avg. Evaluated Score	
		2022	2021
1. Board structure and qualifications	4	3.9	4.0
2. The committee meeting	4	3.9	4.0
3. Roles, duties, and responsibilities of the Board	4	3.8	3.9
Overall Assessment	4	3.9	4.0

Self-assessment of the entire Board in the overall standard with an average score of 3.9 out of 4 points, self-assessment of subcommittees, the average score is 3.8 out of 4 points and the self-assessment of the Board of Directors with an average score of self-evaluation of each director is 3.9 out of 4 points.

Performance Evaluation of the Managing Director

In order to comply with good corporate governance principles, the Company carries out an annual performance evaluation of the Managing Director. For the year 2022, the Board of Directors Meeting No. 6/2022, held on December 13, 2022, resolved to acknowledge the result of the managing director's performance evaluation, which was assessed by non-executive directors, as well as conducting a meeting without the management. The result of the managing director's performance evaluation is shown as follows:

Description	Full Score	Avg. Evaluated Score	
		2022	2021
1. Set up & Deployed Strategy	5	4.7	4.5
2. Management & Decision Making	5	4.6	4.5
3. Communication & Relation with Stakeholder	5	4.8	4.6
4. Competency in Finance & Accounting	5	4.8	4.6
5. Performance compare with planning and targets	5	4.8	4.6
6. Self-Learning & Development	5	4.8	4.6
Overall Assessment	5	4.7	4.6

8.1.2 The Board of Directors' Attendance and Remuneration

1. The Board of Directors' Attendance

All of the Company's Board of Directors has devoted sufficient time to attend the Board of Directors and sub-committees meetings, as well as attend the Annual General Meeting of Shareholders. The meeting attendance in 2022 is specified in the table below:

Attendance / Total Number of Meeting in 2022

Name of Directors	AGM	Board of Directors		Executive Committee	Audit Committee	Risk Management & Corporate Governance Committee	Nomination and Remuneration Committee
		Number of Meetings	Attendance (%)				
1. Dr.Thanong Bidaya	1/1	6/6	100	-	-	-	-
2. Mr.Plew Trivisvavet	1/1	6/6	100	-	-	-	-
3. Mr.Phongsarit Tantisuvanitchkul	1/1	6/6	100	4/4	-	-	2/2
4. Mr.Phairuch Mekarporn	1/1	6/6	100	-	4/4	4/4	-
5. Mr.Somnuk Chaidejsuriya	1/1	6/6	100	-	4/4	4/4	2/2
6. Mr.Yuttana Yimgarund	1/1	6/6	100	-	4/4	-	2/2
7. Dr.Sombat Kitjalaksana	1/1	5/6	83	4/4	-	-	-
8. Mr.Suvich Pungchareon	1/1	6/6	100	4/4	-	-	-
9. Mrs.Payao Marittanaporn	1/1	6/6	100	-	-	4/4	-
10. Mr.Kaoru Umehara	1/1	5/6	83	-	-	-	1/2
11. Mr.Hideo Matsumoto	1/1	6/6	100	4/4	-	4/4	-
12. Ms.Walainut Trivisvavet	1/1	5/5	100	4/4	-	4/4	-

In the year 2022, the Company held 21 meetings of the Board of Directors and sub-committees, with the average attendance of the Board of Directors' meetings of the whole committee at 97 percent. There was 1 non-executive meeting was held without the management at the Board of Directors meeting no. 6/2022 held on December 13, 2022, in order to assess the Managing Director's performance and to adjust the company's strategy for better performance.

2. Remuneration of Directors

The Company has the criteria for determination of remuneration for its directors and subcommittee member for submission to the shareholders' meeting for consideration and approval, and the policy on the determination of appropriate remuneration for its executive in line with their duties and responsibilities.

The remuneration of the Board of Directors was consider from their duties and responsibilities approved by the shareholders. The Nomination and Remuneration Committee shall consider the type of remuneration, guidelines, payment methods, and other benefits for the Board of Directors, subcommittee, and executive managements to be appropriate with the responsibilities consistent with the company's performance and market conditions, and propose to the shareholders meeting for approval of the remuneration, both monetary and non-monetary of the Board of Directors by individual basis each year, The Nomination and Remuneration Committee must consider the responsibilities, the intention of the directors, type and size of the company's business, markets, and competitors, and the remuneration must be at the appropriate level for the responsibilities.

Compensation Criteria

The company has criteria for consideration of remuneration by taking into account the appropriateness of the assigned responsibilities and can be compared to listed companies in the Stock Exchange of Thailand that were in similar industries. The remuneration of directors is sufficient to motivate the directors to have quality and be able to perform their duties to achieve the goal according to the business direction of the company, which determines the composition of the remuneration into 2 parts as follows:

a. Monetary remuneration

Part 1 Annual Fee, consist of:

- The retainer fee is the remuneration paid to directors on a monthly basis whether or not there are meetings by considering the operating results and the ability to operate according to goals.
- The attendance fee is the remuneration paid to directors who attended the meeting.

Part 2 The incentive fee / Bonus is a special remuneration paid to directors once a year by linking with the value created for shareholders such as the company's profits or dividends paid to shareholders.

In 2022, the company paid the compensations to directors a total of 20,158,000 Baht, which comprised 5,650,000 Baht as the Retainer Fee, 1,508,000 Baht as the Attendance Fee, and 13,000,000 Baht as the Bonus for the year 2021.

Compensation paid to each directors in 2022

(Unit : Baht)

Director Name	Position	Retainer Fee	Attendance Fee	Total	Bonus (2021)	Total
1. Dr.Thanong Bidaya	Independent Director, and Chairman of the Board of Directors	800,000	170,000	970,000	1,600,000	2,570,000
2. Mr. Plew Trivisvavet	Director, and Vice Chairman of the Board of Directors	700,000	85,000	785,000	1,400,000	2,185,000
3. Mr. Phongsarit Tantisuvanitchkul	Director, Chairman of the Executive Committee, and Nomination and Remuneration Committee	600,000	159,000	759,000	1,350,000	2,109,000
4. Mr.Phairuch Mekarporn	Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee	500,000	145,000	645,000	1,050,000	1,695,000
5. Dr.Patarut Dardarananda ⁽¹⁾	Former Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee	-	-	-	954,795	954,795
6. Mr.Yuttana Yimgarund ⁽²⁾	Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee	450,000	125,000	575,000	70,205	645,205
7. Mr.Somnuk Chaidejsuriya	Independent Director, Chairman of the Risk Management and Corporate Governance Committee, Audit Committee, and Nomination and Remuneration Committee	500,000	155,000	655,000	1,175,000	1,830,000
8. Dr.Sombat Kitjalaksana	Director, and Executive Committee	350,000	100,000	450,000	900,000	1,350,000
9. Mr.Suvich Pungchareon	Director, and Executive Committee	350,000	117,000	467,000	900,000	1,367,000
10. Mrs.Payao Marittanaporn	Director, and Risk Management and Corporate Governance Committee	300,000	105,000	405,000	750,000	1,155,000
11.Mr.Kaoru Umehara	Director, and Nomination and Remuneration Committee	300,000	73,000	373,000	750,000	1,123,000
12. Mr.Hideo Matsumoto	Director, Executive Committee, and Risk Management and Corporate Governance Committee	400,000	137,000	537,000	1,050,000	1,587,000
13. Ms.Walainut Trivisvavet	Director, Executive Committee, Risk Management and Corporate Governance Committee, and Managing Director	400,000	137,000	537,000	1,050,000	1,587,000
Total		5,650,000	1,508,000	7,158,000	13,000,000	20,158,000

Remark :

1) Dr.Patarut Dardarananda was appointed as the Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee until 6 December 2021.

2) Mr.Yuttanat Yimgarund was appointed as the Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee since 7 December 2021.

Comparison of Compensations paid to Directors in 2022, 2021, and 2020

(Unit : Baht)

Description	2022		2021		2020	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	12	5,650,000	13	5,650,000	13	6,200,666
Attendance Fee	12	1,508,000	12	1,339,000	13	1,526,400
Incentive Fee / Bonus	13	13,000,000	14	13,305,000	13	18,420,000
Total	-	20,158,000	-	20,294,000	-	26,147,066

b. Other remuneration and benefits

- None -

Remuneration for subsidiaries' directors

In 2022, the subsidiaries paid remuneration to its directors and executives as follows:

1. Pathum Thani Water Company Limited
Directors's remuneration
1) Monetary remuneration

(Unit : Baht)

Director Name	Position	Retainer Fee	Attendance Fee	Total	Bonus (2021)	Total
1. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Board of Directors	300,000	60,000	360,000	500,000	860,000
2. Mr.Luckchai Pattamacharoen	Former Chairman of the Board of Directors	-	-	-	245,480	245,480
3. Dr.Sombat Kitjalaksana	Director	150,000	30,000	180,000	250,000	430,000
4. Mr.Tanat Siricharoen	Former Director	-	-	-	250,000	250,000
5. Mr.Somkiat Pattamamongkolchai	Director	150,000	30,000	180,000	250,000	430,000
6. Ms.Walainut Trivisvavet	Director, and Managing Director	150,000	30,000	180,000	250,000	430,000
Total		750,000	150,000	900,000	1,745,480	2,645,000

Comparison of Compensations paid to PTW's Directors in 2022, 2021, and 2020

(Unit : Baht)

Description	2022		2021		2020	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	4	750,000	6	1,223,372	11	1,332,800
Attendance Fee	4	150,000	7	327,250	11	303,450
Incentive Fee / Bonus	6	1,745,480	11	2,850,000	6	4,080,233
Total	-	2,645,480	-	4,400,622	-	5,716,483

2) Other remuneration and benefits

- None -

2. Thai Water Operations Company Limited

Directors' remuneration

1) Monetary remuneration

In 2022, there is no remuneration for the directors of Thai Water Operations Company Limited.

Comparison of Compensations paid to TWO's Directors in 2022, 2021, and 2020

(Unit : Baht)

Description	2022		2021		2020	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	-	-	-	-	4	270,000
Attendance Fee	-	-	-	-	-	-
Incentive Fee / Bonus	-	-	-	-	4	570,000
Total	-	-	-	-	-	840,000

2) Other remuneration and benefits

- None -

8.1.3 Corporate Governance on Subsidiaries and Associated Companies

The Company supervises its subsidiaries and associated companies to ensure that their business operations are in line with the policies and goals of the Company and that they have an appropriate return on investment. The Board of Directors, therefore, has established, in writing, the regulations to govern subsidiaries and associated companies as a guideline as follows:

- (1) Supervise subsidiaries and associated companies by sending representatives of the Company to be directors and/or senior executives in subsidiaries and associated companies according to the proportion of shares held in that company. This is to facilitate comprehensive control and determine the management direction of said subsidiaries and associated companies with transparency and verifiability. As such, the appointment of any representative to perform duties as director and/or senior executive in subsidiaries and associated companies must first be approved by the Nomination and Remuneration Committee and then presented to the Board of Directors for final authorization.
- (2) Determine the limit for the approval limit of the Board of Directors of the Subsidiary. If the limit is exceeded, it must seek approval from the company before proceeding.
- (3) A report of the operating results of subsidiaries and associated companies must be presented at the Board of Directors' meeting on a quarterly basis.

8.1.4 Monitoring on the Compliance of the Corporate Governance Policy and Practices

The Company and its Board take into account the rights of all stakeholder groups and consistently abide by corporate governance principles, best practices, and other supporting guidelines, including our Code of Conduct, to ensure equal and proper treatment of all stakeholders. In the past years, the Company has been monitoring to ensure good corporate governance principles and practices on the following:

1. Conflict of Interest

The Board of Directors has the policy to prevent conflicts between personal interests and the interests of the company. As defined in the Code of Conduct for directors, executives, and employees as follows:

1. Supervise the company to comply with the rules, procedures, and disclosure of connected transactions as strictly required by law or regulatory agency and according to the company's regulations.
2. Avoid making transactions that are related to oneself or persons / juristic persons. That may cause conflicts of interest with the company.
3. In the case of a transaction that is a connected transaction that does not comply with general trading conditions according to the principles approved by the Board of Directors or the nature and size of the transaction, is not within the authority of the management, must be reviewed and commented by the Audit Committee before proposing for approval from the Board of Directors or shareholders.
4. In the event that it is necessary to make a connected transaction, the transaction must be in accordance with general trading conditions according to the principles approved by the Board of Directors. With transparency and fairness, as if making transactions with third parties and taking into account the maximum benefits of the company.
5. Stakeholders must not take part in considering the items that they have a conflict of interest.

2. Insider Trading Control

The company has a written guideline to prevent the use of inside information strictly in the Corporate Governance and Business Ethics of the Company, in order to prevent the use of inside information for improper benefits for oneself and others. It is the duty and responsibility of the supervisor to control and ensure the maintenance of internal information according to principles. The use of inside information that has not been disclosed to the public or general shareholders for the benefit of trading securities by themselves or others is considered an unethical act of the company.

Guideline for prevention of use of inside information of the company has approved from the Board of Directors meeting, No. 1/2006 held on July 28, 2006. TTW has distributed this guideline in a circulating letter and on the company's website for the Director, Executives, and Staff to acknowledge and comply strictly.

Guideline for Prevention of Use of Inside Information

Rationale

TTW is a listed company in the Stock Exchange of Thailand and has run its business in compliance with Public Limited Companies Act B.E.2535 (on the part of share trading), and with the Securities and Exchange Act B.E. 2535 (on the part of securities and exchange), through the performance of duties by directors, executive management, employees of TTW, and the employees of subsidiary companies. There has been a prohibition for such persons from using the essential and unpublicized facts and information that can significantly impose an effect on the price of shares, which they have learned from performing their duties or holding a position in the company; otherwise, they would be considered as committing a criminal offence and

subject to punishments as provided by laws. There were some amendments made to Securities and Exchange Act B.E. 2559 (5th edition) as announced in the Thai Royal Gazette on 11 December 2016. TTW has notified these changes in a circulating letter to directors, executive management, employees of TTW, and employees of subsidiary companies to acknowledge and comply.

In order to prevent the directors, executive management, employees of TTW and employees of subsidiary companies, as well as TTW Company itself, from facing a charge on violating such laws, and in order to implement a good corporate governance approach of TTW; the company has defined the guideline for the prevention of internal information usage for all directors, executive management, employees of TTW and employees of subsidiary companies to comply strictly. All these persons shall comply with the provisions in the Securities and Exchange Act (5th edition) B.E. 2559. TTW has defined the guideline for the prevention of internal information usage as follows.

Directors

- (1) Directors shall not use the information acquired from holding the position as a director of the company in a wrongful manner or in a way that would cause damages to the company.
- (2) Directors shall not disclose the business confidential information or any information to any third party that may affect the company's business.
- (3) Directors, including their spouses and their minors, shall not conduct share trading while having access to internal information of the company, which will affect the price of the shares if this information is disclosed to the public.
- (4) Directors shall not reveal any unpublicized information to a third party, which may lead to a reservation of purchase or sale of the company's shares.

Employees

- (1) Employees shall strictly comply with the regulations defined by SET/SEC and applicable laws, which cover the equitable disclosure of information for shareholders and/or the public.
- (2) For disclosure of any information that may affect the business or the share price of the company, an approval must be sought from the Managing Director who may disclose the information or assign a responsible person to do so.
- (3) The work units in central administration that take function in providing information to the public and investors include Investors Relation and Company Secretary Units (under the Corporate Affairs Division). The work units that own information has a duty to provide support of such information. The directors, executive management and employees who have access to information about financial statement are prohibited by the company from trading shares within a period of 30 days prior to the disclosure of information and within a period of 24 hours after such disclosure. For any other significant information, executive management and employees who have access to the information are prohibited from trading shares during the period from the date that they have known about the information to 24 hours after the disclosure of such information

to SET. In addition, TTW has adopted an internal control system to prevent the leakage of information thoroughly and cautiously. This is to prevent internal information from being revealed to the outside prior to a formal disclosure. These measures and control systems are considered as a part of significant risk control measures of the company. It is the duty and responsibility of supervisors to oversee the protection of internal information in line with such measures. If an employee uses unpublicized internal information, or the ones that have not revealed to general shareholders, for personal or other people's benefits from share trading shall be considered as violating the code of conduct defined by the company.

Securities Trading Based on the Use of Internal Information

Prohibited Persons

The persons who shall not trade the securities as per the prohibition set in the guideline for the prevention of internal information usage include:

- (1) Any directors, executive management, or the persons who have the authority to control the operation of the company.
- (2) Worker or employees in the chain companies or the persons holding a position or working in a line of duty that holds responsibility for internal information.
- (3) The persons holding status in favor of acknowledging internal information from performing their duties as an auditor, financial consultant, legal advisor, property price appraisal expert, or any other person doing duties related to internal information.
- (4) Parents, descendants, adoptive parents, or adopted children of the persons mentioned in (1) (2) and (3).
- (5) Siblings from the same mother and father, or the siblings from either the same mother or the same father, of the persons mentioned in (1) (2) and (3).
- (6) The spouses of the persons cohabitated with the persons mentioned in (1) (2) and (3).

Prohibited Securities

Securities mean the shares, share warrants, convertible debentures, and transferable subscription rights that are issued by the company.

General Practice Guideline

- (1) Prohibited persons shall not trade the securities at any given moment, as long as they know or should have known the essential and unpublicized information that may affect the price of TTW securities in the Stock Exchange.
- (2) Prohibited persons who have acknowledged such essential information from performing their duties and/or from holding a position in the company and its subsidiaries shall not reveal such information to other persons while it has not been publicized yet; except the revealing through the duties they perform in the company.

Specific Practice Guideline

Apart from the general practice guideline for the prevention of internal information usage, there are some specific practice guidelines that the prohibited persons shall comply as detailed below:

- (1) The prohibited persons who have direct involvement in the preparation of TTW financial statements shall not trade TTW securities during the period from the commencement of such preparation to the end of the following day after the date of disclosing such statements.
- (2) Any directors, executive management, and employees who have received a draft copy of TTW financial statements shall not trade TTW securities during the period from the day that they received the draft of financial statements to the end of the date of disclosing such statements.
- (3) Prohibited persons who know or should have known that the company will reveal essential information that may affect the prices of TTW securities in the Stock Exchange shall not trade TTW securities starting from the date that they know or should have known about the event to the end of the following day after the date of revealing and distributing such information.
- (4) The company requires the directors and executive management to report the changes of securities holding in TTW Public Company Limited.
- (5) The Company has set a policy for directors and executive management to report to the Board of Directors at least 1 day in advance before trading the company's shares.

Reporting Procedures of Prohibited Persons

The Required Duty to Prepare the Report

- (1) Managing Director or a person holds an executive management position in accordance with Securities and Exchange Act shall prepare a report on their initial possession of securities and any changes in the possession of such securities afterward, as required by applicable laws and regulations; and shall submit such report to TTW simultaneously.
- (2) Executive management holds a position as a department head or higher shall prepare a report of the acquisition and the selling of TTW securities in their possession in the case that the volume of such acquisition or sale is equal or over 5% of the total securities that have been sold.

Reporting Method

- (1) The Managing Director or a person who holds an executive management position has a duty as required by laws shall prepare and submit a report of the possession of TTW securities of their own and their spouses and minor descendants. They are required to submit a copy of such report to the company on the same day that they have sent it to a respective government authority or a regulatory agency.
- (2) The Executive management holds a position as a department head or higher shall prepare a report of the possession and the changes in possession of TTW securities of their own and their spouses and minor descendants; and submit to the company within 7 working days from the date of ownership transfer of such securities.

In 2022, the Corporate Secretariat section has notified the directors, executives, and employees of the Company by e-mail about the Blackout Period in advance. The directors, executives, and employees of the Company have strictly complied with the guidelines to prevent the use of inside information and have not traded securities by using the inside information.

3. Securities Trading or Changing by Directors and Executives

The Company requires directors and executives to report trading of the Company's securities in order to prevent the buying or selling of securities by using inside information and to avoid any grievances regarding the appropriateness of insider trading. As such, directors and executives are prohibited from buying, selling, or making any changes to their holdings in Company securities for a period of 1 month before the disclosure of financial statements, financial status, business status, or any other important data of the Company to investors. Additionally, directors and executives are required to report any changes in their interests in the Company. Said information is updated every year and is kept for internal use only in compliance with the Notification of the Capital Market Supervisory Board No. Tor Chor 2/2552 regarding the reporting of interests of directors, executives, and related parties.

Guidelines

- The Company shall send a letter to directors and executives, including spouses and minor children, requesting for cooperation in refraining from trading or making any changes to holdings in company's securities and to provide reports to the Corporate Governance Committee and the Board of Directors on a quarterly basis.
- The Company shall require employees who have access to company's important information that could affect the movement of stock prices to refrain from trading any Company securities or wait until the public has received said information and has the time to evaluate it before doing in order to comply with the company's internal information protection policy.
- The Company shall require directors or executives to report to the corporate secretary department when trading or making changes to securities holdings in the company in order to prepare a proper and comprehensive report to regulatory agencies within the timeframe specified by law, consisting of the Report of Securities Holding Form (Form 59-1) and the Report of Changes in Securities and Derivatives Holding Form (Form 59-2).
- The Company shall require directors and executives to report any changes in their interests in the Company every time that has a change of information. Said information must be updated annually.

Direct and Indirect Shareholding by Directors and Executives until December 31, 2022

Director / Executive	Position	TTW shares held as of December 31, 2021	Increase/ (Decrease) in TTW shares held in 2022	TTW shares held as of December 31, 2022	Percentage of Shares held (%)
Dr. Thanong Bidaya	Independent Director and Chairman of the Board of Director	342,500	-	342,500	0.0085
Mr. Plew Trivisvavet	Vice Chairman of the Board of Director	200,000	-	200,000	0.0050
Spouse and minor children		100,000	-	100,000	0.0025
Mr. Phongsarit Tantisuvanitchkul	Chairman of the Executive Committee	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Phairuch Mekarporn	Independent Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Somnuk Chaidejsuriya	Independent Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Yuttana Yimgarund	Independent Director	-	-	-	-
Spouse and minor children		-	-	-	-
Dr. Sombat Kitjalaksana	Director	1,000,100	-	1,000,100	0.0250
Spouse and minor children		-	-	-	-
Mr. Suvich Pungchareon	Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mrs. Payao Marittanaporn	Director	-	-	-	-
Spouse and minor children		100	-	100	0.000003
Mr. Kaoru Umehara	Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Hideo Matsumoto	Director	-	-	-	-
Spouse and minor children		-	-	-	-
Ms. Walainut Trivisvavet	Director / Managing Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Phakpoom Thaweewittayarut	Deputy Managing Director, Administration Group	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Somkiat Pattamamongkolchai	Deputy Managing Director, Finance Group	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Pipat Katikul	Acting Deputy Managing Director, Operations Group	-	-	-	-
Spouse and minor children		-	-	-	-
Ms. Sudarat Chiamchan	Assistant Managing Director, Office of Managing Director and Company Secretary	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Hongthong Artit	Business Development Director	400	-	400	0.00001
Spouse and minor children		-	-	-	-
Mr. Chatchawan Tienprasertkij	Customer Relationship Management Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mrs. Busawan Pholprasert	Acting Human Resource and Administration Director	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Prem Liemsakul	Acting Account and Finance Division Director	-	-	-	-
		-	-	-	-

4. Anti-corruption and Bribery

TTW has adopted a Zero Tolerance policy regarding the corruption and bribery disclosed on the Company website. Board of Directors, executive management, supervisors, employees at all levels, or any related persons are prohibited from involving in all forms of corruption in any business transactions; and they shall comply with rules, regulations, and laws of any countries that TTW has been dealing a business. This policy shall be reviewed on a regular basis to identify a necessary revision for catching up with the new amendments of rules, regulations, standards, and laws; and with the changes the in business. TTW has adopted a policy on anti-corruption and bribery and defined the principles in the code of business ethics prohibiting the employees from requesting or receiving any benefits or assets that may motivate them to perform their duties in a wrongful way, omit the performance of some duties, or cause the company to lose a rightful benefit. Employees are also prohibited from offering or presenting benefits or assets to outsiders to motivate such persons to commit or omit action illegally in favor of a malpractice in his/her position.

