

# Annual Report 2021

## (Form 56-1 One Report)



# Water For Life



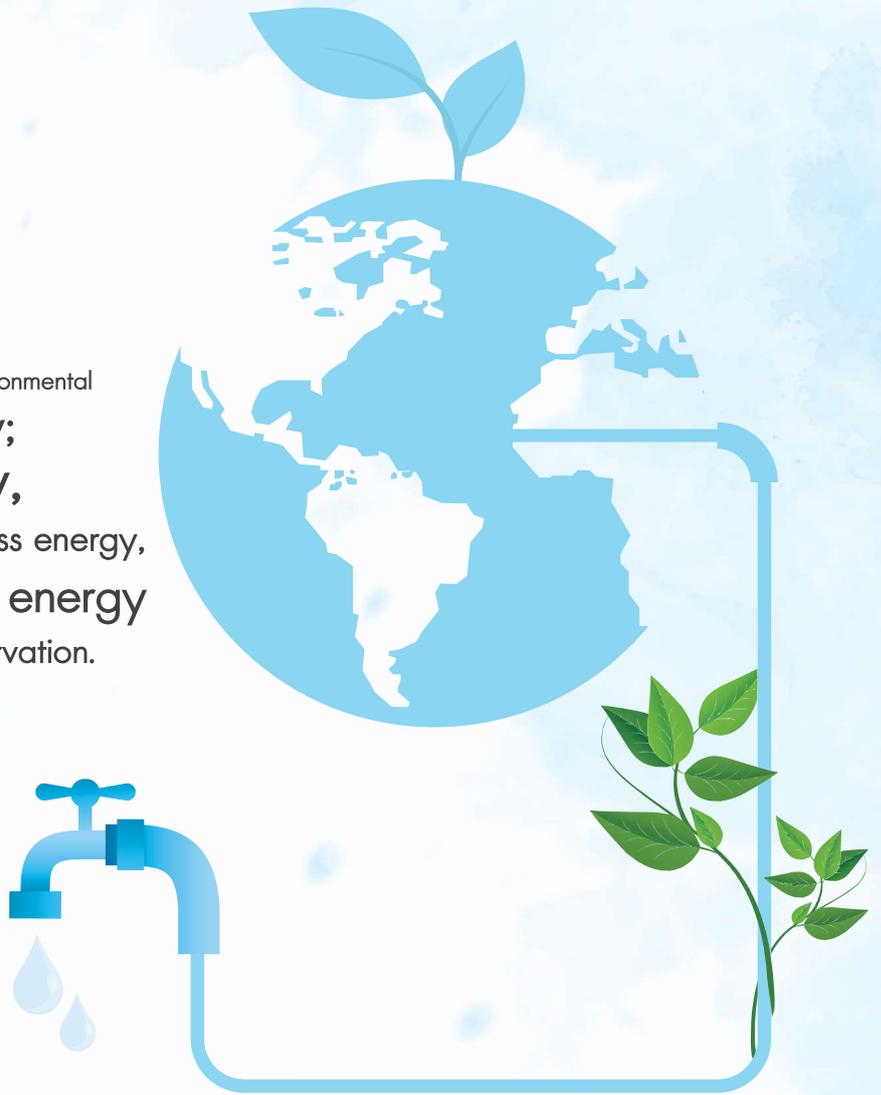
## WATER

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

On the financial side, based on the Company's strong financial position and ability to generate good cash flow, the Company has been assigned Corporate and Issue Credit Ratings of "AA-" with a "Stable" outlook by Thai Rating and Information Services Co., Ltd. In addition, the Company retains some cash reserves to reduce the risk of emergency scenarios or lack of liquidity, and continues to manage financial costs and unnecessary expenses. We also strive for sustainability by setting goals for the reduction of greenhouse gas emissions (GHG) and not less than a 0.05% reduction in electricity consumption

Throughout 2021, Thailand continued to face the challenges of the ongoing COVID-19 pandemic. It is expected that recovery will still take some time before the country is truly able to move forward pass the crisis and toward its true potential. To do this, we must begin to look ahead at the competitive landscape of the global market and the ways we must adapt to the "New Economy" or "Digital Economy," which requires us to compete using "Advanced Technology" and "Human Capital." Beginning to take steps now will allow us to be prepared for the true competition that is soon to come.

2021 was yet another year in which "TTW" stood side by side with its employees, customers, partners, shareholders, and stakeholders to ensure that the Company's business operations were carried out in accordance with our Business Continuity Planning (BCP) and stringent preventative measures. This allowed us to deliver a continuous supply of sufficient quality tap water to water users in all sectors, despite the many challenges impacting the economy overall, the tourism industry, small and medium enterprises (SMEs), and even the household sector.

On the financial side, based on the Company's strong financial position and ability to generate good cash flow, the Company has been assigned Corporate and Issue Credit Ratings of "AA-" with a "Stable" outlook by Thai Rating and Information Services Co., Ltd. In addition, the Company retains some cash reserves to reduce the risk of emergency scenarios or lack of liquidity, and continues to manage financial costs and unnecessary expenses. We also strive for sustainability by setting goals for the reduction of greenhouse gas emissions (GHG) and not less than a 0.05% reduction in electricity consumption, as well as the use of alternative energy sources, such as solar rooftop systems, throughout the past year. All of this confirms our readiness for a full transition into the Low-Carbon Economy age and our goal of supporting Thailand in its move toward clean energy and the reduction of carbon emissions to zero, or "carbon neutrality" by 2065-2070 AD.

In the year 2022, we look forward to yet another challenging year for "TTW" due to both the continued existence of the COVID-19 pandemic and the many

economic changes and technological competition throughout the business world, which likely will never be the same again. However, with the potentiality and determination of our team in a wide variety of fields, as well as the dedication of our Company to operate our business according to our stated mission of “growing on a firm, continuous, and sustainable basis in order to accomplish our vision through the balance of customers, employees, business partners, shareholders, communities, and environment,” I am confident that we will see this vision in action throughout this coming year and will continue to make steady strides forward progress.

On behalf of the TTW Public Company (Limited) Board of Directors, management, and employees, I would like to thank our shareholders, business partners, affiliates, communities, and supporters in all sectors for their trust and support of “TTW” at all times. In closing, I wish you and your family safety and protection from the spread of COVID-19 and hope that Thailand can once again move forward with a smile—that is the vision I see for all of us when the COVID-19 crisis is finally over.



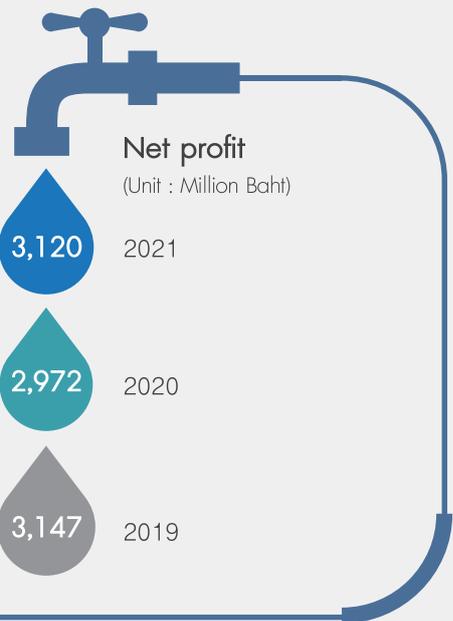
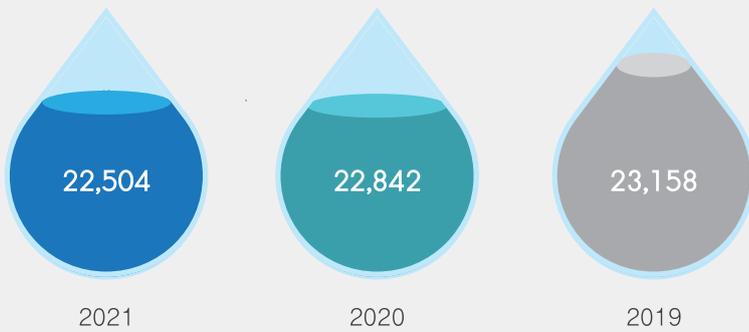
**Dr. Thanong Bidaya**  
Chairman of the Board of Directors