Risk Assessment

In 2022, the Risk Management and Corporate Government Committee assessed the potential risk of corruption by assessing the risk of corruption separated from other risks, in particular, and reporting the risks to the Board of Directors with an internal audit unit to supervise the implementation of the risk assessment report.

Training and Communication

In 2022, the Company communicated and organized training to educate employees regarding anti-corruption policies and all related policies by publishing the anti-corruption articles and guidelines with good practices for employees at all levels.the company provided the lectures regarding anti-corruption practices during the orientation for new employees and tests on said lectures. Employees at all levels can access anti-corruption policies and other various policies via the company's intranet system, the company website, and the company's news board.

Guidelines for Prevention and Monitoring of Fraud and Corruption Risks

1. Provide an inspection process Evaluate internal control systems and risk management covering important systems such as procurement systems. Contracting Budgeting and control system accounting system, payment system, etc. in order to prevent and monitor the risk of fraud and corruption including giving suggestions about appropriate solutions
2. Provide channels to receive information about clues or complaints of violations offense or business ethics of the company or guidelines for preventing involvement in corruption or doubts in financial reports or internal control system With a policy to protect information providers or clues and will keep the information of the information provider confidential Including measures to check and determine penalties discipline of the Company and / or related laws In the event that you can contact the whistleblower or the complainant, the company will notify the result of the operation in writing.
3. The head of the relevant department is responsible for monitoring the operation. Improvements to correct errors (if any) and report to authorized persons, respectively.

Guidelines for Monitoring and Evaluating Implementation of Anti-Corruption Practices

1. Require executive management and employees to carry out regular self-assessment of their performance in regard to compliance with the Good Corporate Governance Handbook and the Company's Code of Business Conduct, which includes the Company's good corporate governance policy and guidelines for the prevention of any forms of corruption, as well as the Code of Ethics/Conduct for all employees.

2. Establish and organize the examination of an internal control system, risk management, and corporate governance by the internal audit department, and provide continuous feedback and recommendations accordingly. Carry out audits in accordance with the annual audit plan approved by the audit committee and report the significant audit results and recommendations to the Audit Committee.

3. Assign the internal audit department to be responsible for ongoing testing and evaluation of fraud and corruption risk in order to implement anti-fraud and anti-corruption measures effectively, as well as to carry out follow-up, review, and improvement of anti-corruption measures on a regular basis. Assessment results must present in a timely and consistent manner to the Risk Management and Corporate Government Committee and the Board of Directors respectively.

4. If investigation finds any information or a complaint contains evidence with sufficient and reasonable grounds for the possibility of misconduct or for any action that may have a significant impact on the Company's financial position or performance, including any violation or action that is against the law or code of business ethics or anti-corruption measures of the Company, or if there are any doubts in regard to financial reports or the internal control system, the Audit Committee will report said issues to the Board of Directors so that actions can be taken and improved within a timeframe deemed appropriate by the Audit Committee.

The company provides communication guidelines for prevention of involvement in corruption. By publishing on various channels such as the intranet of the group and the company's website in order for the management and all employees to acknowledge and comply.

5. Whistleblowing

TTW has provided measures for complaints and clues by disseminating such measures in the Principles of Corporate Governance and on the website of the company and reviewed this measure in order to ensure that complaints are effective and complete. And also helps in tracking and monitoring the performance of directors, executives, and employees of the TTW Group to comply with laws, regulations, principles of corporate governance, and Business ethics and do not take any action that may indicate fraud.

Channels for Reporting Clues or Complaints

The Board of Directors has set up measures to report clues or complaints of unlawful conduct or behavior that may indicate corruption or misconduct of individuals in the organization, both from employees and other stakeholders, including incorrect financial reports or defective internal control systems, and has a mechanism to protect employees and informants of clues by creating a secret database system that only related

parties can access for allowing stakeholders to participate in monitoring the interests of the company more efficiently. Issues that can report:

- Any practices that are against the law or relevant regulations, including the code of conduct/ethics.
- Corruption or fraud.
- Suspicious actions relating to money laundering, accounting, finance, or control and monitoring practices.

In the case of any complaint of possible offense, a committee will be appointed to investigate the matter and take action in accordance with applicable regulations. Said committee would be made up of representatives from departments having no interest in the matter under investigation. Whistle-blowers may raise their concerns with the Audit Committee, the Board of Directors, or the Corporate Governance Department via 2 separate channels as follows:

- by email at: cg@ttwplc.com
- by post addressing one of the committees at the following address:

TTW Public Company Limited

30/130 Moo 12, Buddha Monthon 5 Road, Raikhing, Sampran, Nakhon Pathom 73210

Providing Protection to those who Report Complaints or Whistleblowers, and Related Persons

Complainants or whistleblowers, violations or non-compliance with laws will receive appropriate and fair protection from TTW, for example, without changing job positions, job description, workplace, suspend, threaten, disrupt work practice, dismissal, or any other action that is not fair to those who report the complaint or the informant for information about the complaint. TTW will keep it confidential and not disclose to unrelated people except those that need to disclose in accordance with the law must keep the information confidential and does not disclose to other people except as required by law. If there is a deliberate violation of the information released, TTW will proceed with punishment according to TTW regulations and/or take an legal action as the case may be.

Action when Receiving Complaints

1. The independent director will appoint the working group to collect the complaint.
2. The assigned working group will consider screening information to propose process and proper management methods.
3. The assigned working group proposes measures for actions that violate or do not comply with the Code of Conduct and various policies. The Board of Directors will consider with regard to total damage.
4. The Chairman of the Audit Committee, Independent Director, or Company Secretary report to the Board of Directors for acknowledgment, and report to the stakeholder who is the complainants if the complainant discloses him/herself.

In 2022, there were no complaints from stakeholders.

8.2 Report of the Audit Committee's Performance 2022

8.2.1 Number of meetings' attendance:

Name	Position	Number of Meetings in 2022
1. Mr.Phairuch Mekarporn	Chairman of the Audit Committee	4/4
2. Mr.Somnuk Chaidejsuriya	Audit Committee	4/4
3. Mr.Yuttana Yimgarund	Audit Committee	4/4

8.2.2 Report of the Audit Committee's Performance

Audit Committee As of 31 December 2022	Summary of key duties and responsibilities
Mr. Phairuch Mekarporn (Chairman) Mr. Somnuk Chaidejsuriya Mr. Yuttana Yimgarund	The Audit Committee has the main duty to support the Board of Directors to perform their duties in accordance with their supervisory responsibilities as follows: <ol style="list-style-type: none"> 1. Review the Company's financial reports to ensure the correctness. 2. Review the internal control and internal audit systems of the Company to ensure the suitability and efficiency. 3. Review the Company's operations in accordance with the requirements, laws, regulations, and policies that are related to the Company's business. 4. Consider disclosing information in case of connected transactions or transactions that may have conflicts of interest to ensure accuracy, completeness, and timeliness. 5. Consider the qualification, performance, and independence of auditors. 6. Consider the performance of the internal audit unit under the scope of powers, duties, and responsibilities according to the Audit Committee Charter

The Audit Committee's performance report can be considered from Attachment 6: the Audit Committee Report.

8.3 Summary of other sub-committees' performances

The Board has established 4 sub-committees that reports directly to the Board in order to assist the Board in discharging its responsibilities. Each sub-committee performs its duties in accordance with its charter approved by the Board. These sub-committees shall provide advice and recommendations in relation to their areas of expertise. The key duties and responsibilities are summarized as below.

List of Sub-Committee	Summary of key duties and responsibilities
Executive Committee Mr. Phongsarit Tantisuvanitchkul (Chairman) Dr. Sombat Kitjalaksana Mr. Suvich Pungchareon Mr. Hideo Matsumoto Ms. Walainut Trivisvavet	<ul style="list-style-type: none"> • Supervising the Managing Directors' performances to ensure compliance with policies and strategies as determined by the Board of Directors, as well as providing advice and suggestions to the Managing Directors. • Supervising the conduct of feasibility studies on new projects and approving the implementation of projects.

List of Sub-Committee	Summary of key duties and responsibilities
	<ul style="list-style-type: none"> Having authorized to approve execution of any juristic acts which would have a binding effect upon the company within an amount of not exceeding 50 MB under the policy and strategy framework set by the Board of Directors. Performing other duties as assigned by the Board of Directors. <p>The information on the attendance number of the Executive Committee can be considered from Item 8.1.2: Board of Directors' Attendance, and the Executive Committee performance report can be considered from Attachment 6.</p>
<p>Risk Management and Corporate Governance Committee</p> <p>Mr. Somnuk Chaidejsuriya (Chairman)</p> <p>Mrs. Payao Marittanaporn</p> <p>Mr. Phairuch Mekarporn</p> <p>Mr. Hideo Matsumoto</p> <p>Ms. Walainut Trivisvavet</p>	<ul style="list-style-type: none"> Considering policies, strategies, and risk management plans. Monitoring and controlling the Company's overall risks to stay at an acceptable level. Supervising the operations of the Board of Directors and the Management to ensure the compliance of the good corporate governance principles. Reviewing the corporate governance policy and the corporate governance and code of conduct handbook. Following up on the policy compliance through complaints channels. Supervising operations and providing advice and suggestions for operations for corporate sustainability development. <p>The information on the attendance number of the Risk Management and Corporate Governance Committee can be considered from Item 8.1.2: Board of Directors' Attendance, and the Risk Management and Corporate Governance Committee performance report can be considered from Attachment 6.</p>
<p>Nomination and Remuneration Committee</p> <p>Mr. Yuttana Yimgarund (Chairman)</p> <p>Mr. Somnuk Chaidejsuriya</p> <p>Mr. Phongsarit Tantisuvanitchkul</p> <p>Mr. Kaoru Umehara</p>	<ul style="list-style-type: none"> Recruiting qualified persons for the position of the Board of Directors and the Managing Director. Providing opinions on remuneration management and other benefits for the Board of Directors, sub-committee, and managing director. <p>The information on the attendance number of the Nomination and Remuneration Committee can be considered from Item 8.1.2: Board of Directors' Attendance, and the Nomination and Remuneration Committee performance report can be considered from Attachment 6.</p>

9. Internal Control and Related Party Transactions

9.1 Internal Control

The Board of Directors recognizes the importance of the internal control system to prevent and reduce the potential risks by assigning the Audit Committee which consists of an independent directors to review the internal control system. The Internal Audit section reports directly to the audit committee, to review the accurate operational controls and financial reporting according to the annual audit plan approved by the audit committee. There always review the effectiveness of the internal control system in order to able operate the business for the utmost benefit to all stakeholders on the basis of fairness. The Audit Committee has duties to consider selection, propose the appointment of the auditor and determine the remuneration, consider the company's information disclosure to be accurate and complete, and consider the connected transactions or any transactions that may cause conflicts of interest.

The Company did not found any flaws in the internal control systems in the past. However, the Internal Audit Section has suggestions to improve work efficiency, reduce repetitive operations by recommended and follow-up on action and report the results to the Audit Committee for acknowledgement.

In the year 2022, the Audit Committee held 4 meetings between the Management and auditors from EY Office Limited, and 1 meeting between the Audit Committee and Auditor without the Management in order to inquire about the audit plan and issues that independently detected.

The Company has conducted the internal audit according to the Professional Standards of Internal Audit and Internal Control Practice of the Committee of Sponsoring Organizations of the Tread way Commission: COSO, in order to achieve the objectives of internal control in 3 aspects : Operations, Reporting, and Compliance with the law and rules related to the company business operations which is widely recognized in respect of principle and content of assessment in 2022.

9.2 Related Party Transactions

TTW complies with requirements, rules, and regulations of the Securities and Exchange Commission (SEC). In the case that TTW engages in a party transaction that may lead to a conflict of interest must be approved by the Board of Directors. The Audit Committee will determine the justification of the engagement in such transaction by taking into account the maximum benefits for the company. The prices and conditions in the transaction must be based on normal business nature, fair price, or by comparing it to a market price. Any directors who related to such transaction that may lead to a conflict of interest shall not be eligible to attend or vote in the meeting to review such agenda.

Moreover, TTW also has the policy to disclose any related party transactions as defined in the announcement of The Stock Exchange of Thailand on the criteria, conditions, and method for the disclosure of related party transactions of a listed company and compliance with the requirements stipulated in the Securities and Exchange Act. Related party transactions were based on market prices and fair and at arms' length.

For the accounting period ended of December 31, 2022, the company has disclosed related party transactions in the note to a financial statement that has already been audited by the auditor of the company in compliance with generally accepted accounting standards and the Annual Registration Statement 2022 (Form 56-1 One Report), which contained the following details.

1) Transaction of TTW with CH.Karnchang Public Company Limited (CK)

CK engages in the construction business and a full range of development, investment, and management of large-scale infrastructure concession projects within the country and the region. CK is related to TTW's company since CK is TTW's major shareholder, has held shares in TTW amount of 19.40 percent of TTW's registered and paid-up capital. TTW and CK have two common director, namely: (1) Mr.Plew Trivisvavet and (2) Mr.Phongsarit Tantisuvanitchkul.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Tap Water and wastewater treatment			
• Accounts receivable	3.1	17.0	• Tap water and wastewater treatment service charges at the rate as specified in the Notification of the Industrial Estate Authority of Thailand.
• Sales of treated water	56.3	80.0	
• Service income	14.5	20.7	
Improvement of water supply project			
• Project costs during construction	244,424.6	88,715.9	• TTW engaged CK to improve water supply and distribution system at Banglen water treatment plant (phase 1) amount 349.7 million baht, period of 18 months, which the price had been considered by independent engineering as a reasonable price .
• Prepaid construction costs	12,967.4	36,344.2	
			• TTW engaged CK to improve water supply and distribution system at Banglen water treatment plant (phase 2) amount 330.9 million baht, period of 16 months, which the price had been considered by independent engineering as a reasonable price .

2) Transaction of TTW with Pathum Thani Water Company Limited (PTW)

PTW engages in the tap water production and sales to Provincial Waterworks Authority (PWA) in Pathum Thani – Rangsit area. TTW has held shares in PTW amount of 98.0 percent of PTW's registered and paid-up capital. TTW and PTW have 3 common directors, namely: (1) Mr.Phongsarit Tantisuvanitchkul, (2) Dr.Sombat Kitjalaksana, and (3) Ms.Walainut Trivisvavet, and 1 executive as a director, namely, Mr.Somkiat Pattamongkolchai.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Investment in PTW			
<ul style="list-style-type: none"> Dividend income Management income Interest income Long term loans Interest receivable 	600,202.7 1,166.4 - 1.3	938,385.5 6,000.0 3,007.6 57,160.0 10.2	<ul style="list-style-type: none"> TTW invested in PTW by receiving the dividends from PTW's operations which have been approved by the Board of Directors and Shareholders meeting of PTW TTW provides management support services such as Personnel and administration, Purchasing, Account, and Finance, the service fees is comparable and refer to the personnel employment. TTW provided long a term-loan with an interest rate calculated as MLR minus an amount of difference as defined in contract which the rate is comparable to the cost from financial institute.

3) Transaction of TTW with Thai Water Operations Company Limited (TWO)

TWO engages in the business of provider of maintenance service for production and wastewater treatment systems TTW has held shares in TWO amount of 68.5 percent of TWO's registered and paid-up capital. TTW and TWO have 1 common director namely, Ms.Walainut Trivisvave, and 1 executive as a director, namely, Mr.Pipat Katikul.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Engagement for the production and wastewater treatment systems Management			
<ul style="list-style-type: none"> Sale and service cost Security bond creditor Administration cost income 	37,902.0 5,000.0 13,909.1	37,301.4 5,000.0 10,527.0	<ul style="list-style-type: none"> TTW engaged TWO to provide maintenance service for production and wastewater treatment systems, which the service fees are comparable and refer to the personnel employment. TTW provides management support services such as Personnel and administration, Purchasing, Account, and Finance, the service fees are comparable and refer to the personnel employment.

4) Transaction of TTW with CK Power Public Company Limited (CKP)

CKP operates its core business by holding shares in other companies that engage in the production and sale of electricity relate to various types of energy. As of December 31, 2022, TTW was CKP's major shareholder, has held shares in CKP amount of 24.98 percent of CKP's registered and paid-up capital. TTW and CKP have 2 common Directors, namely: (1) Dr.Thanong Bidaya and (2) Mr.Plew Trivisvavet.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
<ul style="list-style-type: none"> Dividend income 	162,460.8	71,076.6	<ul style="list-style-type: none"> The company invests in CKP and received dividends from its operations, which has been approved at the CKP's Board of Directors meeting and/or at the CKP's shareholder meeting.

5) Transaction of TTW with Bang Pa-in Cogeneration Company Limited (BIC)

BIC engages in the production and distribution of electricity and steam from the cogeneration system. BIC is CKP's subsidiary that TTW has held shares in CKP amount of 24.98 percent.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Tap water sales and waste water treatment			
<ul style="list-style-type: none"> Trade receivables Sales of treated water income Service income 	4,036.6 45,467.7 2,939.3	4,339.4 43,459.6 2,809.5	<ul style="list-style-type: none"> Tap water and wastewater treatment service charges at the rate as specified in the Notification of the Industrial Estate Authority of Thailand.

6) Transaction of TTW with Expert Transport Company Limited

Expert Transport Company Limited engages in the large lorry transportation business, has 1 common Director, namely: Mr.Plew Trivisvavet.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Tap Water sales and waste water treatment			
<ul style="list-style-type: none"> Trade receivables Sales of treated water income Service income 	- - -	- 5.7 1.5	<ul style="list-style-type: none"> Tap water and wastewater treatment service charges at the rate as specified in the Notification of the Industrial Estate Authority of Thailand. Remark: There was no transaction in 2022.

7) Transaction of TTW with Bang Pa-in Land Development Company Limited (BLDC)

BLDC engages in the business of operation of the Bang Pa-in Industrial Estate, sale of areas and management and service provision of certain utilities within the Bang Pa-in Industrial Estate. TTW and BLDC have 1 common director, namely: Mr.Plew Trivisvavet.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Lease of area in Industrial Estate for new raw water pumping station construction and laying raw water pipelines <ul style="list-style-type: none"> Land rental 	1,320.0	1,320.0	<ul style="list-style-type: none"> Land rental for new raw water pumping station construction and laying raw water pipelines in Bang Pa-in Industrial Estate, the rental rate has been considered by an independent appraiser that was a reasonable price.
Service Fee <ul style="list-style-type: none"> Service Fee 	1,326.3	1,326.3	<ul style="list-style-type: none"> TTW paid a service fee to BLDC at the rate of 50% of the amount that IEAT collects from BLDC, which is an agreement in the contract for the right to produce, distribute, and provide services that have been approved by the extraordinary general meeting of shareholders no.1/2009.
Memorandum of agreement for payment of construction costs Bang Pa-In Industrial Estate Flood Protection Dam			

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
<ul style="list-style-type: none"> Service Fee Trade payables and Other payables 	1,542.7 275.1	1,542.9 275.1	<ul style="list-style-type: none"> TTW has signed an agreement to pay for the construction cost of the flood protection dam of Bang Pa-In Industrial Estate. The contract has a period of 10 years, starts from April 2018 to March 2028. The reference service fee is the price that BLDC charges from other customers in BangPa-in Industrial Estate.
Pumping Service <ul style="list-style-type: none"> Service Fee Trade payables and Other payables 	2,637.6 480.9	2,501.5 465.0	<ul style="list-style-type: none"> BLDC pumps the treated wastewater into the public railways to TTW at a comparable cost to the actual cost.
Tap Water sales and waste water treatment <ul style="list-style-type: none"> Sales of treated water income Service income 	1,157.5 299.2	1,194.5 304.8	<ul style="list-style-type: none"> Water supply and wastewater treatment fees are charged at a rate that equates to other customers in Bang Pa-in Industrial Estate.

8) Transaction of TTW with Bangkhenchai Company Limited (BKC)

BKC engages in the business of production and distribution of electricity from the solar power, BKC is CKP's subsidiary that TTW has held shares in CKP amount of 24.98 percent.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Solar rooftop electricity generation project <ul style="list-style-type: none"> Electricity cost Accrued expenses 	15,522.7 1,722.6	12,912.6 1,203.1	<ul style="list-style-type: none"> On September 12, 2018, TTW has entered into a power purchase agreement with BKC for a period of 25 years from 2019 to 2044, with the electricity tariff has a 10% discount from the electrical charge that the Provincial Electricity Authority charges.

9) Transaction of TTW with Mitsui & Co.,LTD (Thailand) (Mitsui)

Mitsui & Co.,LTD (Thailand) engages in the business of transportation and general trading. Mitsui is TTW's major shareholder.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2022	Accounting Period Ended December 31, 2021	
Raw material cost <ul style="list-style-type: none"> • Chemical cost • Trade payables and Other payables 	288.8 -	8,456.7 1,432.5	<ul style="list-style-type: none"> • Chemical price is the selling price that is comparable to what the company buys from other general sellers in the market.

3



Statement Of Financial Position



Report of the Board of Directors Responsibility towards Financial

The Board of Directors is responsible for the financial statement of TTW Public Company Limited (TTW) and subsidiaries to ensure that the financial statements, incomes, expenses and cash flow statement are accurate, reasonable and in line with the generally accepted accounting standard and policy as well as consistent practice and careful assumption.