# Significant Financial Information

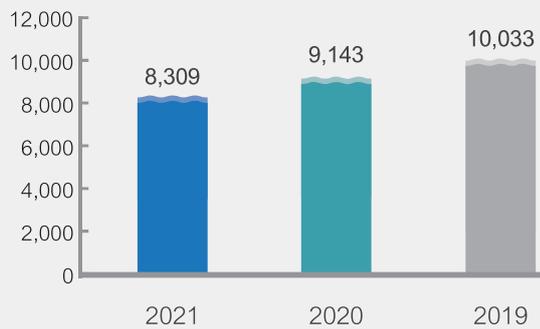
## Consolidated financial statements

Total assets (Unit : Million Baht)



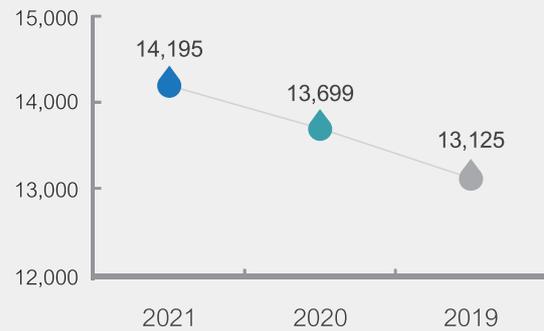
## Total Liabilities

(Unit : Million Baht)



## Shareholders' equity

(Unit : Million Baht)



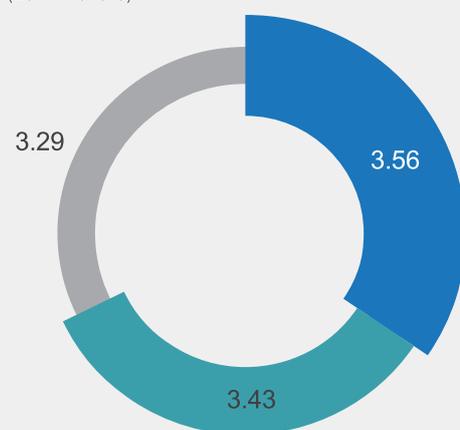
## Earnings per share

(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		
	2021	2020	2019	2021	2020	2019
Total assets	22,504	22,842	23,158	20,286	20,720	21,175
Total Liabilities	8,309	9,143	10,033	8,131	8,914	9,826
Shareholders' equity	14,195	13,699	13,125	12,155	11,806	11,349
Sales of treated water	5,682	6,059	5,993	3,925	4,090	4,096
Services income	124	120	119	41	40	44
Total revenues	5,818	6,193	6,166	4,998	5,181	5,193
Cost of sales and services	1,845	1,862	1,795	1,025	1,061	1,025
Administration expenses	255	264	252	217	225	208
Financial expenses	249	274	305	249	274	305
Income tax expenses	651	685	697	490	509	523
Gross margin	3,961	4,317	4,317	2,941	3,070	3,115
Net profit	3,120	2,972	3,147	2,749	2,850	2,855
Book value per share (Baht / share)	3.56	3.43	3.29	3.05	2.96	2.84
Earnings per share (Baht / share)	0.78	0.74	0.78	0.69	0.71	0.72

## Financial Ratio

Description	Consolidated financial statements			Separate financial statements		
	For the year ended 31 December			For the year ended 31 December		
	2021	2020	2019	2021	2020	2019
<b>Profitability ratio</b>						
Gross profit margin (%)	68.23	69.87	70.64	74.15	74.32	75.23
Net profit margin (%)	53.59	47.91	51.05	54.94	54.89	54.98
Return on equity (%)	22.37	22.16	24.69	22.95	24.62	25.16
<b>Efficiency ratio</b>						
Return on assets (%)	13.76	12.92	13.54	13.40	13.61	13.48
Return on fixed assets (%)	25.15	22.63	22.60	25.88	26.02	25.79
<b>Debt service coverage ratio</b>						
Debt to equity (times)	0.59	0.67	0.76	0.67	0.76	0.87
Dividend Payout (%)	76.72	80.54	76.06	87.09	83.97	83.86