The Board of Directors had delegated this responsibility to the Audit Committee which comprises qualified and experienced independent director with qualifications that fully meet the requirement of the Securities and Exchange Commission and related rules and regulations. The Audit Committee oversaw the internal control process to ensure its effectiveness and efficiency. They had also reviewed the financial statement for its accuracy, reliability and adequate disclosure of related information. The Audit Committee had presented the performance report to the company's Board of Directors.

The Board of Directors has the opinion that the 2022 financial statement of TTW Public Company Limited (TTW) and its subsidiaries showed financial standing, incomes, expenses and total cash flow that are accurate and reasonable, the record of accounting information is accurate and complete, the choice of accounting policy is appropriate and consistent, and the compliance is in accordance with the generally accepted accounting standard. The disclosure of information in the note to financial statement is adequate and the company's auditor has provided opinions on the financial statement of TTW Public Company Limited (TTW) and its subsidiaries without condition in the auditor's report.



(Thanong Bidaya)
Chairman of the Board of Directors



(Walainut Trivisvavet)
Managing Director

Independent Auditor's Report

To the Shareholders of TTW Public Company Limited

Opinion

I have audited the accompanying consolidated financial statements of TTW Public Company Limited and its subsidiaries (the Group), which comprise the consolidated statement of financial position as at 31 December 2022, the related consolidated statements of comprehensive income, changes in shareholders' equity and cash flows for the year then ended, and notes to the consolidated financial statements, including a summary of significant accounting policies, and have also audited the separate financial statements of TTW Public Company Limited for the same period.

In my opinion, the financial statements referred to above present fairly, in all material respects, the financial position of TTW Public Company Limited and its subsidiaries and of TTW Public Company Limited as at 31 December 2022, their financial performance and cash flows for the year then ended in accordance with Thai Financial Reporting Standards.

Basis for Opinion

I conducted my audit in accordance with Thai Standards on Auditing. My responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report. I am independent of the Group in accordance with the Code of Ethics for Professional Accountants including Independence Standards as issued by the Federation of Accounting Professions (Code of Ethics for Professional Accountants) that are relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code of Ethics for Professional Accountants. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of Matter

I draw attention to Note 1.1 to the consolidated financial statements that a subsidiary's concession to produce and sell treated water with Provincial Waterworks Authority will expire on 14 October 2023. Under the concession, the subsidiary has the right to renew the concession after the expiry for total period of 20 years. The subsidiary affirmed its intention to exercise such right with the counterparty and is waiting to negotiate with the counterparty on the contractual renewal after the expiry. Whether the subsidiary succeeds in renewing the concession or what type of operations to produce and sell treated water is to be entirely subject to the relevant agencies' consideration. In addition, the Group's management already conducted a feasibility study for new business plans, to which it can apply its relevant experience, in response to changing business needs in the future. My opinion is not modified in respect of this matter.

Key Audit Matter

Key audit matter is the matter that, in my professional judgement, was of most significance in my audit of the financial statements of the current period. This matter was addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on this matter.

I have fulfilled the responsibilities described in the Auditor's Responsibilities for the Audit of the Financial Statements section of my report, including in relation to this matter. Accordingly, my audit included the performance of procedures designed to respond to my assessment of the risks of material misstatement of the financial statements. The results of my audit procedures, including the procedures performed to address the matter below, provide the basis for my audit opinion on the accompanying financial statements as a whole.

Key audit matter and how audit procedures respond for each matter is described below.

Assets for production of treated water and rights to produce and sell treated water and treat waste water

The Group recognised the amortisation expenses of the assets for the production of treated water, the rights to produce, sell treated water and treat waste water of the Company and the assets that must be transferred at the end of concession of the subsidiary in the financial statements amounting to Baht 1,098 million (Separate financial statements: Baht 515 million), of which the expenses during this year accounted for 44% of total expenses in the consolidated financial statements (34% of total expenses in the separate financial statements). In calculating the amortisation expenses, the Group used the units of production method which required an estimate of the number of units of treated water to be produced in the future, until the end of the concession period or the end of the operation contract or the end of useful life of the assets for the production of treated water of the Company or the end of the concession period of the subsidiary. The management must use judgement to estimate the amount of future production, based on present production volumes, production capacity, demand from customers, economic and industry conditions. This affects the amount of the amortisation expenses.

I assessed the assumptions applied by management in estimating the number of units to be produced in the future by inquiring with the responsible management and gaining an understanding of the method applied to estimate units of production. I also checked the duration of the concession and the duration of the rights to produce and sell treated water and treat waste water to the relevant documents. In addition, I compared the number of units of production estimated by the Group with actual past and current production volumes and tested the Group's calculation of amortisation expenses for the year.

Other Information

Management is responsible for the other information. The other information comprise the information included in annual report of the Group, but does not include the financial statements and my auditor's report thereon.

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

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

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Thai Financial Reporting Standards, 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 the financial statements, management is 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 management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Group's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

My objectives are to obtain reasonable assurance about whether the 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 my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Thai Standards on Auditing 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 Thai Standards on Auditing, I exercise professional judgement and maintain professional skepticism throughout the audit. I 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 my 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 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 Group's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my 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 financial statements, including the disclosures, 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 the Group to express an opinion on the consolidated financial statements. I am responsible for the direction, supervision and performance of the group audit. I remain solely responsible for my audit opinion.

I 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 I identify during my audit.

I also provide those charged with governance with a statement that I 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 my independence, and where applicable, related safeguards.

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

I am responsible for the audit resulting in this independent auditor's report.

Kunlapee Piyawannasuth
Certified Public Accountant (Thailand) No. 6137

EY Office Limited
Bangkok: 21 February 2023

Statement of financial position

TTW Public Company Limited and its subsidiaries

As at 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Assets					
Current assets					
Cash and cash equivalents	7	61,923,764	66,762,188	50,901,329	56,255,966
Trade and other receivables	6, 8	511,774,629	514,176,972	355,183,321	356,501,108
Current portion of long-term loans to related party and interest receivable	6	-	-	1,332	57,170,179
Raw materials and supplies	9	27,604,944	25,043,636	15,291,811	14,520,410
Assets that must be transferred at end of concession of subsidiary	16	456,028,094	-	-	-
Other current financial assets	10	3,300,909,187	3,596,937,742	1,867,824,457	2,645,282,783
Other current assets		33,558,557	25,775,192	22,750,920	21,919,314
Total current assets		4,391,799,175	4,228,695,730	2,311,953,170	3,151,649,760
Non-current assets					
Other non-current financial assets	11	4,250,000	4,350,000	-	-
Investments in subsidiaries	12	-	-	1,250,597,438	1,472,091,587
Investment in associate	13	6,648,263,116	6,219,581,998	5,218,706,282	5,218,706,282
Property, plant and equipment	14	969,311,031	973,209,214	784,685,591	785,323,140
Assets for production of treated water with public sector agency:					
Assets that are owned by the Company	15	8,280,816,145	8,589,844,176	8,280,816,145	8,589,844,176
Assets that must be transferred at end of concession of subsidiary	16	-	1,039,022,681	-	-
Rights to produce and sell treated water and treat waste water from private sector agency	17	978,451,795	1,029,071,471	978,451,795	1,029,071,471
Rights to produce and sell treated water from business acquisition	18	153,286,614	348,233,006	-	-
Intangible assets	19	10,199,936	10,799,525	-	-
Deferred tax assets	28	5,295,312	4,916,736	-	-
Advance payment to subcontractor - related party	6	12,967,398	36,344,230	12,967,398	36,344,230
Other non-current assets		35,279,487	19,827,983	2,881,276	3,052,941
Total non-current assets		17,098,120,834	18,275,201,020	16,529,105,925	17,134,433,827
Total assets		21,489,920,009	22,503,896,750	18,841,059,095	20,286,083,587

The accompanying notes are an integral part of the financial statements.

Statement of financial position (continued)

TTW Public Company Limited and its subsidiaries

As at 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Liabilities and shareholders' equity					
Current liabilities					
Trade and other payables	6, 20	145,813,855	129,712,834	93,023,989	88,909,737
Current portion of long-term loans	21	660,000,000	460,000,000	660,000,000	460,000,000
Current portion of debentures	22	1,000,000,000	2,000,000,000	1,000,000,000	2,000,000,000
Current portion of lease liabilities	23	11,285,059	11,059,693	9,451,412	9,281,986
Income tax payable		283,751,428	291,118,055	216,375,455	218,169,128
Accrued interest		33,732,277	63,536,058	33,732,277	63,536,058
Other current liabilities		65,395,033	66,169,405	45,116,574	46,150,336
Total current liabilities		2,199,977,652	3,021,596,045	2,057,699,707	2,886,047,245
Non-current liabilities					
Retention payable - subsidiary	6	-	-	5,000,000	5,000,000
Long-term loans, net of current portion	21	1,880,000,000	1,640,000,000	1,880,000,000	1,640,000,000
Debentures, net of current portion	22	2,398,424,749	3,397,806,704	2,398,424,749	3,397,806,704
Lease liabilities, net of current portion	23	45,383,954	51,047,071	42,014,825	45,844,295
Provision for long-term employee benefits	24	81,708,615	73,379,121	53,376,120	47,816,192
Deferred tax liabilities	28	134,164,722	124,908,676	123,461,890	108,279,043
Total non-current liabilities		4,539,682,040	5,287,141,572	4,502,277,584	5,244,746,234
Total liabilities		6,739,659,692	8,308,737,617	6,559,977,291	8,130,793,479

The accompanying notes are an integral part of the financial statements.

Statement of financial position (continued)

TTW Public Company Limited and its subsidiaries

As at 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Shareholders' equity					
Share capital					
Registered					
3,990,000,000 ordinary shares of Baht 1 each		3,990,000,000	3,990,000,000	3,990,000,000	3,990,000,000
Issued and fully paid-up					
3,990,000,000 ordinary shares of Baht 1 each		3,990,000,000	3,990,000,000	3,990,000,000	3,990,000,000
Share premium		2,637,769,601	2,637,769,601	2,637,769,601	2,637,769,601
Retained earnings					
Appropriated - statutory reserve	25	399,000,000	399,000,000	399,000,000	399,000,000
Appropriated - other reserve	26	1,691,230,767	1,691,230,767	1,691,230,767	1,691,230,767
Unappropriated		6,721,759,510	6,148,710,378	3,563,081,436	3,437,289,740
Other components of shareholders' equity		(730,250,083)	(712,824,379)	-	-
Equity attributable to owners of the Company		14,709,509,795	14,153,886,367	12,281,081,804	12,155,290,108
Non-controlling interests of the subsidiaries		40,750,522	41,272,766	-	-
Total shareholders' equity		14,750,260,317	14,195,159,133	12,281,081,804	12,155,290,108
Total liabilities and shareholders' equity		21,489,920,009	22,503,896,750	18,841,059,095	20,286,083,587
		-	-	-	-

The accompanying notes are an integral part of the financial statements.

Directors

Statement of comprehensive income

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Profit or loss:					
Revenues					
Sales of treated water to public sector agency:					
Sales of treated water - minimum offtake quantities		5,180,928,446	5,092,028,057	3,510,387,792	3,428,598,957
Sales of treated water - above minimum offtake quantities		197,253,029	388,149,113	159,774,236	294,476,847
Sales of treated water to private sector agencies		196,756,115	202,222,569	196,756,115	202,222,569
Total sales of treated water	29	5,574,937,590	5,682,399,739	3,866,918,143	3,925,298,373
Service income		116,561,486	123,673,267	38,751,003	41,055,006
Dividend income	12, 13.1	-	-	762,663,455	1,009,462,131
Other income		9,705,589	11,681,278	24,875,880	22,674,928
Total revenues		5,701,204,665	5,817,754,284	4,693,208,481	4,998,490,438
Expenses					
Cost of sales of treated water and services		1,974,536,150	1,844,646,460	1,003,784,431	1,025,465,957
Administrative expenses		289,287,774	255,301,401	239,978,479	216,870,134
Amortisation of investments in subsidiaries	12	-	-	221,494,149	221,494,149
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	17	50,619,676	51,874,965	50,619,676	51,874,965
Amortisation of rights to produce and sell treated water from business acquisition	18	194,946,391	194,460,032	-	-
Total expenses		2,509,389,991	2,346,282,858	1,515,876,735	1,515,705,205
Operating profit		3,191,814,674	3,471,471,426	3,177,331,746	3,482,785,233
Share of profit from investment in associate	13.1	608,567,616	544,317,400	-	-
Finance income		3,655,273	4,631,501	3,704,518	6,016,331
Finance cost		(168,726,157)	(249,486,104)	(168,389,758)	(249,039,843)
Profit before income tax expenses		3,635,311,406	3,770,934,223	3,012,646,506	3,239,761,721
Income tax expenses	28	(656,537,396)	(650,959,542)	(492,857,000)	(490,434,698)
Profit for the year		2,978,774,010	3,119,974,681	2,519,789,506	2,749,327,023

The accompanying notes are an integral part of the financial statements.

Statement of comprehensive income (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2022	2021	2022	2021
Other comprehensive income:					
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>					
Share of other comprehensive income from associate	13.1	(17,425,704)	(208,619,561)	-	-
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods:</i>					
Actuarial gain - net of income tax		-	(3,129,627)	-	(6,385,967)
Other comprehensive income for the year		<u>(17,425,704)</u>	<u>(211,749,188)</u>	<u>-</u>	<u>(6,385,967)</u>
Total comprehensive income for the year		<u>2,961,348,306</u>	<u>2,908,225,493</u>	<u>2,519,789,506</u>	<u>2,742,941,056</u>
Profit attributable to:					
Equity holders of the Company		2,967,046,942	3,103,911,658	<u>2,519,789,506</u>	<u>2,749,327,023</u>
Non-controlling interests of the subsidiaries		11,727,068	16,063,023		
		<u>2,978,774,010</u>	<u>3,119,974,681</u>		
Total comprehensive income attributable to:					
Equity holders of the Company		2,949,621,238	2,892,162,470	<u>2,519,789,506</u>	<u>2,742,941,056</u>
Non-controlling interests of the subsidiaries		11,727,068	16,063,023		
		<u>2,961,348,306</u>	<u>2,908,225,493</u>		
Basic earnings per share					
	30				
Profit attributable to equity holders of the Company		<u>0.74</u>	<u>0.78</u>	<u>0.63</u>	<u>0.69</u>
Weighted average number of ordinary shares		<u>3,990,000,000</u>	<u>3,990,000,000</u>	<u>3,990,000,000</u>	<u>3,990,000,000</u>

The accompanying notes are an integral part of the financial statements.

Statement of changes in shareholders' equity (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Note	Separate financial statements						Total shareholders' equity
		Issued and paid-up share capital	Share premium	Appropriated - statutory reserve	Retained earnings - Appropriated - other reserve	Unappropriated		
Balance as at 1 January 2021		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,087,872,132	11,805,872,500	
Profit for the year		-	-	-	-	2,749,327,023	2,749,327,023	
Other comprehensive income for the year		-	-	-	-	(6,385,967)	(6,385,967)	
Total comprehensive income for the year		-	-	-	-	2,742,941,056	2,742,941,056	
Dividend paid	33	-	-	-	-	(2,393,523,448)	(2,393,523,448)	
Balance as at 31 December 2021		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,437,289,740	12,155,290,108	
Balance as at 1 January 2022		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,437,289,740	12,155,290,108	
Profit for the year		-	-	-	-	2,519,789,506	2,519,789,506	
Other comprehensive income for the year		-	-	-	-	-	-	
Total comprehensive income for the year		-	-	-	-	2,519,789,506	2,519,789,506	
Dividend paid	33	-	-	-	-	(2,393,997,810)	(2,393,997,810)	
Balance as at 31 December 2022		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,563,081,436	12,281,081,804	

The accompanying notes are an integral part of the financial statements.

Cash flows statement

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash flows from operating activities				
Profit before tax	3,635,311,406	3,770,934,223	3,012,646,506	3,239,761,721
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation and amortisation	1,087,450,380	982,648,657	496,957,356	509,590,284
Reversal of allowance for expected credit losses	(130,704)	(129,543)	-	-
Amortisation of investments in subsidiaries	-	-	221,494,149	221,494,149
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	50,619,676	51,874,965	50,619,676	51,874,965
Amortisation of rights to produce and sell treated water from business acquisition	194,946,391	194,460,032	-	-
Loss (gain) on sales/written off of equipment	9,326	(1,016,770)	7,633	(841,504)
Gain on fair value adjustments of financial assets	(4,333,896)	(5,769,951)	(2,057,059)	(4,523,885)
Share of profit from investment in associate	(608,567,616)	(544,317,400)	-	-
Dividend income	-	-	(762,663,455)	(1,009,462,131)
Write-off withholding tax deducted at source	1,558,682	2,579,062	-	-
Provision for long-term employee benefits	9,118,562	8,586,368	5,559,928	5,319,055
Finance cost	168,726,157	249,486,104	168,389,758	249,039,843
Profit from operating activities before changes in operating assets and liabilities	4,534,708,364	4,709,335,747	3,190,954,492	3,262,252,497
Operating assets (increase) decrease				
Trade and other receivables	2,533,047	43,863,118	1,326,634	21,097,141
Raw materials and supplies	(2,561,308)	1,141,120	(771,401)	159,529
Other current assets	(7,783,365)	3,264,280	(831,606)	2,626,221
Other non-current assets	(14,828,334)	(11,829,041)	171,665	3,173,763
Operating liabilities increase (decrease)				
Trade and other payables	15,948,034	(75,300,844)	3,961,265	(45,693,107)
Other current liabilities	(774,372)	(3,343,517)	(1,033,762)	(1,290,742)
Cash paid for long-term employee benefits	(789,068)	(1,390,400)	-	(1,183,000)
Cash from operating activities	4,526,452,998	4,665,740,463	3,193,777,287	3,241,142,302
Cash paid for interest expenses	(195,455,666)	(245,410,891)	(195,455,666)	(245,410,891)
Cash paid for income tax	(657,208,405)	(648,101,543)	(479,467,826)	(471,459,929)
Net cash flows from operating activities	3,673,788,927	3,772,228,029	2,518,853,795	2,524,271,482

The accompanying notes are an integral part of the financial statements.

Cash flows statement (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Cash flows from investing activities				
Decrease (increase) in other current financial assets	300,462,451	(270,817,456)	779,515,385	(294,718,895)
Decrease in long-term loans to related party	-	-	57,160,000	57,140,000
Increase in property, plant and equipment	(29,140,713)	(137,454,394)	(25,469,000)	(21,831,885)
Increase in assets for production of treated water				
with public sector agency - assets that are owned by the Company	(132,468,712)	(88,879,019)	(132,468,712)	(88,879,019)
Increase in assets for production of treated water				
with public sector agency - assets that must be transferred				
at the end of concession of subsidiary	-	(134,394,567)	-	-
Increase in rights to produce and sell treated water				
and treat waste water from private sector agency	-	(1,568,000)	-	(1,568,000)
Proceeds from sales of equipment	39,049	1,063,841	7,242	873,682
Dividend received	162,460,794	71,076,597	762,663,455	1,009,462,131
Increase in advance payment to subcontractor - related party	-	(49,631,086)	-	(49,631,086)
Net cash flows from (used in) investing activities	301,352,869	(610,604,084)	1,441,408,370	610,846,928
Cash flows from financing activities				
Cash receipt from long-term loans	1,000,000,000	-	1,000,000,000	-
Repayment of long-term loans	(560,000,000)	(760,000,000)	(560,000,000)	(760,000,000)
Repayment of debentures	(2,000,000,000)	-	(2,000,000,000)	-
Repayment of principal portion of lease liabilities	(13,886,085)	(14,178,613)	(11,771,979)	(11,601,304)
Dividend paid	(2,393,844,823)	(2,393,501,185)	(2,393,844,823)	(2,393,501,185)
Dividend paid for non-controlling interests of the subsidiary	(12,249,312)	(19,151,160)	-	-
Net cash flows used in financing activities	(3,979,980,220)	(3,186,830,958)	(3,965,616,802)	(3,165,102,489)
Net decrease in cash and cash equivalents	(4,838,424)	(25,207,013)	(5,354,637)	(29,984,079)
Cash and cash equivalents at beginning of year	66,762,188	91,969,201	56,255,966	86,240,045
Cash and cash equivalents at end of year	61,923,764	66,762,188	50,901,329	56,255,966
	-	-	-	-

The accompanying notes are an integral part of the financial statements.

Cash flows statement (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2022	2021	2022	2021
Supplemental cash flows information				
Non-cash transactions				
Increase in dividend payable	152,987	22,263	152,987	22,263
Portion of advance payment to subcontractor deducted from payment for assets for production of treated water with public sector agency - assets that are owned by the Company	23,376,832	13,286,856	23,376,832	13,286,856
Portion of advance payment to subcontractor deducted from payment for assets for production of treated water with public sector agency - assets that must be transferred at the end of concession of subsidiary	-	23,268,100	-	-
Transfer assets for production of treated water with public sector agency - assets that are owned by the Company to property, plant and equipment	(136,835)	-	(136,835)	-
Transfer assets for production of treated water with public sector agency - assets that must be transferred at end of concession of subsidiary to property, plant and equipment	-	(148,600)	-	-
Transfer rights to produce and sell treated water and treat waste water from private sector agency to property, plant and equipment	-	(2,240,000)	-	(2,240,000)
Increase in right-of-use assets due to new lease agreements	(5,992,107)	(1,678,758)	(5,992,107)	(1,678,758)
Increase in lease liabilities due to new lease agreements	5,992,107	1,678,758	5,992,107	1,678,758
Reclassify of other non-current financial assets to other current financial assets	-	(9,000,000)	-	-

The accompanying notes are an integral part of the financial statements.

Notes to consolidated financial statements

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2022

1. General information

TTW Public Company Limited (“the Company”) is a public company incorporated and domiciled in Thailand. Its major shareholder is Mitsui Water Holdings (Thailand) Company Limited, which was incorporated in Thailand. The Company is principally engaged in the production and sale of treated water to the Provincial Waterworks Authority (“PWA”) in the Amphur Nakorn Chaisri, Amphur Sam Pran, and Amphur Budha Monthon areas of Nakhon Pathom and the Amphur Muang and Amphur Kratumban areas of Samut Sakhon, under the “Water Purchase Agreement” made with the PWA dated 21 September 2000 (An amendment agreement dated 29 December 2008), which covers a period of 30 years as from the Actual Commencement Date (21 July 2004), and under the Concession to operate treated water granted by the Ministry of Natural Resources and Environment (“the Concessionaire”) for a period of 25 years commencing on 11 March 2005. The Company has to comply with certain conditions as stipulated in the Water Purchase Agreement and the Concession.

The terms of the Concession include certain significant conditions, such as that when the Company has completed half of the concession period, if the government or the local government agency wish to purchase the water production business of the Company, the Concessionaire is entitled to cancel the concession in order to purchase it, or permit the relevant local government agency to purchase it, at market price. However, it must provide the Company with advance notice of six months of such action.

The Company’s registered office is at 30/130 Moo 12, Budha Monthon 5 Road, Rai Khing, Sam Pran, Nakhon Pathom.

1.1 The concession to produce and sell treated water with Provincial Waterworks Authority

The concession to produce and sell treated water (“the concession”) between Pathum Thani Water Company Limited (“the subsidiary”) and Provincial Waterworks Authority will expire on 14 October 2023. Under the concession, the subsidiary has the right to renew the concession after the expiry for a total period of 20 years. The subsidiary affirmed its intention to exercise such right with the counterparty and is waiting to negotiate with the counterparty on the contractual renewal after the expiry. Therefore, what type of the renewed concession after the expiry is to be depends on the negotiation between the subsidiary and the government agencies. As at 31 December 2022, the subsidiary's assets accounted for 10% of total assets in the consolidated statement of financial position. The Group reclassified the assets that must be transferred at end of concession of subsidiary as current assets in the consolidated statement of financial position as at 31 December 2022.

Whether the subsidiary succeeds in renewing the concession or what type of operations to produce and sell treated water is to be entirely subject to the relevant agencies' consideration. As a result, changes in the value of assets of the subsidiary to the consolidated financial statements depends on what type of the renewed concession after the expiry is to be. The subsidiary's management expected to become aware of the outcome of the negotiation prior to the expiry. In addition, the Group's management already conducted a feasibility study for new business plans, to which it can apply its relevant experience, in response to changing business needs in the future.

2. Basis of preparation

2.1 The financial statements have been prepared in accordance with Thai Financial Reporting Standards enunciated under the Accounting Profession Act B.E. 2547 and their presentation has been made in compliance with the stipulations of the Notification of the Department of Business Development issued under the Accounting Act B.E. 2543.

The financial statements in Thai language are the official statutory financial statements of the Company. The financial statements in English language have been translated from the Thai language financial statements.

The financial statements have been prepared on a historical cost basis except where otherwise disclosed in the accounting policies.

2.2 Basis of consolidation

a) The consolidated financial statements include the financial statements of TTW Public Company Limited (“the Company”) and the following subsidiary companies (“the subsidiaries”) (collectively as “the Group”):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2022	2021
			(%)	(%)
Pathum Thani Water Company Limited	Production and sale of treated water in Pathumthani	Thailand	98.0	98.0
Thai Water Operations Company Limited (31.5% held by Pathum Thani Water Company Limited)	Operating and maintenance of water supply project	Thailand	68.5	68.5

b) The Company is deemed to have control over an investee or subsidiaries if it has rights, or is exposed, to variable returns from its involvement with the investee, and it has the ability to direct the activities that affect the amount of its returns.

c) Subsidiaries are fully consolidated, being the date on which the Company obtains control, and continue to be consolidated until the date when such control ceases.

d) The financial statements of the subsidiaries are prepared using the same significant accounting policies as the Company.

- e) Material balances and transactions between the Group have been eliminated from the consolidated financial statements.
- f) Non-controlling interests represent the portion of profit or loss and net assets of the subsidiaries that are not held by the Company and are presented separately in the consolidated profit or loss and within equity in the consolidated statement of financial position.

2.3 The separate financial statements present investments in subsidiaries and associate under the cost method.

3. New financial reporting standards

3.1 Financial reporting standards that became effective in the current year

During the year, the Group has adopted the revised financial reporting standards and interpretations which are effective for fiscal years beginning on or after 1 January 2022. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The adoption of these financial reporting standards does not have any significant impact on the Group's financial statements.

3.2 Financial reporting standards that became effective for fiscal years beginning on or after 1 January 2023

The Federation of Accounting Professions issued a number of revised financial reporting standards, which are effective for fiscal years beginning on or after 1 January 2023. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards clarifying accounting treatment and providing accounting guidance for users of the standards.

The management of the Group believes that adoption of these amendments will not have any significant impact on the Group's financial statements.

4. Significant accounting policies

4.1 Revenue and expense recognition

Sales of treated water

Sales of treated water are recognised when the Group supplies the water to the Provincial Waterworks Authority, and comprise the invoiced value, excluding value added tax, of the treated water supplied, after deducting discounts and allowances.

Service income

Service income is recognised at a point in the time upon completion of service, presents the invoiced value, excluding value added tax, of services rendered.

Interest income

Interest income is calculated using the effective interest method and recognised on an accrual basis. The effective interest rate is applied to the gross carrying amount of a financial asset, unless the financial assets subsequently become credit-impaired when it is applied to the net carrying amount of the financial asset (net of the expected credit loss allowance).

Finance cost

Interest expense from financial liabilities at amortised cost is calculated using the effective interest method and recognised on an accrual basis.

Dividends

Dividends are recognised when the right to receive the dividends is established.

Other income and expenses

Other income and expenses are recognised on an accrual basis.

4.2 Cash and cash equivalents

Cash and cash equivalents consist of cash in hand and at banks, and all highly liquid investments with an original maturity of three months or less and not subject to withdrawal restrictions.

4.3 Raw materials and supplies

Raw materials and supplies are valued at the lower of cost (under the first-in, first-out method) and net realisable value and are charged to treated water production costs whenever consumed.

4.4 Investments in subsidiaries and associate

Investment in associate is accounted for in the consolidated financial statements using the equity method.

Investments in subsidiaries and associate are accounted for in the separate financial statements using the cost method.

Investment costs of subsidiaries are the values paid for their acquisition. The subsidiary is engaged in business under the agreement for the production and sale of treated water with the Provincial Waterworks Authority and concessions granted by state enterprises or government agencies, which have defined fixed periods of operation, as stipulated in the agreement and concessions; and the subsidiary has committed to transfer most of its assets used in the operation to the Provincial Waterworks Authority. Hence, parts of the investment cost are deemed to be investments in the acquisition of rights to operate business under the agreement and concessions, and are amortised on a straight-line basis over the remaining periods of the agreements, commencing from the date of investment in the subsidiary. This amortised amount is presented as amortisation of investments in subsidiaries, and recognised as an expense in profit or loss.

In addition, parts of the investment costs in the subsidiary to which the subsidiary transferred most of its operations after investment, in order to reduce future operating costs, was amounts paid for acquisition of such operations. These are amortised on a straight-line basis over the remaining period of the Water Purchase Agreement made between the Company and the Provincial Waterworks Authority, commencing from the date of investing in the subsidiary, and presented as amortisation of investments in subsidiaries. The amortised amount is recognised as expense in profit or loss.

4.5 Property, plant and equipment/Depreciation

Land is stated at cost. Building and equipment are stated at cost less accumulated depreciation and allowance for loss on impairment of assets (if any).

Depreciation of assets is generally calculated by reference to their costs on the straight-line basis over estimated useful lives of 3, 5 and 10 years. However, depreciation of the Company's assets used for production of treated water is calculated using the units of production method, based on the following formula:

$$\text{Depreciation for the period} = \text{Net assets for production of treated water at the beginning of the period} \\ \times \text{Percentage of treated water produced in the period}$$

$$\text{Percentage of treated water produced in the period} = \frac{\text{Current period's actual production of treated water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of the Water Purchase Agreement or the end of useful live of the assets for production of treated water})}$$

$$\text{Net assets for production of treated water at the beginning of the period} = \text{Total assets for production of treated water} - \text{Accumulated depreciation as at the beginning of the period}$$

Assets for production of treated water consist of costs of construction of a water treatment plant and distribution system, and related interest expenses and financial costs.

Depreciation is included in determining income.

No depreciation is provided on land and assets under installation.

An item of property, plant and equipment is derecognised upon disposal or when no future economic benefits are expected from its use or disposal. Any gain or loss arising on disposal of an asset is included in profit or loss when the asset is derecognised.

4.6 Assets for production of treated water that must be transferred at end of concession and amortisation

Assets for production of treated water of Pathum Thani Water Company Limited that must be transferred to the Provincial Waterworks Authority at the end of the concession to produce and sell treated water (land, water treatment plant and distribution system) are stated at cost less accumulated amortisation and any impairment losses. Amortisation of assets for production of treated water is calculated using the units of production method, based on the following formula:

Amortisation for the period = Net assets for production of treated water that must be transferred at end of concession at the beginning of the period x Percentage of treated water produced in the period

Percentage of treated water produced in the period =
$$\frac{\text{Current period's actual production of treated water}}{\text{(Actual production of treated water for the period + Projected total production of treated water over the remaining term of concession for production and sale of treated water)}}$$

Net assets for production of treated water that must be transferred at end of concession at the beginning of the period = Total assets for production of treated water that must be transferred at end of concession - Accumulated amortisation as at the beginning of the period

Amortisation is included in determining income.

No amortisation is provided on assets under installation.

4.7 Rights to produce and sell treated water and treat waste water and amortisation

The Company recorded cost of rights to produce and sell treated water and treat waste water ("Operation rights") at cost as at the acquisition date, and allocated such cost in line with forecasted revenues calculated as at the acquisition date.

a) Rights to produce and sell treated water

Rights to produce and sell treated water are stated at cost less accumulated amortisation and any impairment losses. Amortisation of the rights is calculated using the units of production method, based on the following formula:

$$\text{Amortisation for the period} = \text{Net rights to produce and sell treated water as at the beginning of the period} \times \text{Percentage of treated water produced in the period}$$

$$\text{Percentage of treated water produced in the period} = \frac{\text{Current period's actual production of treatment water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of operation rights})}$$

$$\text{Net rights to produce and sell treated water at the beginning of the period} = \text{Total rights to treated water} - \text{Accumulated amortisation as at the beginning of the period}$$

Amortisation is included in determining income.

No amortisation is provided on construction in progress.

b) Rights to treat waste water

Rights to treat waste water are stated at cost less accumulated amortisation and any impairment losses. Amortisation of the rights is calculated using the units of production method, based on the following formula:

$$\text{Amortisation for the period} = \text{Net rights to treat waste water at the beginning of the period} \times \text{Percentage of waste water treatment in the period}$$

$$\text{Percentage of waste water treated in the period} = \frac{\text{Current period's actual treatment of waste water}}{(\text{Actual treatment of waste water for the period} + \text{Projected total treatment of waste water over the remaining term of operation rights})}$$

$$\text{Net rights to treat waste water at the beginning of the period} = \text{Total rights to treat waste water} - \text{Accumulated amortisation as at the beginning of the period}$$

Amortisation is included in determining income.

No amortisation is provided on construction in progress.

4.8 Rights to produce and sell treated water from business acquisition and amortisation

Rights to produce and sell treated water, which arose as a result of the acquisition of ordinary shares in Pathum Thani Water Company Limited being made at a cost higher than the fair value of this subsidiary, is regarded as an intangible asset with a definite life. It is carried at cost less accumulated amortisation and any impairment losses.

The Company amortises it on a straight-line basis over the remaining period of the subsidiary's agreement for the production and sale of treated water, starting from the acquisition date, (approximately 16 years) and tested for impairment whenever there is an indication that it may be impaired. The amortisation period and the amortisation method for rights to produce and sell treated water are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

4.9 Intangible assets

The intangible assets are assets for maintenance, management project, waste water treatment and sludge management system of the subsidiary are carried at cost less accumulated amortisation and any accumulated impairment losses.

Intangible assets with finite lives are amortised on the straight-line basis over the economic useful life (10 years and 20 years) and tested for impairment whenever there is an indication that the intangible asset may be impaired. The amortisation period and the amortisation method of such intangible assets are reviewed at least at each financial year end. The amortisation expense is charged to profit or loss.

No amortisation is provided on intangible assets under installation.

4.10 Leases

At inception of contract, the Group assesses whether a contract is, or contains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration.

The Group applied a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. At the commencement date of the lease (i.e. the date the underlying asset is available for use), the Group recognises right-of-use assets representing the right to use underlying assets and lease liabilities based on lease payments.

a) Right-of-use assets

Right-of-use assets are measured at cost, less any accumulated depreciation, any accumulated impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities initially recognised, initial direct costs incurred, and lease payments made at or before the commencement date of the lease less any lease incentives received.

Depreciation of right-of-use assets are calculated by reference to their costs, on the straight-line basis over the shorter of their estimated useful lives and the lease term.

Land	15 and 20	years
Motor vehicles	1 - 5	years

If ownership of the leased asset is transferred to the Group at the end of the lease term or the cost reflects the exercise of a purchase option, depreciation is calculated using the estimated useful life of the asset.

Right of use are presented as property, plant and equipment in the financial position.

b) Lease liabilities

Lease liabilities are measured at the present value of the lease payments to be made over the lease term. The lease payments include fixed payments less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be payable under residual value guarantees. Moreover, the lease payments include the exercise price of a purchase option reasonably certain to be exercised by the Group and payments of penalties for terminating the lease, if the lease term reflects the Group exercising an option to terminate. Variable lease payments that do not depend on an index or a rate are recognised as expenses in the period in which the event or condition that triggers the payment occurs.

The Group discounted the present value of the lease payments by the interest rate implicit in the lease or the Group's incremental borrowing rate. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a change in the lease term, a change in the lease payments or a change in the assessment of an option to purchase the underlying asset.

c) Short-term leases and leases of low-value assets

A lease that has a lease term less than or equal to 12 months from commencement date or a lease of low-value assets is recognised as expenses on a straight-line basis over the lease term.

4.11 Related party transactions

Related parties comprise individuals or enterprises that control, or are controlled by, the Company, whether directly or indirectly, or which are under common control with the Company.

They also include associates, and individuals or enterprises which directly or indirectly own a voting interest in the Company that gives them significant influence over the Company, key management personnel, directors and officers with authority in the planning and direction of the Company's operations.

4.12 Impairment of non-financial assets

At the end of each reporting period, the Group performs impairment reviews in respect of the property, plant and equipment, right-of-use assets and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Group also carries out annual impairment reviews in respect of rights to produce and sell treated water. An impairment loss is recognised when the recoverable amount of an asset, which is the higher of the asset's fair value less costs to sell and its value in use, is less than the carrying amount.

An impairment loss is recognised in profit or loss.

4.13 Employee benefits

Short-term employee benefits

Salaries, wages, bonuses and contributions to the social security fund are recognised as expenses when incurred.

Post-employment benefits

Defined contribution plans

The Group and its employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Group. The fund's assets are held in a separate trust fund and the Group's contribution is recognised as expenses when incurred.

Defined benefit plans

The Group has obligations in respect of the severance payments it must make to employees upon retirement under labor law. The Group treats these severance payment obligations as a defined benefit plan.

The obligation under the defined benefit plan is determined by a professionally qualified independent actuary based on actuarial techniques, using the projected unit credit method.

Actuarial gains and losses arising from defined benefit plans are recognised immediately in other comprehensive income.

4.14 Provisions

Provisions are recognised when the Group has a present obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

4.15 Income tax

Income tax expense represents the sum of corporate income tax currently payable and deferred tax.

Current tax

Current income tax is provided in the accounts at the amount expected to be paid to the taxation authorities, based on taxable profits determined in accordance with tax legislation.

Deferred tax

Deferred income tax is provided on temporary differences between the tax bases of assets and liabilities and their carrying amounts at the end of each reporting period, using the tax rates enacted at the end of the reporting period.

The Group recognises deferred tax liabilities for all taxable temporary differences while it recognise deferred tax assets for all deductible temporary differences and tax losses carried forward to the extent that it is probable that future taxable profit will be available against which such deductible temporary differences and tax losses carried forward can be utilised.

At each reporting date, the Group reviews and reduces the carrying amount of deferred tax assets to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised.

The Group records deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

4.16 Financial instruments

The Group initially measures financial assets at its fair value plus, in the case of financial assets that are not measured at fair value through profit or loss, transaction costs. However, trade receivables, that do not contain a significant financing component are measured at the transaction price as disclosed in the accounting policy relating to revenue recognition.

Classification and measurement of financial assets

Financial assets are classified, at initial recognition, as to be subsequently measured at amortised cost, fair value through other comprehensive income (FVOCI), or fair value through profit or loss (FVTPL). The classification of financial assets at initial recognition is driven by the Group's business model for managing the financial assets and the contractual cash flows characteristics of the financial assets.

Financial assets at amortised cost

The Group measures financial assets at amortised cost if the financial asset is held in order to collect contractual cash flows and the contractual terms of the financial asset give rise on specified dates to cash flows that are solely payments of principal and interest on the principal amount outstanding.

Financial assets at amortised cost are subsequently measured using the effective interest rate (EIR) method and are subject to impairment. Gains and losses are recognised in profit or loss when the asset is derecognised, modified or impaired.

Financial assets at FVTPL

Financial assets measured at FVTPL are carried in the statement of financial position at fair value with net changes in fair value recognised in profit or loss.

These financial assets include derivatives, security investments held for trading, equity investments which the Group has not irrevocably elected to classify at FVOCI and financial assets with cash flows that are not solely payments of principal and interest.

Classification and measurement of financial liabilities

Except for derivative liabilities, at initial recognition the Group's financial liabilities are recognised at fair value net of transaction costs and classified as liabilities to be subsequently measured at amortised cost using the EIR method. Gains and losses are recognised in profit or loss when the liabilities are derecognised as well as through the EIR amortisation process. In determining amortised cost, the Group takes into account any fees or costs that are an integral part of the EIR. The EIR amortisation is included in finance costs in profit or loss.

Regular way purchases and sales of financial assets

Regular way purchases and sales of financial assets that require delivery of assets within a time frame established by regulation or convention in the marketplace are recognised on the settlement date, i.e., the date on which an asset is delivered.

Derecognition of financial instruments

A financial asset is primarily derecognised when the rights to receive cash flows from the asset have expired or have been transferred and either the Group has transferred substantially all the risks and rewards of the asset, or the Group has transferred control of the asset.

A financial liability is derecognised when the obligation under the liability is discharged or cancelled or expires. When an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as the derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognised in profit or loss.

Impairment of financial assets

The Group recognises an allowance for expected credit losses (ECLs) for all debt instruments not held at FVTPL. ECLs are based on the difference between the contractual cash flows due in accordance with the contract and all the cash flows that the Group expects to receive, discounted at an approximation of the original effective interest rate.

For credit exposures for which there has not been a significant increase in credit risk since initial recognition, ECLs are provided for credit losses that result from default events that are possible within the next 12-months (a 12-month ECL). For those credit exposures for which there has been a significant increase in credit risk since initial recognition, a loss allowance is required for credit losses expected over the remaining life of the exposure (a lifetime ECL).

The Group considers a significant increase in credit risk to have occurred when contractual payments are more than 30 days past due, and considers a financial asset as credit impaired or default when contractual payments are 90 days past due. However, in certain cases, the Group may also consider a financial asset to have a significant increase in credit risk and to be in default using other internal or external information, such as credit rating of issuers.

For trade receivables, the Group applies a simplified approach in calculating ECLs. Therefore, the Group does not track changes in credit risk, but instead recognises a loss allowance based on lifetime ECLs at each reporting date.

ECLs are calculated based on its historical credit loss experience and adjusted for forward-looking factors specific to the debtors and the economic environment.

A financial asset is written off when there is no reasonable expectation of recovering the contractual cash flows.

4.17 Hedge accounting - Cash flow hedges

The associate recognises the effective portion of the gain or loss on the hedging instrument is recognised in other comprehensive income in the cash flow hedge reserve, while any ineffective portion is recognised immediately in profit or loss. The cash flow hedge reserve is adjusted to the lower (in absolute amounts) of the cumulative gain or loss on the hedging instrument and the cumulative change in fair value of the hedged item.

The way cash flow hedge reserve accumulated in other comprehensive income are subsequently accounted for, depends on the nature of the underlying hedged transaction. If the hedged transaction subsequently results in the recognition of a non-financial item, the reserve accumulated in equity is removed from the separate component of equity and included in the initial cost or other carrying amount of the hedged asset or liability. This is not a reclassification adjustment and is not recognised in other comprehensive income for the period. For any other cash flow hedges, the reserve accumulated in other comprehensive income is subsequently reclassified to profit or loss as a reclassification adjustment in the same period which the hedged cash flows affect profit or loss.

If cash flow hedge accounting is discontinued, the cash flow hedge reserve accumulated in other comprehensive income must remain in equity if the hedged future cash flows are still expected to occur. Otherwise, the reserve will be immediately reclassified to profit or loss as a reclassification adjustment. After discontinuation, once the hedged cash flow occurs, the way the reserve remaining in equity is accounted for depends on the nature of the underlying transaction as described above.

4.18 Fair value measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between buyer and seller (market participants) at the measurement date. The Group applies a quoted market price in an active market to measure their assets and liabilities that are required to be measured at fair value by relevant financial reporting standards. Except in case of no active market of an identical asset or liability or when a quoted market price is not available, the Group measures fair value using valuation technique that are appropriate in the circumstances and maximises the use of relevant observable inputs related to assets and liabilities that are required to be measured at fair value.

All assets and liabilities for which fair value is measured or disclosed in the financial statements are categorised within the fair value hierarchy into three levels based on categorise of input to be used in fair value measurement as follows:

Level 1 - Use of quoted market prices in an active market for such assets or liabilities

Level 2 - Use of other observable inputs for such assets or liabilities, whether directly or indirectly

Level 3 - Use of unobservable inputs such as estimates of future cash flows

At the end of each reporting period, the Group determines whether transfers have occurred between levels within the fair value hierarchy for assets and liabilities held at the end of the reporting period that are measured at fair value on a recurring basis.

5. Significant accounting judgements and estimates

The preparation of financial statements in conformity with financial reporting standards at times requires management to make subjective judgements and estimates regarding matters that are inherently uncertain. These judgements and estimates affect reported amounts and disclosures, and actual results could differ from these estimates. Significant judgements and estimates are as follows:

Assets for production of treated water and rights to produce and sell treated water and treat waste water

In determining recognised the amortisation expenses of the assets for the production of treated water, the rights to produce, sell treated water and treat waste water of the Company and the assets that must be transferred at the end of concession of the subsidiary. The Group used the units of production method which required an estimate of the number of units of treated water to be produced in the future, until the end of the concession period or the end of the operation contract or the end of useful live of the assets for the production of treated water of the Company or the end of the concession period of the subsidiary. The management must use judgement to estimate the amount of future production, based on present production volumes, production capacity, demand from customers, economic and industry conditions. This affect the amount of the amortisation expenses.

6. Related party transactions

During the years, the Group had significant business transactions with related parties. Such transactions, which are summarised below, arose in the ordinary course of business and were concluded on commercial terms and bases agreed upon between the Company and those related parties.