# Board of Directors



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- 1. Dr. Thanong Bidaya**  
Independent Director  
Chairman of the Board of Directors
- 2. Mr. Plew Trivisvavet**  
Director  
Vice Chairman of the Board of Directors
- 3. Mr. Phongsarit Tantisuvanitchkul**  
Director  
Chairman of the Executive Committee  
Nomination and Remuneration  
Committee Member

- 4. Mr. Phairuch Mekarporn**  
Independent Director  
Chairman of the Audit Committee  
Risk Management and Corporate  
Governance Committee Member

- 5. Mr. Somnuk Chaidejsuriya**  
Independent Director  
Chairman of the Risk Management  
and Corporate Governance Committee  
Audit Committee Member  
Nomination and Remuneration  
Committee Member

- 6. Mr. Yuttana Yimgarund**  
Independent Director  
Chairman of the Nomination and  
Remuneration Committee  
Audit Committee Member



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- 7. Dr. Sombat Kitjalaksana**  
Director  
Executive Committee Member
- 8. Mr. Suvich Pungchareon**  
Director  
Executive Committee Member
- 9. Mrs. Payao Marittanaporn**  
Director  
Risk Management and Corporate  
Governance Committee Member

- 10. Mr. Kaoru Umehara**  
Director  
Nomination and Remuneration  
Committee Member

- 11. Mr. Hideo Matsumoto**  
Director  
Executive Committee Member  
Risk Management and Corporate  
Governance Committee Member

- 12. Ms. Walainut Trivisvavet**  
Director  
Executive Committee Member  
Risk Management and Corporate  
Governance Committee Member  
Managing Director



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# Management



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**1. Ms. Walainut Trivisvavet**

Managing Director

**2. Mr. Tanat Siricharoen**

Deputy Managing Director, Operations Group

**3. Mr. Phakpoom Thaweewittayarut**

Deputy Managing Director, Administration Group

**4. Mr. Somkiat Pattamamongkolchai**

Deputy Managing Director, Finance Group

**5. Ms. Sudarat Chiamchan**

Assistant Managing Director,  
Office of Managing Director and Company Secretary

**6. Mr. Hongthong Artit**

Business Development Director

**7. Mr. Pipat Katikul**

Operations Director

**8. Mr. Chatchawan Tienprasertkij**

Customer Relationship Management Director

**9. Mrs. Busawan Pholprasert**

Acting Human Resources and Administrative Director  
Human Resources Development Manager

## Vision

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



## Mission

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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

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

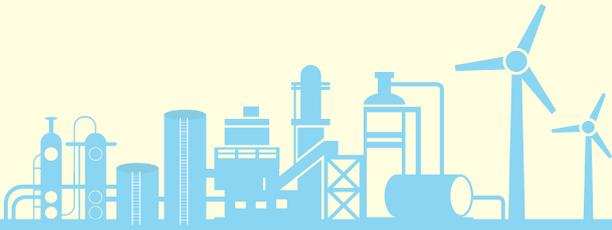
- Continuous Improvement
- Proactive & Initiative
- Teamwork

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Part 1  
Business Operation  
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 generation 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 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 Companies that operating the business of production and distribution of electricity from various kinds of energy.

##### 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 regard to 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 regard to 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 was essential for life itself. In 2021, the country's largest tap water producer, the Metropolitan Waterworks Authority (MWA), produced a total of 2,121 million cubic meters of tap water, while the Provincial Waterworks Authority (PWA) had a production volume of 1,981 million cubic meters. TTW and PTW are considered the largest private tap water production and distribution contract parties and, in 2021, the amount of tap water produced and distributed by TTW and PTW to PWA was 291 million cubic meters - 15% of PWA's total production amount or 74% of the total amount of tap water produced by all private producers.

The Company formulated its business strategy as a framework to deliver products and services in response to customer demand, enhancing 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 demand is high. In 2021, the company supported PWA for the installation of tap water pipe in Thammasala Sub district (PWA Nakhon Pathom Branch) and during the process of the laying pipe to enhance efficiency project to transfer the users of Raikhing Municipality (PWA Omnoi Branch and Sampran Branch)

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

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 is currently focused on the communication of necessary information between the Company, PWA, and water users by 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.
- Support the activities of PWA's service area expansion to new water users, which is an off-site service activity in the targeted community areas, including facilitating water users such as registration of new water users, inspection of pipe leaks in houses or buildings, etc.
- 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 case of a water pipe repair that affects water users to reduce the impact that will occur in the production of goods or services.

### 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 2021.

- (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 99.85%

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 foster good relationship with tap water users. Moreover, TTW also organized other activities to express gratitude to tap 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 modern filtration technology and gravity to help the sedimentation process without using electrical power to circulate the water. TTW has been able to effectively maintain the cost of production at a manageable level. Moreover, TTW also has a subsidiary; TWO operates as a maintenance unit of operation that enable TTW to control maintenance works without having outsource them.

**(2) Human resources Strategy**

The company’s employees are significant resources, and they are also the key to supporting 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 the start of operation.

## Part 1 Business Operation and Operating Performance

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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.
22 February 2019	The Company redeemed the debenture of Thai Tap Water Company Limited No.1/2012 (TTW192A) valued at 1,500 million baht.
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.
9 May 2020	TTW refinanced a long-term loan of 2,760 million baht from Thanachart Bank to Krung Thai Bank, repayment period not exceeding 6 years 7 months, 25 installments.
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.

### Significant Changes and Developments of the Company in 2021

17 February 2021	The Stock Exchange of Thailand (SET) has removed TTW from the SET50 Index and transferred it to respective reserve lists.
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 and project period is 540 days.
16 June 2021	TTW was removed from the SET50 index, the SET100 index, and the SETHD index but still listed in the SETTHSI Index for the second half of 2021. (For calculating the index during 1 July - 31 Dec 2021)
29 June 2021	TTW received the work of Renovation of Water Treatment and Transmission Distribution Systems of Pathum Thani Water Treatment Plant Project from Ch.Karnchang Public Company Limited (CK).
4 October 2021	The Stock Exchange of Thailand (SET) announced TTW is 1 of 146 listed companies for the Thailand Sustainability Investment (SET THSI) listing for the year 2021. (for the 6 <sup>th</sup> consecutive year)
26 October 2021	The Thai Institute of Directors (IOD) announced the results of their Corporate Governance Report of Thai Listed Companies for 2021 (CGR), with TTW received a rating of "Excellent".
29 November 2021	TRIS Rating Co., Ltd. Reaffirmed the Company's rating at "AA-", with a "Stable" outlook.
17 December 2021	TTW received an honorable award "Sustainability Disclosure Award" for the year 2021 from Thaipat Institute. (for the 3 <sup>rd</sup> consecutive year)

### 1.1.3 Propose of Fund Raised

As of 31 December 2021, the Company had 4 outstanding debentures, equivalent to 5,400 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
TTW222A	22 February 2012	2,000	10 year	4.60%	To refinance the existing debenture to maturity
TTW255A	21 May 2015	1,400	10 year	3.98%	To purchase additional shares of CK Power Public Company Limited
TTW232A	1 February 2018	1,000	5 year	2.33%	To refinance the existing debenture to maturity
TTW272A	20 December 2019	1,000	7 year 2 month	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
<b>Total</b>		<b>5,400</b>			

### 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 Sampran 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 Udomsora-yuth Road, Klongjig Sub-District, Bang Pa-in District, Phra Nakhon Si Ayutthaya Province 13160.
Company's Website	:	<a href="http://www.ttwplc.com">http://www.ttwplc.com</a>
Telephone Number	:	0 2019 9490-3 , 0 2019 9484-9
Fax Number	:	0 2420 6064
Board of Directors	:	Email Address : <a href="mailto:cg@ttwplc.com">cg@ttwplc.com</a>
Audit Committee	:	Email Address : <a href="mailto:cg@ttwplc.com">cg@ttwplc.com</a>
Company Secretary	:	0 2019 9484-9 Ext. 1106 Email Address : <a href="mailto:cg@ttwplc.com">cg@ttwplc.com</a>
Investor Relations	:	0 2019 9484-9 Ext. 1108, 1110 Email Address : <a href="mailto:ir@ttwplc.com">ir@ttwplc.com</a>