(Unit: Thousand Baht)

	Consolidated		Separate		Transfer pricing policy
	financial statements		financial statements		
	2022	2021	2022	2021	
<u>Transactions with subsidiary companies</u>					
(eliminated from the consolidated financial statements)					
Interest income	-	-	1,166	3,008	Minimum Loan Rate minus stipulated margin per annum
Management income	-	-	19,909	16,527	Based on contract
Dividend income	-	-	600,203	938,386	As declared
Cost of sales and services	-	-	37,902	37,301	Based on contract
<u>Transaction with associate</u>					
Dividend income	-	-	162,461	71,076	As declared
<u>Transactions with related parties</u>					
Sales of treated water	46,681	44,740	46,681	44,740	Based on contract
Service income	3,253	3,136	3,253	3,136	Based on contract
Improvement of machinery, equipment of water supply and distribution system					
	132,469	256,776	132,469	124,923	Based on contract
Cost of sales and services	6,827	6,691	6,827	6,691	Based on contract
Electricity expenses	15,523	12,913	15,523	12,913	Based on contract
Purchase of raw materials	289	8,457	289	8,457	Selling prices as specified

As at 31 December 2022 and 2021, the balances of the accounts between the Company and those related parties are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Trade and other receivables - related parties (Note 8)</u>				
Subsidiaries	-	-	5,010	4,187
Related companies (related by shareholders or committees)	4,040	4,356	4,040	4,356
Total trade and other receivables - related parties	4,040	4,356	9,050	8,543
<u>Advance payment to subcontractor - related party</u>				
Related company (related by committees)	12,967	36,344	12,967	36,344
Total advance payment to subcontractor - related party	12,967	36,344	12,967	36,344
<u>Trade and other payables - related parties (Note 20)</u>				
Subsidiaries	-	-	3,281	3,358
Related companies (related by shareholders or committees)	12,070	10,812	12,055	10,801
Related companies (entities under the group of Companies of the shareholders)	-	1,432	-	1,432
Total trade and other payables - related parties	12,070	12,244	15,336	15,591
<u>Retention payable - subsidiary</u>	-	-	5,000	5,000
	-	-	5,000	5,000

Long-term loans to related party

As at 31 December 2022 and 2021, the balance of long-term loans between the Company and a related party and the movement are as follows:

Company's name	Related by	(Unit: Thousand Baht)			
		Separate financial statements			
		Balance as at 1 January 2022	Increase during the year	Decrease during the year	Balance as at 31 December 2022
Pathum Thani Water Company Limited	Subsidiary				
Loan		57,160	-	(57,160)	-
Interest receivable		10	1,166	(1,175)	1
Total		57,170			1

(Unit: Thousand Baht)

	Separate financial statements	
	2022	2021
<u>Long-term loans to related party and interest receivable</u>		
Pathum Thani Water Company Limited		
Loan	-	57,160
Interest receivable	1	10
Total	1	57,170
Less: Current portion and interest receivable	(1)	(57,170)
Long-term loans to related party, net of current portion	-	-

Long-term loans to subsidiary were subject to interest at the Minimum Loan Rate minus a stipulated margin (MLR - margin) per annum. Repayment is to be made in quarterly installments and due in full within December 2022.

Directors and management's benefits

During the years ended 31 December 2022 and 2021, the Group had employee benefit expenses payable to their directors and management as below.

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Short-term employee benefits	58,980	56,713	56,180	50,244
Post-employment benefits	1,864	1,912	1,864	1,912
Total	60,844	58,625	58,044	52,156

7. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Cash	473	471	121	109
Bank deposits	61,451	66,291	50,780	56,147
Total	61,924	66,762	50,901	56,256

As at 31 December 2022, bank deposits in saving accounts carried interests 0.150% to 0.350% per annum (2021: bank deposits in saving accounts carried interests 0.125% per annum).

8. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Trade receivables - related parties</u>				
Aged on the basis of due dates				
Not yet due	4,040	4,348	4,040	4,348
Past due				
Up to 3 months	-	8	-	8
Total trade receivables - related parties	4,040	4,356	4,040	4,356
<u>Trade receivables - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	504,841	505,582	343,481	344,281
Past due				
Up to 3 months	1,668	2,302	1,668	2,302
Total trade receivables - unrelated parties	506,509	507,884	345,149	346,583
Total trade receivables	510,549	512,240	349,189	350,939
<u>Other receivables</u>				
Other receivables - related parties	-	-	5,010	4,187
Other receivables - unrelated parties	19,422	19,553	11,221	11,221
Interest receivables - unrelated parties	1,226	1,937	984	1,375
Total other receivables	20,648	21,490	17,215	16,783
Less: Allowance for expected credit losses	(19,422)	(19,553)	(11,221)	(11,221)
Total other receivables - net	1,226	1,937	5,994	5,562
Total trade and other receivables - net	511,775	514,177	355,183	356,501

The normal credit term is 7 days to 25 days.

9. Raw materials and supplies

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Raw materials	6,672	5,465	4,374	3,717
Spare parts	20,933	19,579	10,918	10,803
Total	27,605	25,044	15,292	14,520

10. Other current financial assets

The balances represented investments in open-ended fund, debentures and fixed deposits, carrying interests and return on investments between 0.20% and 0.75% per annum (the Company only: between 0.20% and 0.60% per annum) (2021: between 0.20% and 4.10% per annum (the Company only: between 0.20% and 0.625% per annum)). The Company had maintained the fixed deposits according to the addition amendment of the agreement to the concession to operate treated water as described in Note 26 to the consolidated financial statements.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
<u>Debt instruments at amortised cost</u>				
Fixed deposits over 3 months but less than 1 year	565,321	884,309	425,320	744,309
Current portion of debentures	-	9,000	-	-
Total debt instruments at amortised cost	<u>565,321</u>	<u>893,309</u>	<u>425,320</u>	<u>744,309</u>
<u>Financial assets state FVTPL</u>				
Investments in open-ended fund - debt securities	2,735,588	2,703,629	1,442,504	1,900,974
Total financial assets at FVTPL	<u>2,735,588</u>	<u>2,703,629</u>	<u>1,442,504</u>	<u>1,900,974</u>
Total other current financial assets	<u>3,300,909</u>	<u>3,596,938</u>	<u>1,867,824</u>	<u>2,645,283</u>

11. Other non-current financial assets

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	2022	2021
<u>Financial assets at FVTPL</u>		
Real estate investment trust	5,000	5,000
Less: Unrealised loss on changes in value of investments	(750)	(650)
Real estate investment trust - net	<u>4,250</u>	<u>4,350</u>
Total financial assets at FVTPL	<u>4,250</u>	<u>4,350</u>
Total other non-current financial assets	<u>4,250</u>	<u>4,350</u>

12. Investments in subsidiaries

Details of investments in subsidiaries as presented in separate financial statements are as follows:

(Unit: Thousand Baht)

Company's name	Paid-up capital		Shareholding percentage		Cost		Dividend received during the years	
	2022	2021	2022	2021	2022	2021	2022	2021
			(%)	(%)				
Pathum Thani Water Company Limited	1,200,000	1,200,000	98.0	98.0	3,998,310	3,998,310	600,203	938,386
Thai Water Operations Company Limited	60,000	60,000	68.5	68.5	700,000	700,000	-	-
					4,698,310	4,698,310	600,203	938,386
Less: Accumulated amortisation of investments in subsidiaries					(3,427,712)	(3,206,218)	-	-
Less: Dividend received from income before purchase of shares					(20,000)	(20,000)	-	-
Total					1,250,598	1,472,092	600,203	938,386

Thai Water Operations Company Limited (“the subsidiary”) provides services in Amata City Chonburi Industrial Estate which the contract expired during the year 2021. The subsidiary is currently providing the services as usual. At present, the Group is in the process of preparing services offer.

13. Investment in associate

(Unit: Thousand Baht)

Company's name	Nature of business	Country of incorporation	Consolidated financial statements			
			Shareholding percentage		Carrying amounts based on equity method	
			2022 (%)	2021 (%)	Cost 2022	Cost 2021
CK Power Public Company Limited	Making investment in other companies	Thailand	24.98	24.98	5,218,706	6,648,263
Total					5,218,706	6,219,582

(Unit: Thousand Baht)

Company's name	Nature of business	Country of incorporation	Separate financial statements			
			Shareholding percentage		Carrying amounts based on cost method	
			2022 (%)	2021 (%)	Cost 2022	Cost 2021
CK Power Public Company Limited	Making investment in other companies	Thailand	24.98	24.98	5,218,706	5,218,706
Total					5,218,706	5,218,706

13.1 Share of comprehensive income and dividend received

During the years, the Company has recognised its share of profit (loss) from investment in associate in the consolidated financial statements and dividend income in the separate financial statements as follows:

(Unit: Thousand Baht)

Associate	Consolidated financial statements				Separate financial statements	
	Share of profit from investment in associate during the years		Share of loss from investment in associate as presented in other comprehensive income during the years		Dividend received during the years	
	2022	2021	2022	2021	2022	2021
CK Power Public Company Limited	608,568	544,317	(17,426)	(208,620)	162,461	71,076
Total	608,568	544,317	(17,426)	(208,620)	162,461	71,076

13.2 Fair value of investment in listed associate

In respect of investment in associate that is listed company on the Stock Exchange of Thailand, its fair value is as follows:

(Unit: Thousand Baht)

Associate	Fair values as at 31 December	
	2022	2021
CK Power Public Company Limited	9,260,265	10,153,800
Total	9,260,265	10,153,800

13.3 Summarised financial information about material associate

Summarised information about financial position

(Unit: Thousand Baht)

	CK Power Public Company Limited	
	2022	2021
Current assets	10,423,445	9,711,841
Non-current assets	59,422,671	59,265,506
Current liabilities	(4,631,998)	(3,393,985)
Non-current liabilities	(27,274,650)	(29,453,296)
Net assets	37,939,468	36,130,066
Equity attributable to non-controlling interest of the associate	(11,389,601)	(11,296,310)
Net assets of the Company	26,549,867	24,833,756
Shareholding percentage	24.98%	24.98%
Share of net assets	6,632,157	6,203,472
Goodwill	16,106	16,110
Carrying amounts of associate based on equity method	6,648,263	6,219,582

Summarised information about comprehensive income

(Unit: Thousand Baht)

CK Power Public Company Limited		
For the years ended 31 December		
	2022	2021
Revenue	11,441,869	9,369,493
Profit from continuing operations	2,845,950	2,751,253
Other comprehensive income	(69,759)	(835,146)
Total comprehensive income	2,776,191	1,916,107

14. Property, plant and equipment

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Net book value:				
Property, plant and equipment	914,721	911,753	735,004	730,626
Right-of-use assets (Note 23)	54,590	61,456	49,682	54,697
Total	969,311	973,209	784,686	785,323

Movements of property, plant and equipment for the years ended 31 December 2022 and 2021 are summarised below.

(Unit: Thousand Baht)

Consolidated financial statements

	Land	Construction in progress	Building and building improvement	Furniture and office equipment	Motor vehicles	Tools	Total
Cost:							
As at 1 January 2021	737,631	1,355	81,948	170,523	69,342	29,579	1,090,378
Additions	108,514	-	974	26,083	2,537	1,025	139,133
Disposals/write-offs	-	-	-	(1,697)	(9,230)	(39)	(10,966)
Transfer in (out)	-	(1,355)	-	1,355	-	-	-
Transfer from assets for production of treated water with public sector agency - assets that must be transferred at end of concession of subsidiary	-	-	-	149	-	-	149
Transfer from rights to produce and sell treated water and treat waste water from private sector agency	-	-	-	2,240	-	-	2,240
As at 31 December 2021	846,145	-	82,922	198,653	62,649	30,565	1,220,934
Additions	-	-	797	27,955	6,045	336	35,133
Disposals/write-offs	-	-	-	(3,528)	(2,173)	(1,241)	(6,942)
Transfer from assets for production of treated water with public sector agency - assets that are owned by the Company	-	-	-	137	-	-	137
As at 31 December 2022	846,145	-	83,719	223,217	66,521	29,660	1,249,262
Accumulated depreciation:							
As at 1 January 2021	1,677	-	41,358	129,859	20,121	26,827	219,842
Depreciation for the year	1,677	-	7,352	15,945	12,721	1,106	38,801
Depreciation on disposals/write-offs	-	-	-	(1,655)	(9,229)	(34)	(10,918)
As at 31 December 2021	3,354	-	48,710	144,149	23,613	27,899	247,725
Depreciation for the year	1,677	-	6,576	17,369	12,495	1,002	39,119
Depreciation on disposals/write-offs	-	-	-	(3,496)	(2,172)	(1,225)	(6,893)
As at 31 December 2022	5,031	-	55,286	158,022	33,936	27,676	279,951
Net book value:							
As at 31 December 2021	842,791	-	34,212	54,504	39,036	2,666	973,209
As at 31 December 2022	841,114	-	28,433	65,195	32,585	1,984	969,311
Depreciation for the year							
2021 (Baht 19 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							38,801
2022 (Baht 20 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							39,119

(Unit: Thousand Baht)

Separate financial statements

	Land	Construction in progress	Building and building improvement	Furniture and office equipment	Motor vehicles	Tools	Total
Cost:							
As at 1 January 2021	682,899	1,355	81,948	119,722	50,966	12,473	949,363
Additions	-	-	974	19,897	2,366	274	23,511
Disposals/write-offs	-	-	-	(1,163)	(7,599)	(30)	(8,792)
Transfer in (out)	-	(1,355)	-	1,355	-	-	-
Transfer from rights to produce and sell treated water and treat waste water from private sector agency	-	-	-	2,240	-	-	2,240
As at 31 December 2021	682,899	-	82,922	142,051	45,733	12,717	966,322
Additions	-	-	797	24,514	6,045	105	31,461
Disposals/write-offs	-	-	-	(1,991)	(2,032)	(76)	(4,099)
Transfer from assets for production of treated water with public sector agency - assets that are owned by the Company	-	-	-	137	-	-	137
As at 31 December 2022	682,899	-	83,719	164,711	49,746	12,746	993,821
Accumulated depreciation:							
As at 1 January 2021	1,677	-	41,358	88,037	14,867	11,905	157,844
Depreciation for the year	1,677	-	7,352	13,133	9,503	249	31,914
Depreciation on disposals/write-offs	-	-	-	(1,136)	(7,599)	(24)	(8,759)
As at 31 December 2021	3,354	-	48,710	100,034	16,771	12,130	180,999
Depreciation for the year	1,677	-	6,576	14,009	9,714	245	32,221
Depreciation on disposals/write-offs	-	-	-	(1,980)	(2,032)	(73)	(4,085)
As at 31 December 2022	5,031	-	55,286	112,063	24,453	12,302	209,135
Net book value:							
As at 31 December 2021	679,545	-	34,212	42,017	28,962	587	785,323
As at 31 December 2022	677,868	-	28,433	52,648	25,293	444	784,686
Depreciation for the year							
2021 (Baht 12 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							31,914
2022 (Baht 13 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							32,221

As at 31 December 2022, certain items of plant and equipment were fully depreciated but are still in use. The gross carrying amount before deducting accumulated depreciation of those assets amounted to approximately Baht 166 million (the Company only: Baht 111 million) (2021: Baht 154 million (the Company only: Baht 99 million)).

15. Assets for production of treated water with public sector agency - assets that are owned by the Company

(Unit: Thousand Baht)

	Consolidated / Separate financial statements		
	Water treatment plant and distribution treated water system	Construction in progress	Total
Cost:			
As at 1 January 2021	14,776,089	-	14,776,089
Additions	13,450	88,716	102,166
As at 31 December 2021	14,789,539	88,716	14,878,255
Additions	-	155,846	155,846
Transfer to property, plant and equipment	-	(137)	(137)
As at 31 December 2022	14,789,539	244,425	15,033,964
Accumulated amortisation:			
As at 1 January 2021	5,810,735	-	5,810,735
Amortisation for the year	477,676	-	477,676
As at 31 December 2021	6,288,411	-	6,288,411
Amortisation for the year	464,737	-	464,737
As at 31 December 2022	6,753,148	-	6,753,148
Net book value:			
As at 31 December 2021	8,501,128	88,716	8,589,844
As at 31 December 2022	8,036,391	244,425	8,280,816
Amortisation for the years			
2021			477,676
2022			464,737

Amortisation of such assets for production of treated water has been included as part of cost of sales of treated water.

16. Assets for production of treated water with public sector agency - assets that must be transferred at end of concession of subsidiary

(Unit: Thousand Baht)

	Consolidated financial statements			
	Land	Water treatment plant and distribution treated water system	Construction in progress	Total
Cost:				
As at 1 January 2021	413,401	6,553,173	184,848	7,151,422
Additions	-	2,543	155,120	157,663
Write-offs	-	(186)	-	(186)
Transfer in (out)	-	339,968	(339,968)	-
Transfer to property, plant and equipment	-	(149)	-	(149)
As at 31 December 2021	413,401	6,895,349	-	7,308,750
Disposals/write-offs	-	(110)	-	(110)
As at 31 December 2022	413,401	6,895,239	-	7,308,640
Accumulated amortisation:				
As at 1 January 2021	365,850	5,439,051	-	5,804,901
Amortisation for the year	17,054	447,958	-	465,012
Amortisation on write-offs	-	(186)	-	(186)
As at 31 December 2021	382,904	5,886,823	-	6,269,727
Amortisation for the year	17,047	565,948	-	582,995
Amortisation on disposals/write-offs	-	(110)	-	(110)
As at 31 December 2022	399,951	6,452,661	-	6,852,612
Net book value:				
As at 31 December 2021	30,497	1,008,526	-	1,039,023
As at 31 December 2022	13,450	442,578	-	456,028
Amortisation for the years				
2021				465,012
2022				582,995

Amortisation of such assets for production of treated water has been included as part of cost of sales of treated water.

Assets for production of treated water of Pathum Thani Water Company Limited will be transferred to the Provincial Waterworks Authority after the end of the 25-year concession to produce and sell treated water. The concession will be expired in October 2023.

17. Rights to produce and sell treated water and treat waste water from private sector agency

The net book value of rights to produce and sell treated water and treat waste water from private sector agency as at 31 December 2022 and 2021 are presented below.

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Construction in progress	Total
As at 31 December 2022:				
Cost	1,410,075	154,350	-	1,564,425
Less: Accumulated amortisation/depreciation	(549,743)	(36,230)	-	(585,973)
Net book value	860,332	118,120	-	978,452
As at 31 December 2021:				
Cost	1,410,075	154,350	-	1,564,425
Less: Accumulated amortisation/depreciation	(505,357)	(29,997)	-	(535,354)
Net book value	904,718	124,353	-	1,029,071

A reconciliation of the net book of right to produce and sell treated water and treat waste water from private sector agency for the years 2022 and 2021 is presented below.

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Construction in progress	Total
Net book value as at 1 January 2021	950,211	130,736	671	1,081,618
Addition during period - at cost	-	-	1,569	1,569
Transfer in (out)	-	2,240	(2,240)	-
Transfer to property, plant and equipment	-	(2,240)	-	(2,240)
Amortisation/depreciation for the year	(45,493)	(6,383)	-	(51,876)
Net book value as at 31 December 2021	904,718	124,353	-	1,029,071
Amortisation/depreciation for the year	(44,386)	(6,233)	-	(50,619)
Net book value as at 31 December 2022	860,332	118,120	-	978,452

Assets to produce and sell treated water and treat waste water from private sector must be transferred to the owner of the rights after the end of the 30-years concession. The concession will be expired in 2039.

18. Rights to produce and sell treated water from business acquisition

(Unit: Thousand Baht)

	Consolidated financial statements	
	2022	2021
Rights to produce and sell treated water from business acquisition	3,169,109	3,169,109
Less: Accumulated amortisation of rights to produce and sell treated water from business acquisition	(3,015,822)	(2,820,876)
Rights to produce and sell treated water from business acquisition, net	153,287	348,233

19. Intangible assets

The net book value of intangible assets as at 31 December 2022 and 2021 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements		
	Waste water treatment system	Sludge management system	Total
As at 31 December 2022			
Cost	14,104	12,000	26,104
Less: Accumulated amortisation	(14,104)	(1,800)	(15,904)
Net book value	-	10,200	10,200
As at 31 December 2021			
Cost	14,104	12,000	26,104
Less: Accumulated amortisation	(14,104)	(1,200)	(15,304)
Net book value	-	10,800	10,800

A reconciliation of the net book value of intangible assets for the years 2022 and 2021 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements		
	Waste water treatment system	Sludge management system	Total
Net book value as at 1 January 2021	560	11,399	11,959
Amortisation	(560)	(599)	(1,159)
Net book value as at 31 December 2021	-	10,800	10,800
Amortisation	-	(600)	(600)
Net book value as at 31 December 2022	-	10,200	10,200

20. Trade and other payables

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Trade payables - related party	-	1,432	3,281	4,790
Trade payables - unrelated parties	32,095	28,401	17,248	14,679
Amounts due to related parties	771	751	756	740
Amounts due to unrelated parties	14,171	12,185	10,696	9,421
Retention payable for contract work - related party	9,576	8,858	9,576	8,858
Retention payable for contract work - unrelated parties	2,438	3,708	1,939	3,192
Accrued expenses - related party	1,723	1,203	1,723	1,203
Accrued expenses - unrelated parties	85,040	73,175	47,805	46,027
Total trade and other payables	145,814	129,713	93,024	88,910

21. Long-term loans

(Unit: Thousand Baht)

Loan	Interest rate (% per annum)	Repayment schedule	Consolidated / Separate	
			financial statements	
			2022	2021
1	The 12-month fixed deposit rate + a stipulated margin	Quarterly installments as from June 2020 to June 2026	1,640,000	2,100,000
2	The fixed rate of 1.2% per annum + non-cumulative compounded reference interest rate	Quarterly installments as from July 2022 to April 2027	900,000	-
Total			2,540,000	2,100,000
Less: Current portion			(660,000)	(460,000)
Long-term loans, net of current portion			1,880,000	1,640,000

Movement of long-term loans account during the years ended 31 December 2022 and 2021 is summarised below:

(Unit: Thousand Baht)

	Consolidated / Separate	
	financial statements	
	2022	2021
Beginning balance	2,100,000	2,860,000
Add: Additional borrowings	1,000,000	-
Less: Repayment	(560,000)	(760,000)
Ending balance	2,540,000	2,100,000

The loan agreements contain several covenants which, among other things, require the Company to maintain certain debt to equity ratio, net debt to EBITDA ratio and EBITDA to interest expense ratio at the rate prescribed in the agreements.

22. Debentures

					(Unit: Thousand Baht)	
					Consolidated / Separate financial statements	
Debentures	Life	Date of issue	Maturity date	Interest rate	2022	2021
					(% per annum)	
1	10 years	22 February 2012	22 February 2022	4.60	-	2,000,000
2	10 years	21 May 2015	21 May 2025	3.98	1,400,000	1,400,000
3	5 years	1 February 2018	1 February 2023	2.33	1,000,000	1,000,000
4	7 years 2 months	20 December 2019	20 February 2027	2.41	1,000,000	1,000,000
Total					3,400,000	5,400,000
Less: Current portion of debentures					(1,000,000)	(2,000,000)
Less: Deferred debenture issuing costs					(1,575)	(2,193)
Debentures, net of current portion					<u>2,398,425</u>	<u>3,397,807</u>

All debentures of the Company are unsecured, senior debentures with no trustees and with a par value of Baht 1,000 each. The interest is payable every 6 months throughout the life of the debentures.

The Company is required to maintain certain financial ratios i.e. debt to equity ratio, net debt to EBITDA ratio and EBITDA to interest expense ratio at the rate prescribed.

23. Leases

The Group as a lessee

The Group has lease contracts in its operations. Land leases have lease terms of 15 and 20 years and motor vehicles leases have lease terms between 1 - 5 years.

a) Right-of-use assets

Movement of right-of-use assets for the years ended 31 December 2022 and 2021 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements		
	Motor			Motor		
	Land	vehicles	Total	Land	vehicles	Total
As at 1 January 2021	28,693	44,249	72,942	28,693	35,208	63,901
Additions	-	1,679	1,679	-	1,679	1,679
Depreciation for the year	(1,677)	(11,488)	(13,165)	(1,677)	(9,206)	(10,883)
As at 31 December 2021	27,016	34,440	61,456	27,016	27,681	54,697
Additions	-	5,992	5,992	-	5,992	5,992
Depreciation for the year	(1,677)	(11,181)	(12,858)	(1,677)	(9,330)	(11,007)
As at 31 December 2022	25,339	29,251	54,590	25,339	24,343	49,682

b) Lease liabilities

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Lease payments	65,618	72,585	60,002	64,854
Less: Deferred interest expenses	(8,949)	(10,478)	(8,536)	(9,728)
Total	56,669	62,107	51,466	55,126
Less: Portion due within one year	(11,285)	(11,060)	(9,451)	(9,282)
Lease liabilities - net of current portion	45,384	51,047	42,015	45,844

c) Expenses relating to leases that are recognised in profit or loss

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	For the years ended 31 December			
	2022	2021	2022	2021
Depreciation expense of right-of-use assets	12,858	13,165	11,007	10,883
Interest expense on lease liabilities	2,456	2,863	2,120	2,417
Expense relating to short-term leases	36,612	35,370	36,197	35,076
Expense relating to leases of low-value assets	164	210	-	-

d) Others

The Group had total cash outflows for leases for the year ended 31 December 2022 of Baht 51 million, (2021: Baht 50 million) (the Company only: Baht 48 million (2021: Baht 47 million)), including the cash outflow related to short-term lease and leases of low-value assets.

24. Provision for long-term employee benefits

Provision for long-term employee benefits, which represents compensation payable to employees after they retire, was as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Provision for long-term employee benefits				
at beginning of year	73,379	62,271	47,816	35,698
Included in profit or loss:				
Current service cost	7,670	7,301	4,678	4,533
Interest cost	1,449	1,285	882	786
Included in other comprehensive income:				
Actuarial (gain) loss arising from				
Demographic assumptions changes	-	1,143	-	248
Financial assumptions changes	-	(1,661)	-	(360)
Experience adjustments	-	4,430	-	8,094
Benefits paid during the year	(789)	(1,390)	-	(1,183)
Provision for long-term employee benefits				
at end of year	81,709	73,379	53,376	47,816

The Group does not expect to pay of long-term employee benefits during the next year.

As at 31 December 2022 and 2021, the weighted average duration of the liabilities for long-term employee benefits is 10.54 - 15.76 years (the Company only: 10.54 years).

Significant actuarial assumptions are summarised below:

	(Unit: % per annum)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Discount rate	1.80 - 2.29	1.80 - 2.29	1.80	1.80
Salary increase rate	5.0	5.0	5.0	5.0
Turnover rate	0 - 9.0	0 - 9.0	0 - 8.0	0 - 8.0

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2022 and 2021 are summarised below:

(Unit: Thousand Baht)

	As at 31 December 2022			
	Consolidated		Separate	
	financial statements		financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(5,102)	5,855	(2,700)	3,070
Salary increase rate	6,362	(5,663)	3,428	(3,086)
Turnover rate	(5,378)	3,441	(2,832)	1,709

(Unit: Thousand Baht)

	As at 31 December 2021			
	Consolidated		Separate	
	financial statements		financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(4,873)	5,600	(2,631)	2,995
Salary increase rate	5,285	(4,706)	2,818	(2,533)
Turnover rate	(5,137)	3,318	(2,761)	1,675

25. Statutory reserve

Pursuant to Section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside to a statutory reserve at least 5% of its net profit after deducting accumulated deficit brought forward (if any), until the reserve reaches 10% of the registered capital. The statutory reserve is not available for dividend distribution. At present, the statutory reserve has fully been set aside.

26. Other reserve

According to the amendment of the concession to operate treated water dated 20 March 2008, prior to paying a dividend the Company is required to set aside 10% of its annual net profit to other reserve.

However, according to the additional amendment of the agreement to the concession to operate treated water dated 28 October 2016, amendment the articles above to prior to paying a dividend from net profit the Company is required to set aside 10% of its full registered share capital to the legal reserve.

Retained earnings set aside as the legal reserve are to be retained in cash and deposited at a bank or financial institution licensed by the Bank of Thailand.

27. Expenses by nature

Significant expenses classified by nature are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Salaries, wages and other employee benefits	207,660	195,529	117,167	105,143
Depreciation and amortisation	504,455	517,637	496,957	509,590
Amortisation of assets for production of treated water that must be transferred at end of concession	582,995	465,012	-	-
Amortisation of investments in subsidiaries	-	-	221,494	221,494
Operating and maintenance expenses	-	-	37,902	37,301
Production and maintenance cost	720,562	702,130	412,110	423,863

28. Income tax

Income tax expenses for the years ended 31 December 2022 and 2021 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Current income tax:				
Current income tax charge	647,660	642,313	477,674	476,244
Deferred tax:				
Relating to origination and reversal of temporary differences	8,877	8,647	15,183	14,191
Income tax expenses reported in profit or loss	<u>656,537</u>	<u>650,960</u>	<u>492,857</u>	<u>490,435</u>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2022 and 2021 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Deferred tax on share of other comprehensive income from associate	(4,356)	(52,155)	-	-
Deferred tax on actuarial loss	-	(782)	-	(1,596)
	<u>(4,356)</u>	<u>(52,937)</u>	<u>-</u>	<u>(1,596)</u>

The reconciliation between accounting profit and income tax expenses is shown below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Accounting profit before tax	3,635,311	3,770,934	3,012,647	3,239,762
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	727,062	754,187	602,529	647,952
Effects of:				
Promotional privileges (Note 29)	-	(41,428)	-	-
Non-deductible expenses	47,843	48,718	44,603	45,296
Additional expense deductions allowed	(1,463)	(2,070)	(1,401)	(1,986)
Exemption of income	-	-	(152,533)	(201,892)
Effect of elimination entry on the consolidated financial statements	(129,877)	(117,124)	-	-
Others	12,972	8,677	(341)	1,065
Total	(70,525)	(103,227)	(109,672)	(157,517)
Income tax expenses reported in profit or loss	656,537	650,960	492,857	490,435

The components of deferred tax assets and deferred tax liabilities are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
Statements of financial position as at 31 December				
	2022	2021	2022	2021
Deferred tax assets				
Allowance for expected credit losses	3,884	3,910	2,244	2,244
Provision for long-term employee benefits	16,342	14,675	10,675	9,563
Unrealised fair value loss on investment	116	121	-	-
Leases	416	130	357	86
Total	20,758	18,836	13,276	11,893
Deferred tax liabilities				
Accumulated depreciation - assets for production of treated water	(119,488)	(102,967)	(119,488)	(102,967)
Accumulated amortisation - rights to produce and sell treated water and treat waste water	(16,533)	(15,862)	(16,533)	(15,862)
Accumulated depreciation - assets for production of treated water that must be transferred at end of concession of subsidiary	(11,774)	(17,000)	-	-
Unrealised fair value gain on investments	(852)	(1,029)	(411)	(904)
Deferred debenture issuing costs	(306)	(439)	(306)	(439)
Fair value adjustment of assets for production of treated water that must be transferred at end of concession regarding business combination	(674)	(1,531)	-	-
Total	(149,627)	(138,828)	(136,738)	(120,172)
Net	(128,869)	(119,992)	(123,462)	(108,279)

29. Promotional privileges

- a) The Company received promotional privileges from the Board of Investment for production of treated water, pursuant to the investment promotion certificate No. 59-0683-1-00-1-0 issued on 29 February 2016. Subject to certain imposed conditions, the main privileges include the following:
- Exemption from import duty on imported machinery under specified conditions.
 - Exemption from corporate income tax on net profit from the promoted operations for a period of five years from the date the promoted operations begin generating revenues (31 March 2019).
- b) The subsidiary received the promotional privileges extension for a period of eight years according to investment promotional privileges for restore investment after the floods, pursuant to the investment promotion certificate No. 5187(2)/2556 (replacing earlier investment promotion certificate No. 1451(2)/2551) and during the year 2015, the subsidiary received promotional privileges from the Board of Investment for expand production of treated water, pursuant to the investment promotion certificate No. 59-0392-1-00-1-0 issued on 1 September 2015. Subject to certain imposed conditions, the main privileges include the following:
- Exemption of import duty on imported machinery under specified conditions.
 - Exemption from corporate income tax on net profit from the promoted operations for a period of five years from the date the promoted operations begin generating revenues (1 December 2017).

All tax privileges of the subsidiary have ended during the year 2022.

The Group's operating revenues for the years ended 31 December 2022 and 2021, divided between promoted and non-promoted operations, are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements					
	Promoted operations		Non-promoted operations		Total	
	2022	2021	2022	2021	2022	2021
Sales of treated water	-	419,554	5,574,938	5,262,846	5,574,938	5,682,400

(Unit: Thousand Baht)

	Separate financial statements					
	Promoted operations		Non-promoted operations		Total	
	2022	2021	2022	2021	2022	2021
Sales of treated water	-	630	3,866,918	3,924,668	3,866,918	3,925,298

30. Basic earnings per share

Basic earnings per share is calculated by dividing profit for the year attributable to equity holders of the Company (excluding other comprehensive income) by the weighted average number of ordinary shares in issue during the year.

31. Segment information

Operating segment information is reported in a manner consistent with the internal reports that are regularly reviewed by the chief operating decision maker in order to make decisions about the allocation of resources to the segment and assess its performance.

The Group is principally engaged in the production and sell of treated water. Its operations are carried on only in Thailand. Segment performance is measured based on operating profit or loss, on a basis consistent with that used to measure operating profit or loss in the financial statements. As a result, all of the revenues, operating profits and assets as reflected in these financial statements pertain to the aforementioned reportable operating segment and geographic area.

Geographic information

The Group operates in Thailand only. As a result, all the revenues and assets as reflected in these financial statements pertain exclusively to this geographical reportable segment.

Major customer

For the year 2022, the Group has revenue from a major customer in amount of Baht 5,378 million (2021: Baht 5,480 million) accounted for 94% of total revenues of the Group.

32. Provident fund

The Group and its employees have established provident funds jointly with their employees in accordance with the Provident Fund Act B.E. 2530. The Company, the subsidiaries and their employees contribute to the funds monthly at the rates of 5.0% - 15.0% of basic salary. The funds, which are managed by Kasikorn Asset Management Company Limited, will be paid to employees upon termination in accordance with the fund rules. The contributions for the year 2022 amounting to approximately Baht 10 million (the Company only: Baht 6 million) (2021: Baht 10 million (the Company only: Baht 5 million)) were recognised as expenses.

33. Dividend paid

Dividends	Approved by	Total dividends (Thousand Baht)	Dividend per share (Baht)
Dividends from the earnings of the non-promoted operations for July to December 2020	Annual General Meeting of shareholders on 8 April 2021	1,196,556	0.30
Dividends from the earnings of the non-promoted operations for January to June 2021	Board of Directors' meeting on 26 August 2021	1,196,967	0.30
Total dividends for 2021		<u>2,393,523</u>	<u>0.60</u>
Dividends from the earnings of the non-promoted operations for July to December 2021	Annual General Meeting of shareholders on 11 April 2022	1,196,999	0.30
Dividends from the earnings of the non-promoted operations for January to June 2022	Board of Directors' meeting on 23 August 2022	1,196,999	0.30
Total dividends for 2022		<u>2,393,998</u>	<u>0.60</u>

34. Commitments and contingent liabilities

34.1 Capital commitments

As at 31 December 2022, the Company had capital commitments of Baht 79 million (2021: Baht 209 million) relating to the improvement project on water supply and distribution systems at Bang Len water supply plant with a related company and other system improvement projects.

34.2 Service commitments and other commitments

- a) The Group has entered into operation and maintenance agreements with Thai Water Operations Company Limited (“the subsidiary”), whereby the subsidiary is to manage and maintenance of production and supply of treated water system and to manage the waste water treatment system. Under the conditions of the agreements, the Group is to pay service fees at a rate stipulated in the agreements, which have an initial term of 1 year from 8 January 2010 and thereafter automatically renews each year for a further period of 1 year.
- b) As at 31 December 2022, the Group had commitments totaling Baht 30 million (the Company only: Baht 20 million) (2021: Baht 28 million (the Company only: Baht 22 million)) under other service agreements.

34.3 Bank guarantees

As at 31 December 2022, there were outstanding bank guarantees of Baht 301 million (the Company only: Baht 111 million) (2021: Baht 300 million (the Company only: Baht 110 million)) issued by banks on behalf of the Group in respect of certain performance bonds as required in the normal course of business. These included letters of guarantee as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2022	2021	2022	2021
Guarantee under the Water Purchase Agreement				
with the Provincial Waterworks Authority	230,650	230,650	63,000	63,000
Guarantee electricity use	70,555	69,097	48,178	46,894
Guarantee for others	101	101	101	101
Total	<u>301,306</u>	<u>299,848</u>	<u>111,279</u>	<u>109,995</u>

35. Fair value hierarchy

As at 31 December 2022 and 2021, the Group had the assets and liabilities that were measured or disclosed at fair value using different levels of inputs as follows:

	(Unit: Thousand Baht)			
	Consolidated financial statements			
	As at 31 December 2022			
	Level 1	Level 2	Level 3	Total
Assets measured at fair value				
Financial assets measured at FVTPL				
Investments in open-ended fund - debt securities	-	2,735,588	-	2,735,588
Real estate investment trust	4,250	-	-	4,250
Assets for which fair value are disclosed				
Financial assets measured at amortised cost				
Investment in associate	9,260,265	-	-	9,260,265
Liabilities for which fair value are disclosed				
Debentures	-	3,443,018	-	3,443,018

(Unit: Thousand Baht)

Consolidated financial statements

As at 31 December 2021

	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets measured at FVTPL				
Investments in open-ended fund - debt securities	-	2,703,629	-	2,703,629
Real estate investment trust	4,350	-	-	4,350
Assets for which fair value are disclosed				
Financial assets measured at amortised cost				
Investment in associate	10,153,800	-	-	10,153,800
Current portion of debt investments - debentures	-	9,058	-	9,058
Liabilities for which fair value are disclosed				
Debentures	-	5,550,559	-	5,550,559

(Unit: Thousand Baht)

Separate financial statements

As at 31 December 2022

	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets measured at FVTPL				
Investments in open-ended fund - debt securities	-	1,442,504	-	1,442,504
Assets for which fair value are disclosed				
Financial assets measured at amortised cost				
Investment in associate	9,260,265	-	-	9,260,265
Liabilities for which fair value are disclosed				
Debentures	-	3,443,018	-	3,443,018

(Unit: Thousand Baht)

Separate financial statements

As at 31 December 2021

	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Financial assets measured at FVTPL				
Investments in open-ended fund - debt securities	-	1,900,974	-	1,900,974
Assets for which fair value are disclosed				
Financial assets measured at amortised cost				
Investment in associate	10,153,800	-	-	10,153,800
Liabilities for which fair value are disclosed				
Debentures	-	5,550,559	-	5,550,559

During the current year, there were no transfers within the fair value hierarchy.

36. Financial instruments

36.1 Financial risk management

The Group's financial instruments principally comprise cash and cash equivalents, trade and other receivables, long-term loans to related party, investments, trade and other payables, long-term loans and debentures. The financial risks associated with these financial instruments and how they are managed is described below.

Credit risk

The Group is exposed to credit risk primarily with respect to trade and other receivables and there is a high concentration of risk since the Group has only one major customer, the Provincial Waterworks Authority. However, because the Provincial Waterworks Authority is a government agency, the Group does not expect to incur material financial losses. The maximum exposure to credit risk is limited to the carrying amounts of receivables as stated in the statement of financial position.

Interest rate risk

The Group's exposures to interest rate risk relate primarily to their cash at banks, other current financial assets, long-term loans to related party, other non-current financial assets, long-term loans and debentures. However, since most of the Group's financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the market rate, the interest rate risk is expected to be minimal.

As at 31 December 2022 and 2021, significant financial assets and liabilities classified by type of interest rates are summarised in the table below, with those financial assets and liabilities that carry fixed interest rates further classified based on the maturity date, or the repricing date if this occurs before the maturity date.

(Unit: Thousand Baht)

	2022						
	Consolidated financial statements						
	Fixed interest rates			Floating		Total	Effective interest rate (% per annum)
	Within 1 year	1 - 5 years	Over 5 years	interest rate	Non-interest bearing		
Financial assets							
Cash and cash equivalents	-	-	-	50,126	11,798	61,924	0.15 - 0.35
Trade and other receivables	-	-	-	-	511,775	511,775	-
Other current financial assets	565,321	-	-	-	2,735,588	3,300,909	0.20 - 0.75
Other non-current financial assets	-	-	-	-	4,250	4,250	-
	<u>565,321</u>	<u>-</u>	<u>-</u>	<u>50,126</u>	<u>3,263,411</u>	<u>3,878,858</u>	
Financial liabilities							
Trade and other payables	-	-	-	-	145,814	145,814	-
Long-term loans	-	-	-	2,540,000	-	2,540,000	2.225 - 2.318
Debentures	1,000,007	2,398,418	-	-	-	3,398,425	2.33 - 3.98
	<u>1,000,007</u>	<u>2,398,418</u>	<u>-</u>	<u>2,540,000</u>	<u>145,814</u>	<u>6,084,239</u>	

(Unit: Thousand Baht)

2021

Consolidated financial statements

	Fixed interest rates			Floating		Total	Effective interest rate (% per annum)
	Within	1 - 5	Over	interest	Non-interest		
	1 year	years	5 years	rate	bearing		
Financial assets							
Cash and cash equivalents	-	-	-	46,673	20,089	66,762	0.125
Trade and other receivables	-	-	-	-	514,177	514,177	-
Other current financial assets	893,309	-	-	-	2,703,629	3,596,938	0.20 - 4.10
Other non-current financial assets	-	-	-	-	4,350	4,350	-
	<u>893,309</u>	<u>-</u>	<u>-</u>	<u>46,673</u>	<u>3,242,245</u>	<u>4,182,227</u>	
Financial liabilities							
Trade and other payables	-	-	-	-	129,713	129,713	-
Long-term loans	-	-	-	2,100,000	-	2,100,000	1.875 - 2.950
Debentures	2,000,060	2,398,641	999,106	-	-	5,397,807	2.33 - 4.60
	<u>2,000,060</u>	<u>2,398,641</u>	<u>999,106</u>	<u>2,100,000</u>	<u>129,713</u>	<u>7,627,520</u>	

(Unit: Thousand Baht)

2022

Separate financial statements

	Fixed interest rates			Floating		Total	Effective interest rate (% per annum)
	Within	1 - 5	Over	interest	Non-interest		
	1 year	years	5 years	rate	bearing		
Financial assets							
Cash and cash equivalents	-	-	-	39,553	11,348	50,901	0.15 - 0.35
Trade and other receivables	-	-	-	-	355,183	355,183	-
Other current financial assets	425,320	-	-	-	1,442,504	1,867,824	0.20 - 0.60
	<u>425,320</u>	<u>-</u>	<u>-</u>	<u>39,553</u>	<u>1,809,036</u>	<u>2,273,909</u>	
Financial liabilities							
Trade and other payables	-	-	-	-	93,024	93,024	-
Long-term loans	-	-	-	2,540,000	-	2,540,000	2.225 - 2.318
Debentures	1,000,007	2,398,418	-	-	-	3,398,425	2.33 - 3.98
	<u>1,000,007</u>	<u>2,398,418</u>	<u>-</u>	<u>2,540,000</u>	<u>93,024</u>	<u>6,031,449</u>	

(Unit: Thousand Baht)

2021							
Separate financial statements							
Fixed interest rates			Floating		Total	Effective interest rate (% per annum)	
Within 1 year	1 - 5 years	Over 5 years	interest rate	Non-interest bearing			
Financial assets							
Cash and cash equivalents	-	-	-	36,627	19,629	56,256	0.125
Trade and other receivables	-	-	-	-	356,501	356,501	-
Other current financial assets	744,309	-	-	-	1,900,974	2,645,283	0.200 - 0.625
Long-term loans to related party	-	-	-	57,170	-	57,170	3.25
	<u>744,309</u>	<u>-</u>	<u>-</u>	<u>93,797</u>	<u>2,277,104</u>	<u>3,115,210</u>	
Financial liabilities							
Trade and other payables	-	-	-	-	88,910	88,910	-
Long-term loans	-	-	-	2,100,000	-	2,100,000	1.875 - 2.950
Debentures	2,000,060	2,398,641	999,106	-	-	5,397,807	2.33 - 4.60
	<u>2,000,060</u>	<u>2,398,641</u>	<u>999,106</u>	<u>2,100,000</u>	<u>88,910</u>	<u>7,586,717</u>	

Foreign currency risk

The Group does not consider themselves exposed to foreign currency risk because they have no significant foreign currency transactions.

36.2 Fair values of financial instruments

Since the majority of the Group's financial instruments are short-term in nature or carrying interest at rates close to market interest rates, their fair value is not expected to be materially different from the amounts presented in the statement of financial position.

37. Capital management

The primary objective of the Group's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value and it meets financial covenants attached to the loan agreements. The Group has complied with these covenants throughout the reporting periods.

As at 31 December 2022, the Group's debt-to-equity ratio was 0.46:1 (2021: 0.59:1) and the Company's was 0.53:1 (2021: 0.67:1).

38. Events after the reporting period

On 21 February 2023, a meeting of the Company's Board of Directors passed a resolution to propose a dividend payment for the year 2022 of Baht 0.60 per share, of which Baht 0.30 per share was paid as an interim dividend and the remaining dividend payment will be Baht 0.30 per share. Dividend payment is subject to the approval of shareholders.

39. Approval of financial statements

These consolidated financial statements were authorised for issue by the Company's Board of Directors on 21 February 2023.

4



ATTACHMENT



ATTACHMENT 1

1. Information of Directors, Executives, Controlling Person, the Person Assigned to the Highest Responsibility in Accounting and Finance (CFO), the Person Assigned to the Direct Responsibility of Supervising Accounting Preparation (Chief Accountant), and Company Secretary

DR. THANONG BIDAYA

Independent Director and Chairman of the Board of Directors

Date of Appointment : 17 December 2008

Age : 75 Years

Education / Training

- Ph.D. in Management, Northwestern University, U.S.A.
- M.A. in Economics, Northwestern University, U.S.A.
- B.A. in Economics, Yokohama National University, Japan
- Directors Accreditation Program (DAP) 25/2004, Thai Institute of Directors Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2018 - Present Independent Director and Chairman of the Board of Directors
S.Khonkaen Foods Public Company Limited
- 2018 - Present Chairman of the Board of Directors
Property Perfect Public Company Limited
- 2012 - Present Independent Director and Chairman of the Board of Directors
CK Power Public Company Limited
- 2012 – 2020 Independent Director and Chairman of the Board of Directors
Scan Inter Public Company Limited

Company Limited

- 2020 - Present Chairman of the Board of Directors
Luang Prabang Power Company Limited
- 2010 - Present Chairman of the Board of Directors
Xayaburi Power Company Limited
- 2005 - 2006 Minister of Finance
Ministry of Finance
- 2005 Minister of Commerce
Ministry of Commerce

Shareholding in the Company : Direct - 0.0085%
(342,500 Shares)
Indirect - None

MR. PLEW TRIVISVAVET

Director, Vice Chairman of the Board of Directors, and Authorized Director

Date of Appointment : 22 May 2008

Age : 77 Years

Education / Training

- Honorary Doctor of Science (Industrial Management Technology), Southeast Bangkok College
- Honorary Doctor of Civil Engineering, Rajamangala University of Technology Isan
- Honorary Doctor of Civil Engineering, Nakhon Phanom University
- Honorary Doctor of Civil Engineering, Kasetsart University
- Honorary Doctor of Science (Engineering), Thai-Nichi Institute of Technology
- M.Sc. (Electrical Engineering), Osaka University, Japan
- B.Sc. (Electrical Engineering), Osaka University, Japan
- Energy Literacy Leadership Program, class10/2017, Thailand Energy Academy (TEA)
- Capital Market Academy Executive Program (CMA), Class 4/2007, Capital Market Academy
- Director Accreditation Program (DAP), Class 18/2004, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 50/2004, Thai Institute of Directors Association
- Finance for Non-Finance Directors (FND), Class 13/2004, Thai Institute of Directors Association
- National Defense Course for the Joint State-Private Sectors, (Thai NCD), Class 366, Thai National Defense College

Family Relationship between Director and Executive Management

- Walainut Trivisvavet's uncle

Work Experience in the Past 5 Years

Listed Company

- Apr 2020 - Present Acting Chairman of the Board of Directors Bangkok Expressway and Metro Public Company Limited
- Dec 2015 - Present Vice Chairman of the Board of Directors, Chairman of the Executive Board, and Nomination and Remuneration Committee member Bangkok Expressway and Metro Public Company Limited
- 2012 - Present Chairman of Executive Committee CK Power Public Company Limited
- 2011 - Present Director CK Power Public Company Limited
- 2007 - Present Corporate Governance and Risk Management Committee Member CH. Karnchang Public Company Limited
- 2003 - Present Nomination and Remuneration Committee Member CH. Karnchang Public Company Limited

- 1994 - Present Chairman of Executive Board CH. Karnchang Public Company Limited
- 1998 - 2015 Chairman of the Board of Directors and Chairman of Executive Committee Bangkok Metro Public Company Limited
- 1994 - 2015 President CH. Karnchang Public Company Limited
- 1994 - 2015 Director / Chairman of Executive Committee Bangkok Expressway Public Company Limited

Company Limited

- Dec 2020 - Present Director and Chairman of Executive Committee Luang Prabang Power Company Limited
- 2010 - Present Director and Chairman of Executive Committee Xayaburi Power Company Limited
- 2006 - Present Director and Chairman of Executive Committee Nam Ngum 2 Power Company Limited
- 2004 - Present Director and Chairman of Executive Committee Southeast Asia Energy Company Limited
- 1996 - Present Chairman of the Board of Directors and Chairman of Executive Committee Northern Bangkok Expressway Company Limited (NECL)
- 1994 - Present Director CH. Karnchang Holding Company Limited
- 1992 - Present Director CK Office Tower Company Limited
- 1991 - Present Director and Chairman of the Board of Directors CH. Karnchang Real Estate Company Limited
- 1990 - Present Director Expert Transport Company Limited
- 1988 - Present Director Bang Pa-In Land Company Limited
- 1983 - Present Director Mahasiri Siam Company Limited
- 1981 - Present Director and Chairman of Executive Committee CH. Karnchang-Tokyu Construction Company Limited

Shareholding In The Company : Direct - 0.0050% (200,000 Shares)
Indirect - 0.0025% (100,000 Shares)

MR. PHONGSARIT TANTISUVANITCHKUL

Director, Chairman of the Executive Committee, Nomination and Remuneration Committee Member, and Authorized Director

Date of Appointment : 25 February 2016

Age : 50 Years

Education / Training

- Master of Engineering (Construction & Management) University of Michigan Ann Arbor U.S.A.
- Bachelor of Engineering (Mechanical Engineering), Kasetsart University
- Understanding the Fundamental of Financial Statement (UFS), Class 9/2007
- Finance for Non-Finance Director (FND), Class 35/2007, Thai Institute of Directors Association
- Director Certification Program (DPC), Class 155/2012, Thai Institute of Directors Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Aug 2022 - Present Vice Chairman of the Executive Board
CH. Karnchang Public Company Limited
- Oct 2020 - Present Director
CH. Karnchang Public Company Limited
- Dec 2015 - Present Director, Executive Director, and Corporate Governance and Risk Management Committee member
Bangkok Expressway and Metro Public Company Limited
- 2016 - Present Senior Executive Vice President - Operation Group
CH. Karnchang Public Company Limited
- 2011 - 2015 Executive Vice President – Business Development
CH. Karnchang Public Company Limited
- 2014 - 2015 Director and Executive Director
Bangkok Metro Public Company Limited

Company Limited

- 2020 - Present Director and Chairman of the Board of Directors
Pathum Thani Water Company Limited
- 2019 - Present Director
Asia Era One Company Limited
- Oct 2017 - Present Chairman of the Board of Directors
Bangkok Metro Networks Company Limited
- 2016 - Present Director and Executive Committee
Northern Bangkok Expressway Company Limited
- 2016 - Present Director
CH. Karnchang-Tokyu Construction Company Limited
- 2009 - 2017 Director
Bangkok Metro Networks Company Limited
- 2012 - 2015 Director
Transit Expert Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MR. PHAIRUCH MEKARPORN

Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee Member

Date of Appointment : 22 May 2008

Age : 77 Years

Education / Training

- M.S.M.E California State University, Long beach, U.S.A.
- B.S.M.E Chulalongkorn University
- Advanced Management Program: The International Senior Manager's Program (1995), Harvard University, Graduate School of Business Administration, U.S.A.
- Advanced Audit Committee Program (AACCP), Class 17/ 2007, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 81/2006, Thai Institute of Directors Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2004 – Present Independent Director, Chairman of Nomination and Remuneration Committee, and Audit Committee
Thai Optical Group Public Company Limited
- 2008 – Jul 2020 Chairman of Nomination and Remuneration Committee and Corporate Governance Committee
TTW Public Company Limited

Company Limited

- 2007 - Jul 2020 Chairman of the Board of Directors
Pathum Thani Water Company Limited
- 1996 - 2003 Managing Director
Siam Kraft Industry Company Limited
- 1989 - 1996 Managing Director
Thai Paper Company Limited
- 1985 - 1989 Managing Director
TIP Fibre-Cement Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MR. SOMNUK CHAIDEJSURIYA

Independent Director, Chairman of the Risk Management and Corporate Governance Committee, Audit Committee Member, and Nomination and Remuneration Committee Member

Date of Appointment : 22 May 2008

Age : 72 Years

Education / Training

- Master of Law, Chulalongkorn University
- Bachelor of Law, Chulalongkorn University
- Thai Barrister-at-Law, Institute of Legal Education, Thai Bar Association
- Director Certification Program (DCP), Class 46/2004, Thai Institute of Directors Association
- Advanced Audit Committee Program (AACP), Class 9/2005, Thai Institute of Directors Association
- Diploma, National Defense Course for the Joint State Private Sectors, Class 11, Thai National Defense College

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2004 - Present Independent Director, Chairman of Risk Management Committee, Audit Committee, and Nomination and Remuneration Committee Don Muang Tollway Public Company Limited
- 2008 - Jul 2020 Chairman of the Corporate Governance Committee TTW Public Company Limited

Company Limited

- 2016 - 2019 Chairman of Nomination and Remuneration Committee Advance Finance Public Company Limited
- 2015 - 2018 Chairman of Audit Committee Loxley Wireless Public Company Limited
- 2012 - 2016 Vice Chancellor Navamindradhiraj University (formerly University of Bangkok Metropolis)
- 1999 - 2000 Board Member and Executive Director The Marketing Organization For Farmers (MOF)
- 1997 - 1998 Governor Expressway Authority of Thailand (EXAT)

Shareholding in the Company : Direct - None
Indirect - None

MR. YUTTANA YIMGARUND

Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee Member

Date of Appointment : 7 December 2021

Age : 61 Years

Education / Training

- Master of Public Administration, National Institute of Development Administration (NIDA)
- Bachelor of Laws, Ramkhamhaeng University
- Public Law Certificate Program, Thammasat University
- Director Certificate Program (DCP) Class 208/2015, Thai Institute of Directors Association
- Capital Market Leader Program, Class 18, Capital Market Academy (CMA)
- The Joint State-Private Sectors, Class 25, Thai National Defense College
- The Civil Service Executive Development Program: Visionary and Moral Leadership. Class 71, Office of the Civil Service

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2021 - Present Advisory of the Board of Directors
Preecha Group Public Company Limited
- 2017 - 2019 Directors
Bangkok Expressway and Metro Public Company Limited

Company Limited

- 2019 - Sep 2021 Director-General
The Treasury Department
- 2019 - Sept 2021 The Chairman of the Board of Directors
Dhanarak Asset Development Company Limited
- 2019 - Sept 2021 Director
Government Housing Bank
- 2015 - Sept 2021 Director
Mass Rapid Transit Authority of Thailand
- 2019 - 2019 Deputy Permanent Secretary
Ministry of Finance
- 2015 - 2018 Inspector General
Ministry of Finance

Shareholding in the Company : Direct - None
Indirect - None

DR. SOMBAT KITJALAKSANA

Director, Executive Committee Member, and Authorized Director

Date of Appointment : 22 May 2008

Age : 65 Years

Education / Training

- Dr. Techn. (Soil Mechanic), University of Innsbruck, Austria
- Bachelor of Engineering (Civil), Chulalongkorn University
- Master of Engineering (Civil), Chulalongkorn University
- Director Certification Program (DCP), Class 81/2006, Thai Institute of Directors Association
- Directors Accreditation Program (DAP), Class 36/2005, Thai Institute of Directors Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Dec 2015 - Present Director, Corporate Governance and Risk Management Committee Member, Executive Director, and Managing Director
Bangkok Expressway and Metro Public Company Limited
- 2014 - 2015 Director, Executive Committee and Managing Director
Bangkok Metro Public Company Limited
- 2011 - 2014 Vice Chairman of Executive Committee
Bangkok Metro Public Company Limited
- 2006 - 2015 Director
CH. Karnchang Public Company Limited
- 2004 - 2015 Director
Bangkok Metro Public Company Limited
- 2004 - 2011 Executive Director
Bangkok Metro Public Company Limited

- 2001 - 2010 Vice President for Business Development
CH. Karnchang Public Company Limited
- 2000 - 2011 Managing Director
Bangkok Metro Public Company Limited

Company Limited

- Jan 2021 - Present Acting Managing Director
Northern Bangkok Expressway Company Limited
- 2020 - Present Director
Pathum Thani Water Company Limited
- 2016 - Present Director and Executive Director
Northern Bangkok Expressway Company Limited
- 2009 - Present Director
Bangkok Metro Networks Company Limited

Shareholding in the Company : Direct - 0.0250%
(1,000,100 Shares)
Indirect - None

MR. SUVICH PUNGCHAREON

Director, Executive Committee Member, and Authorized Director

Date of Appointment : 22 May 2008

Age : 76 Years

Education / Training

- Master of Political Science, Sukhothai Thammathirat University
- Bachelor of Electrical Engineering, Tohoku University, Japan
- Diploma Program on Politics and Governance in Democratic Systems, Class 8/2004,
- King Prajadhipok's Institute
- Diploma Program on Public Economy Management, Class 1/2003, King Prajadhipok's Institute
- Director Certification Program (DCP), Class 37/2003, Thai Institute of Directors Association
- Mini MBA, Berkeley University, U.S.A.

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Present Advisor
Bangkok Expressway and Metro Public Company Limited
- 2003 - 2006 Managing Director
Bangkok Expressway Public Company Limited
- 1989 - 1994 General Manager
Bangkok Expressway Public Company Limited

Company Limited

- 1996 - 2003 Managing Director
Northern Bangkok Expressway Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MRS. PAYAO MARITTANAPORN

Director, Risk Management and Corporate Governance Committee Member, and Authorized Director

Date of Appointment : 17 February 2015

Age : 65 Years

Education / Training

- Master of Business Administration, Chulalongkorn University
- Higher Diploma in Auditing, Thammasat University
- Bachelor of Accountancy, Chulalongkorn University
- Director Certification Program (DCP), Class 48/2004, Thai Institute of Directors Association
- Role of the Compensation Committee (RCC), Class 9/2009, Thai Institute of Directors Association
- Capital Market Academy Leader Program, Class 11/2010, Capital Market Academy(CMA)

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2015 - Present Director and Executive Director Bangkok Expressway and Metro Public Company Limited
- 2015 - Dec 2021 Corporate Governance and Risk Management Committee Member Bangkok Expressway and Metro Public Company Limited
- 2015 - 2020 Managing Director Bangkok Expressway and Metro Public Company Limited
- 2019 - Jul 2020 Chairman of Risk Management Committee TTW Public Company Limited
- 2015 - Jul 2020 Nomination and Remuneration Committee Member TTW Public Company Limited
- 2007 - 2015 Director, Executive Director, and Managing Director Bangkok Expressway Public Company Limited

- 2013 - 2014 Director, Nomination and Remuneration Committee Member, and Risk Management Committee Member TTW Public Company Limited

Company Limited

- 2004 – Jun 2021 Director and Executive Director Northern Bangkok Expressway Company Limited
- 2007 - 2020 Acting Managing Director Northern Bangkok Expressway Company Limited
- 2011 – 2014 Director Xayaburi Power Company Limited

Shareholding in the Company : Direct - None
Indirect - 0.000003
(100 Shares)

MR. KAORU UMEHARA

Director, Nomination and Remuneration Committee Member, and Authorized Director

Date of Appointment : 20 August 2020

Age : 55 Years

Education / Training

- Bachelor's degree (Faculty of Law), Keio University, Japan

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- - None -

Company Limited

- 2020 Divisional Operating Officer Infrastructure & Energy Division Mitsui & Co. (Asia Pacific) Pte. Ltd.
- 2019 Divisional Operating Officer Energy Business Division Mitsui & Co. (Asia Pacific) Pte. Ltd.
- 2018 General Manager Energy & Innovation Division, Energy Business Unit I Mitsui & Co., Ltd. (Tokyo)
- 2016 General Manager Business Innovation Department, Corporate Planning & Strategy Division Mitsui & Co., Ltd. (Tokyo)
- 2014 General Manager Strategic Planning Department, Energy Business Unit I & II Mitsui & Co., Ltd. (Tokyo)

Shareholding in the Company : Direct - None
Indirect - None

MR. HIDEO MATSUMOTO

Director, Executive Committee Member, Risk Management and Corporate Governance Committee Member, and Authorized Director

Date of Appointment : 21 December 2017

Age : 50 Years

Education / Training

- Bachelor of Arts in Policy Management , Keio University
- Director Certification Program (DCP), Class 256/2018, Thai Institute of Directors Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- - None -

Company Limited

- 2017 - Present Director Mitsui Water Holdings (Thailand) Co., Ltd
- 2017 - Present Senior Vice President & General Manager Infrastructure Projects Division Mitsui & Co., (Thailand) Ltd.
- 2017 - Jul 2020 Director Pathum Thani Water Company Limited
- 2016 - 2017 Deputy General Manager Fourth Department, First Projects Development Division Mitsui & Co., Ltd (Tokyo Headquarters)
- 2011 - 2016 Deputy General Manager Third Department, First Projects Development Division Mitsui & Co., Ltd. (Tokyo Headquarters)
- 2005 – 2011 Deputy Project Director Mit-Power (Thailand) Limited

Shareholding in the Company : Direct - None
Indirect - None

MS. WALAINUT TRIVISVAVET

Director, Executive Committee Member, Risk Management and Corporate Governance Committee Member, Managing Director, and Authorized Director

Date of Appointment : 1 March 2018

Age : 52 Years

Education / Training

- Master of Science in Administrative Studies, Sub-concentration : Financial Economics, Boston University, USA
- Bachelor of Business Administration, Assumption University
- Advanced Audit Committee Program (AACP), Class 20/2015, Thai Institute of Directors Association
- Company Reporting Program (CRP), Class 13/2015, Thai Institute of Directors Association
- Director Certification Program (DCP), class 201/2015, Thai Institute of Directors Association
- Capital Market Academy Executive Program (CMA), Class 24/2017, Capital Market Academy
- Top Executive Program in Commerce and Trade (TEPCoT) Class 11/2018, Commerce Academy, University of the Thai Chamber of Commerce
- Certification Program in Investor Relations, 2016, Thai Listed Companies Association
- Chief Financial Officer Certification Program (CFO), Class 19, The Federation of Accounting
- Advance Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute
- Agriculture and Cooperatives Executive Program (ACE), Class 1, Ministry of Agriculture and Cooperatives
- National Defense Course (NDC), Class 65, Thai National Defense College

Family Relationship between Director and Executive Management

- Grandchild of Mr. Plew Trivisvavet

Work Experience in the Past 5 Years

Listed Company

- 2015 - 2018 Assistant Managing Director, Administration Group
TTW Public Company Limited
- 2014 - 2015 Assistant Managing Director, Finance Department
Bangkok Expressway Public Company Limited

Company Limited

- Jan 2021 - Present Managing Director
Thai Water Operations Company Limited
- 2021 - Present Director
Thai Listed Companies Association
- 2019 - Present Director
Center of Excellence on Hazardous Substance Management,
Chulalongkorn University
- 2016 - Present Director and Managing Directors
Pathum Thani Water Company Limited
- 2016 - Present Director
Thai Water Operation Company Limited
- 2014 - 2017 Managing Director
Fahamorn Machinery Company Limited
- 2014 - 2017 Managing Director
RSB Construction Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MR. PHAKPOOM THAWEEWITTAYARUT

Deputy Managing Director, Administration Group

Age : 56 Years

Education / Training

- Master of Business Administration, Thammasat University
- Bachelor of Laws (second - class honors), Chulalongkorn University
- Bachelor of Accountancy, Chulalongkorn University
- Certified Public Accountant (CPA)
- Certified Internal Auditor (CIA)
- Director Certification Program (DCP), Class 102/2008, Thai Institute of Directors Association
- Company Secretary Program (CSP), Class 9/2005, Thai Institute of Directors Association
- Director Refreshment Program, Thai Institute of Directors Association
- ADVANCES FOR CORPORATE SECRETARIES, Thai Listed Companies Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Nov 2021 - Present Deputy Managing Director, Administration Group
TTW Public Company Limited
- 2015 - Oct 2021 Deputy Managing Director, Administration and Company Secretary
Bangkok Expressway and Metro Public Company Limited
- Oct 2014 - Dec 2015 Deputy Managing Director, Administration and Company Secretary
Bangkok Expressway Public Company Limited
- 2012 - Sep 2014 Assistant Managing Director, Administration
Bangkok Expressway Public Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MR. SOMKIAT PATTAMAMONGKOLCHAI

Deputy Managing Director, Finance Group

Age : 50 Years

Education / Training

- Master of Accounting, Thammasart University
- Bachelor of Commerce and Accountancy, Chulalongkorn University
- Director Certification Program (DCP), Class 121/2009, Thai Institute of Directors Association
- Director Accreditation Program (DAP), Class 79/2009, Thai Institute of Directors Association
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- TLCA Executive Development Program, Thai Listed Companies Association, 2015
- Strategy Management Program, Fiscal policy research institute foundation, 2018
- TLCA CFO Professional Development Program, The Securities and Exchange Commission, Thailand 2019
- TLCA CFO CPD: PDPA for Accounting and Finance, The Securities and Exchange Commission, Thailand 2022

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Oct 2021 – Present Deputy Managing Director, Finance Group
TTW Public Company Limited
- 2020 – Oct 2021 Assistant Managing Director, Administration Group, Acting Account and Finance Director
TTW Public Company Limited
- 2018 - 2019 Account and Finance Director
TTW Public Company Limited
- 2005 - 2019 Director of Accounting and Finance
TTW Public Company Limited
- 2011 - 2016 Director
CK Power Public Company Limited

Company Limited

- 2020 - Present Director
Pathum Thani Water Company Limited
- 2011 - 2016 Director
Bangkhenchai Company Limited
- 2007 - 2016 Director
Pathum Thani Water Company Limited
- 2007 - 2016 Director
Thai Water Operations Company Limited
- 2000 - 2005 Assistant Audit Manager
EY Office Limited (Formerly Ernst & Young Limited)

Shareholding in the Company : Direct - None
Indirect - None

MR. PIPAT KATIKUL

Acting Deputy Managing Director, Operation Group and Operations Director

Age : 55 Years

Education / Training

- Master of Business Administration, National Institute of Development Administration (NIDA)
- Master of Computer and Engineering Management, Assumption University
- Bachelor of Science (Microbiology), King Mongkut's University of Technology Thonburi
- Executive Development Program : Building Regional Leaders, EDP 2018, Thai Limited Companies Association
- Water Loss Management, Dhurakij Pundit University
- Monitoring and Controlling Business Performance, 2015, Thailand Management Association (TMA)
- Business Reporting Program (BRP), 2015, Thai Institute of Directors Association
- Business Capability Enhancement Program (BCEP), 2014, Thailand Management Association

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2022 - Present Acting Deputy Managing Director, Operation Group
TTW Public Company Limited
- 2017 - Present Operations Director
TTW Public Company Limited
- 2015 – 2017 Acting Engineering and Construction Director
TTW Public Company Limited
- 2010 – 2014 Business Development Manager
Thai Tap Water Supply Public Company Limited

Company Limited

- 2015 Quality and Efficiency Manage
Thai Water Operations Company Limited
- 2014 - 2015 Pathum Thani Water Treatment Plant Manager
Thai Water Operations Company Limited
- 1997 - 2005 Operations Manager
BJT Water Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MS. SUDARAT CHIAMCHAN

Assistant Managing Director, Office of Managing Director and Company Secretary

Age : 58 Years

Education / Training

- Master of Management, Mahidol University
- Bachelor of Business Administration (Accounting), Ramkhamhaeng University
- Director Certification Program (DCP), Class 186/2014, Thai Institute of Directors Association
- Company Secretary Program (CSP), Class 43/2011, Thai Institute of Directors Association
- Company Reporting Program (CRP), Class 2/2011, Thai Institute of Directors Association
- Effective Minutes Taking (EMT), Class 24/2012, Thai Institute of Directors Association
- Advance Audit Committee Program (AACP), Class 20/2015, Thai Institute of Directors Association
- Board Reporting Program (BRP), Thai Institute of Directors Association
- Board Nomination & Compensation Program (BNCP 1/2017), The Thai Institute of Directors Association
- Corporate Governance for Executives (CGE), Class 6/2016), Thai Institute of Directors Association
- Orientation Course - CFO Focus on Financial Reporting, Class 6/2018, Federation of Accounting

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- Oct 2021 - Present Assistant Managing Director, Office of Managing Director
TTW Public Company Limited
- 2011 - Present Company Secretary
TTW Public Company Limited
- 2015 - Oct 2021 Corporate Affairs Director
TTW Public Company Limited
- 2011 - 2014 Director of the Managing Director's Office
Thai Tap Water Supply Public Company Limited

Company Limited

- 1996 – 2011 Accounting and Finance Manager
Pathum Thani Water Company Limited
- 1993 – 1995 Accounting and Finance Manager
Index International Group Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MR. HONGTHONG ARTIT

Business Development Director

Age : 55 Years

Education / Training

- Master of Engineering (Infrastructure and Management), Kasetsart University
- Bachelor of Engineer (Mechanical Engineering), King Mongkut's Institute of Technology North Bangkok
- TMA Thailand Management Day 2018, Thailand Management Association
- Business Reporting Program (BRP), 2015, Thai Institute of Directors Association
- TLCA Exclusive Development Program, EDP 2016, Thai Listed Companies Association
- Energy Symposium, 2016, The Federation of Thai Industries

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2015 - Present Business Development Director
TTW Public Company Limited
- 2012 - 2015 Customer Service Director
TTW Public Company Limited
- 2005 - 2010 Engineering and Construction
Section Chief
Thai Tap Water Supply Public Company
Limited

Company Limited

- 2011 - 2012 Operation Manager
Pathum Thani Water Company Limited
- 2001 - 2004 Pipeline Site Manager
JWTWCK Joint Venture

Shareholding in the Company : Direct - 0.00001
(400 Shares)
Indirect - None

MR. CHATCHAWAN TIENPRASERTKIJ

Customer Relationship Management Director

Age : 57 Years

Education / Training

- Master of Business Administration (Management), Sripatum University
- Bachelor of Commerce and Accountancy, Department of Statistics, Computer Program, Chulalongkorn University
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Governance, Risk and Compliance, TRIS Academy of Management, 2014
- Internal Audit Certification Program, The Federation of Accounting Professions, 2013
- Water loss management, Dhurakij Pundit University, 2017
- Strategic Risk Management, Holistic Development Center Company Limited
- Leadership for QMS and EMS, SGS (Thailand) Limited, 2018
- Water Leadership Program, 2019, Water Institute for Sustainability, The Federation of Thai Industries

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2015 - Oct 2021 Acting Customer Relationship Management Director
TTW Public Company Limited
- 2015 - Oct 2021 Customer Relationship Manager
TTW Public Company Limited
- 2014 - 2015 Manager - Internal Audit Division
TTW Public Company Limited
- 2010 - 2014 Information Technology Director,
Marketing Director
Thai Tap Water Supply Public Company Limited
- 2001 - 2010 Senior Manager - Business Development
Division, Operation Support
Manager - Operation Division
Bangkok Metro Public Company Limited

Company Limited

- 1999 - 2001 Manager – Software Applications for
Business Administration
Business Application Co., Ltd.
- 1994 - 1999 Manager – Computer Division
Siam Kayaba Company Limited

Shareholding in the Company : Direct - None
Indirect - None

MRS. BUSAWAN PHOLPRASERT

Acting Human Resources and Administration Director and Human Resources Development Manager

Age : 50 Years

Education / Training

- Master of Art - Public Administration, Kasetsart University
- Bachelor of Political Science, Thammasart University
- Strategic Risk Management, 2017, Holistic Development Center Company Limited
- Interesting Court Ruling in Human Resources Management, Class 2, Court of Justice

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2018 - Present Acting Human Resources and Administration Director
TTW Public Company Limited
- 2016 – Present Human Resources Development Manager
TTW Public Company Limited

Company Limited

- 2015 - 2016 Human Resources Manager
Progress Software Co., Ltd.
- 2015 - 2015 Human Resources Manager
Suksawad Converting Center Co., Ltd.
- 2008 - 2515 Human Resources Manager
T.N. Information System Co., Ltd.

Shareholding in the Company : Direct - None
Indirect - None

MR. PREM LIEMSAKUL

Acting Director of Accounting and Finance and Account Manager

Age : 47 Years

Education / Training

- Master of Public and Private Management Graduate School of Public Administration, National Institute of Development Administration
- Bachelor of Accountancy University of the Thai Chamber of Commerce
- Company Secretary Program (CSP), Thai Institute of Directors Association
- Certified Professional Internal Audit of Thailand (CPIAT), The Institute of Internal Auditors of thailand (IIAT)
- Certified Internal Auditor (CIA), The Institute of Internal Auditors of thailand (IIAT)
- TLCA Risk Management, Thai Listed Companies Association
- IR Professional Certification Program, Class 4, Thai Listed Companies Association
- Enterprise Risk Management: COSO ERM, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- Professional Controller, Federation of Accounting Professions under the Royal Patronage of His Majesty the King

Family Relationship between Director and Executive Management

- None

Work Experience in the Past 5 Years

Listed Company

- 2022 - Present Acting Director of Accounting and Finance
TTW Public Company Limited
- 2014 - Present Account Manager
TTW Public Company Limited
- 2010 - 2013 Accounting Supervisor
Thai Tap Water Supply Public Company Limited
- 2008 - 2010 Head of Internal Audit Department
Thai Tap Water Supply Public Company Limited

Company Limited

- Mar 2013 - Dec 2013 Executive Manager
Pathum Thani Water Company Limited

Shareholding in the Company : Direct - None
Indirect - None

2. Duties and Responsibilities of Company Secretary

Duties and Responsibilities :

- (1) Giving primary advice to the Board of Directors about regulations, rules, and requirements of the Company and following up with correct and regular practices, including reporting changes with significance to the Board of Directors.
- (2) Organizing the Shareholders meetings and Board of Directors meetings according to the Company's Articles of Association and codes of conduct.
- (3) Recording the minutes of AGM of shareholders and the Board of Directors meetings as well as making a follow-up with practices in compliance with the resolutions of AGM of shareholders and the Board of Directors meetings.
- (4) Supervising disclosure and reporting of information for the responsible parts in accordance with the regulations and requirements of The Securities Exchange of Thailand and The Securities and Exchange Commission.
- (5) Contacting and communicating with general shareholders so that they are informed of the rights of shareholders and information of the Company.
- (6) Supervising and coordinating in activities of the Board of Directors, including the orientation of directors.
- (7) Keeping the Company's important documents, such as a register of directors, invitational letters of the Board of Directors meetings, minutes of the Board of Directors meetings, Annual Report, invitational letters of shareholders meetings, minutes of shareholders meetings, and reports of interests of directors or executives.

3. Record of the Punishment of Directors, Executives, and Controlling Person

In the 5 preceding years, no Directors, Executives, and Controlling Person have been punished due to the violation of the Securities and Exchange Act B.E. 2535 or the Derivatives Acts B.E. 2546.

ATTACHMENT 2

Details about the directors of company and its subsidiaries

Company and its subsidiaries

Director	Pathum Thani Water Company Limited	Thai Water Operations Company Limited	CK Power Public Company Limited
1. Dr. Thanong Bidaya	-	-	⊙
2. Mr. Plew Trivisvavet	-	-	◆
3. Mr. Phongsarit Tantisuvanitchkul	⊙	-	-
4. Mr. Phairuch Mekarporn	-	-	-
5. Mr. Somnuk Chaidejsuriya	-	-	-
6. Dr. Sombat Kitjalaksana	●	-	-
7. Mr. Suvich Pungchareon	-	-	-
8. Mrs. Payao Marittanaporn	-	-	-
6. Mr. Yuttana Yimgarund	-	-	-
10. Mr. Kaoru Umehara	-	-	-
11. Mr. Hideo Matsumoto	-	-	-
12. Ms. Walainut Trivisvavet	● ■	● ■	-

Remark	⊙	=	Chairman of the Board of Directors
	◆	=	Chairman of the Executive Committee
	●	=	Director
	■	=	Managing Director

ATTACHMENT 3

Information of Head of Internal Audit and Head of Compliance

The Company conducts internal audits in accordance with the Professional Practice of Internal Auditing Standards and the Internal Control Practices Framework of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), which are generally accepted in accordance with the principles and essence of the assessment of the internal control system's sufficiency. Considering the necessary principles of internal control in 5 aspects as follows:

1. Control Environment
2. Risk Assessment
3. Control Activities
4. Information and Communication
5. Monitoring Activities.

The Company's Audit Committee has considered assigning the internal audit head to perform the internal audit by planning the audit to cover the company's business. When the audit is completed, the internal audit results will be reported to the person who was examined and the management to inform them about the operational guidelines that should be improved, including conducting audits of departmental issues in the organization that have been audited and advised by auditors. The internal audit head will follow up on the results that the management has implemented and report the results to the management initially. The results of the quarterly audit and the follow-up results will be submitted to the Audit Committee for quarterly acknowledgment, and then the Chairman of the Audit Committee will report the results to the Board of Directors.

Details of the Company's internal audit head are as follows:

1. Internal Audit Head

Name : Mrs. Naruemon Udomkiat
Position : Acting Internal Audit Department Manager
Education : • Bachelor of Business Administration, Accounting, Bangkok University
• Bachelor of Business Administration, Management Science, Sukhothai Thammathirat Open University

Experience

- 2022 – Present : Acting Internal Audit Department Manager, TTW Public Company Limited
- 2011 – 2021 : Internal Audit Section Manager, TTW Public Company Limited
- 2010 – 2011 : Account Section Manager, Thai Water Operations Company Limited

Training Courses Related to Internal Audit Performance

- 1) Guidelines on Internal Control System, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 2) Analytical Thinking in the Internal Audit Process, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 3) Risk Management during the COVID-19 Pandemic, Thai Listed Companies Association
- 4) Easy Listening: Accounting Tips that AC should not miss, The Securities and Exchange Commission (SEC)
- 5) PDPA for Internal Auditor, Dharmniti Seminar and Training Company Limited
- 6) COSO Enterprise Risk Management 2017, Federation of Accounting Professions under the Royal Patronage of His Majesty the King

Duties and Responsibilities

1. Internal Audit
 - Prepare an annual internal audit plan.
 - Control the performance review, adequacy, and appropriateness of the internal control system of various systems of the company to be in accordance with the work plan.
 - Summarize the review results with the observations and suggestions for the work improvement to acknowledge a person who is audited and follow up on the improvement based on the suggestions.
 - Report the audit results to the Executives and the Audit Committee.
2. Audit Committee's Performance Support
 - Review the annual and quarterly financial statements.
 - Prepare information for the selection and appointment of the Company's annual auditor.
 - Review the disclosure of information in accordance with rules, regulations, and good corporate governance principles.
 - Evaluate the adequacy of the Company's annual internal control system.
 - Coordinate and arrange the Audit Committee Meeting.
3. Other duties as assigned by the Audit Committee

2. Compliance Head

Name : Mr. Natarat Intharat
Position : Corporate Governance Officer
Education : • Thai Barrister
: • Bachelor of Laws, Siam University

Training Courses

- Certification of Labor Law for Human Resource Management by the Central Labor Court Workshop
- Certification of English for Lawyers Training Program, Class 11, Thammasat University
- Certification of Thai Intelligent Investors Program (TIIP), class 20, Thai Investors Association
- Certification of Fintech and Laws, Political Science, Thammasat University
- Personal Data Management of Organizations for PDPA Enforcement, Chulalongkorn University

Experience

- 2016 - Present : Corporate Governance Officer, Law and Corporate Governance Section
TTW Public Company Limited
- 2012 - 2016 : Legal Officer
Dairy Farming Promotion Organization of Thailand

Duties and Responsibilities

1. Perform legal and contract work, such as reviewing, amending, and preparing the contract and agreement, as well as other legal documents of the Company and its affiliates.
2. Conduct the company's performance in compliance with the laws, rules, and regulations of the Stock Exchange of Thailand and the Securities and Exchange Commission (SEC).
3. Conduct the registration of the juristic person, such as establishing a company and changing the list of registration, including coordinating with government agencies.
4. Provide advice on laws and regulations, and prepare orders, announcements, rules and regulations, or documents related to legal issues that each agency sends to operate.
5. Other duties as assigned.

ATTACHMENT 4

Details on Appraisal of Assets

- None -

ATTACHMENT 5

Corporate Governance Policy and Business Code of Conduct and Employee Ethics

The Company has established a Corporate Governance & Business Code of Conduct Handbook, published on the Company's website at <https://www.ttwplc.com/storage/cg/cg/files/20230105-ttw-cg-code-of-ethics-en.pdf>

The Company has prepared a charter for each sub-committee disclosed on the Company's website as follows :

- Executive Committee Charter
<https://www.ttwplc.com/storage/cg/cg/files/executive-board-charter-en.pdf>
- Audit Committee Charter
<https://www.ttwplc.com/storage/cg/cg/files/committee-check-en.pdf>
- Nomination and Remuneration Committee Charter
<https://www.ttwplc.com/storage/cg/cg/files/committee-recruiting-en.pdf>
- Risk Management and Corporate Governance Committee Charter
<https://www.ttwplc.com/storage/cg/cg/files/risk-management-and-corporate-governance-committee-en.pdf>

ATTACHMENT 6

Audit Committee Report

To The Shareholders

The Audit Committee of TTW Public Company Limited consists of a number of experts in various fields, three of which are Independent Directors, with Mr. Phairuch Mekarporn as the Chairman of the Audit Committee, Mr. Somnuk Chaidejsuriya, and Mr. Yuttana Yimgarund as members of the Audit Committee, and Mrs. Naruemon Udomkiat, the Acting Internal Audit Manager of the Company is the Audit Committee Secretary.

In 2022, the Audit Committee, in the performance of its duties in accordance with the scope of responsibilities specified in the Audit Committee Charter as approved by the Board of Directors, convened 4 meetings and reported said meeting results to the Board of Directors each quarter, with an assessment of key matters summarized as follows

1. Carried out examination of the annual audit plan and quarterly audit results in order to assess the work systems and internal control system of the Company, as well as to provide advice and propose solutions for the internal audit and supervision of operations to ensure that the internal audit system is satisfactory and is standardized in accordance with the regulations of the Office of the Securities and Exchange Commission (SEC).

2. Carried out reviews of legal compliance with rules and regulations of relevant external agencies, as well as rules and regulations within the Company itself.

3. Carried out reviews of quarterly and annual financial statements before proposing to the Board of Directors for consideration, with special emphasis on the implementation of accounting standards, related party transactions, and connected transactions, and provided assessment opinions to the Company's management regarding the performance of asset management for the full benefit of the Company.

4. Assessed the selection, nomination for an appointment, and termination of independent persons to act as the Company's auditors and proposed the remuneration for said persons. Convened meetings with the auditor without Company management in attendance.

The Audit Committee performed its duties with prudence and provided independent opinions in the best interests of the Organization without any restriction in the obtaining of Company data, resources, and the full cooperation of the Company. The Audit Committee carried out an evaluation of the performance of its duties annually for the continued improvement and development of its duties in an effective and efficient manner in order to achieve the objectives assigned by the Board of Directors.

For the year 2023, the Audit Committee has proposed to the Board of Directors the appointment of Ms. Kunlapee Piyawannasuth, Certified Public Accountant No. 6137, and/or Ms. Poonnart Paochareon, Certified Public Accountant No. 5238, and/or Ms. Manee Rattanabunnakit, Certified Public Accountant No. 5313 and/or Mrs. Wilai Sunthornwanee, Certified Public Accountant No. 7356, of EY Office as the Company's auditor for another year, with the Audit fees not exceeding 1,570,000 Baht. This shall be proposed for approval at the Annual General Meeting of Shareholders in 2023.



(Phairuch Mekarporn)
Chairman of the Audit Committee

ATTACHMENT 6

Executive Committee Report

To The Shareholders

The Executive Committee of TTW Public Company Limited consists of a number of experts in various fields, with Mr. Phongsarit Tantisuvanitchkul as the Chairman of the Executive Committee, Dr.Sombat Kitjalaksana, Mr.Suvich Pungchareon, Mr.Hideo Matsumoto and Ms.Walainut Trivisvavet as members of the Executive Committee

In 2022, the Executive Committee, in the performance of its duties in accordance with the scope of responsibilities specified in the Executive Committee Charter as approved by the Board of Directors, convened its 4 meetings and reported said meeting results to the Board of Directors each quarter, with an assessment of key matters summarized as follows :

1. Consider the Company's and its subsidiaries' operating plans and budgets, and propose to the Board of Directors for approval as well as to continuously monitor the performance of the management in accordance with the plan and budget.

2. Implementation of policies and other aspects of management as well as budgeting were monitored regularly to ensure they are carried out as assigned by the Board.

3. Consideration for projects, investments, and other usual business transactions falling under the limits or annual budget approved by the Board and within the limits of authority delineated in the Company's Approval Authority.

4. The Company's business performance was monitored quarterly, including operating, financial results.

5. The Executive Committee's charter was reviewed and found to be appropriated and aligned with the Committee's performance of its duties as well as with relevant policies and procedures.

6. Performing other duties as delegated from time to time by the Board of Directors



(Mr.Phongsarit Tantisuvanitchkul)
Chairman of the Executive Committee

ATTACHMENT 6

Nomination and Remuneration Committee

To The Shareholders

The Nomination and Remuneration Committee of TTW Public Company Limited consists of a number of experts in various fields, with Mr.Yuttana Yimgarund as the Chairman of the Nomination and Remuneration Committee, Mr.Phongsarit Tantisuvanitchkul, Mr.Somnuk Chaidejsuriya, and Mr.Kaoru Umehara as member of the Nomination and Remuneration Committee

In 2022, the Nomination and Remuneration Committee, in the performance of its duties in accordance with the scope of responsibilities specified in the Nomination and Remuneration Committee Charter as approved by the Board of Directors, convened its 2 meetings to consider the significant matters and report the results to the Board of Directors that can be summarized as follows:

1. Consideration and selection of candidates as directors to replace who were due to retire by rotation by taking into account their knowledge, ability, experience, transparency, morality, responsibility, maturity, and professionalism. It also took into account the Board Diversity and set a Board Skills Matrix to determine the qualifications of the directors to be nominated based on the necessary skills, appropriate qualifications, and are consistent with the composition and Board's structure according to the company's business strategy. In addition, the Director Pool database from the Thai Institute of Directors Association (IOD) is also used for recruiting new directors.
2. Consideration and determination of remuneration for directors and the Managing Director by taking into account the appropriateness for duties and responsibilities of the directors, together with the company's operational results, compared with that of companies in the same industry and on a similar scale.
3. Reviewing the criteria for granting the right of shareholders to nominate persons to be directors and the agenda of the Annual General Meeting of Shareholders in advance.
4. Consideration and review of the Nomination and Remuneration Committee's Charter to ensure that the format and topic are in the same direction and in line with the CG Code.

In this regard, the Nomination and Remuneration Committee has performed its duties independently in accordance with good corporate governance principles to make the recruitment and remuneration processes transparent and build the confidence of shareholders and all stakeholders.



(Mr.Yuttana Yimgarund)

Chairman of the Nomination and Remuneration Committee

ATTACHMENT 6

Risk Management and Corporate Governance Committee

To The Shareholders

The Risk Management and Corporate Governance Committee of TTW Public Company Limited consists of a number of experts in various fields, with Mr.Somnuk Chaidejsuriya serves as Chairman of the Risk Management and Corporate Governance Committee, Ms.Payao Marittanaporn, Mr.Phairuch Mekarporn, and Mr.Hideo Matsumoto serve as Members of the Risk Management and Corporate Governance Committee and Ms.Walainut Trivisvavet serves as Member and secretary to the Risk Management and Corporate Governance Committee.

In 2022, the Risk Management and Corporate Governance Committee has performed its work in accordance with the scope of duties and responsibilities as assigned by the Board of Directors, which is specified in writing in the Risk Management and Corporate Governance Committee's Charter. The Risk Management and Corporate Governance Committee convened its 4 meetings to consider the important matters that can be summarized as follows:

Risk Management

1. Considering the annual risk management plans of the company to ensure that such plans have addressed such internal and external risk factors which may affect the Company's operations.
2. Considering plans and strategies in line with the risk management policies to be able to assess, monitor, and control the Company's overall risks to stay at an acceptable level.
3. Monitoring and supervising the risk management on a quarterly basis through the reports from the management of the Company and reporting on the results of its performance in respect of risk management to the Board of Directors on a quarterly basis.

Corporate Governance

1. Supervising the performance of the Board of Directors, Executive Committee, and Subcommittee and the management of the company to ensure compliance with the Principles of Good Corporate Governance, Code of Conduct and Business ethics. Promoting information disclosure and transparency of quarterly reports on trading/ changes in holdings of securities by directors and executives of the company on a quarterly basis.
2. Reviewing the Company's good corporate governance practice by comparing it with the good corporate governance principles of the international standard and the Stock Exchange of Thailand, and propose the same to the Board of Directors for consideration and regular update.
3. Reporting on the results of its performance in respect of Corporate Governance to the Board of Directors on a quarterly basis.

Sustainability

1. Supervising the operations including providing advice and suggestion for operations in economics, social, environmental, and corporate governance dimensions for sustainable business operations.
2. Monitoring performance against various indicators and provide advice on reporting on information related to sustainability.
3. Reporting to the Board of Directors on what need to be improved to comply with the specified policies and strategies.



(Mr.Somnuk Chaidejsuriya)

Chairman of the Risk Management and Corporate Governance Committee



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