#### (2) Information of Juristic persons in which the Company held more than 10% of fully paid-up capital

Company's Name	:	Pathum Thani Water Company Limited ("PTW")
Type of Business	:	Water Producer and Distributor to PWA in Pathumthani-Rangsit Area
Company's Registration Number	:	0105538063801
Registered Capital	:	1,200,000,000 Baht
Issued and Fully Paid-Up Capital	:	1,200,000,000 Baht
Par Value	:	100 Baht

## Part 1 Business Operation and Operating Performance

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Shareholding	:	11,759,733 Shares
Shareholding Percentage	:	98%
Head Office	:	43 Moo 3, Chiangrak noi-Bangsai Road, Baan Pathum Sub-District, Samkhok District, Pathum Thani Province, 12160.
Company's Website	:	<a href="http://www.ptw.co.th">http://www.ptw.co.th</a>
Telephone Number	:	0 2019 9484
Fax Number	:	0 2420 6064
Company's Name	:	<b>Thai Water Operations Company Limited ("TWO")</b>
Type of Business	:	Water Management / Production System Management / Water Distribution and Wastewater Treatment
Company's Registration Number	:	0105553002426
Registered Capital	:	60,000,000 Baht
Issued and Fully Paid-Up Capital	:	60,000,000 Baht
Par Value	:	100 Baht
Shareholding	:	411,000 Shares
Shareholding Percentage	:	68.5%
Head Office	:	30/10 Moo 12, Buddha Monthon 5 Road, Raikhing Sub-District Sampran District, Nakhon Pathom Province, 73210.
Company's Website	:	<a href="http://www.two.co.th">http://www.two.co.th</a>
Telephone Number	:	0 2019 9480
Fax Number	:	0 2420 6064
Company's Name	:	<b>CK Power Public Company Limited ("CKP")</b>
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	:	<a href="http://www.ckpower.co.th">http://www.ckpower.co.th</a>
Telephone Number	:	0 2691 9720
Fax Number	:	0 2691 9723

### 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 2021, the revenue structure of the Company and its subsidiaries for the year 2019-2021 is as follows:

Type of Business	Operating Company	Shareholding (%)	Financial Information					
			31 December 2021		31 December 2020		31 December 2019	
			Mil.Bt.	%	Mil.Bt.	%	Mil.Bt.	%
Revenues								
Sales of treated water								
TTW	The company		3,925.3	67.4	4,090.2	65.9	4,096.0	66.4
PTW	Subsidiaries	98.0	1,757.1	30.2	1,969.2	31.8	1,897.4	30.8
Service income								
TTW	The company		41.1	0.7	40.0	0.6	43.7	0.7
TWO	Subsidiaries	68.5	82.6	1.4	80.2	1.3	75.8	1.2
Finance income	The company and its subsidiaries	-	4.6	0.1	10.2	0.1	14.2	0.2
Other income								
Profits from investment <sup>(1)</sup>	The company and its subsidiaries	-	6.9	0.1	11.0	0.2	34.6	0.6
Other	Subsidiaries		4.8	0.1	2.3	0.1	3.9	0.1
<b>Total revenues</b>		-	5,822.4	100.0	6,203.1	100.0	6,165.6	100.0

Remark : <sup>(1)</sup> 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, continuing and good quality supply of tap water to the public, and the business of management and maintenance of tap water production system and wastewater treatment service, divided 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, continuing and good quality supply of tap water to the public 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 2021 from 1 January to 31 December, the rate for 1-300,000 cubic meters shall be 29.108206 Baht per cubic meter, and the exceeding 300,001 cubic meters shall be 12.24 Baht per cubic meter.

###### c) Tap Water Business Concession

TTW was 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, 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, Banglen 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 Sampran 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 2021, the total lease fee that TTW had to pay was 34.62 million Baht of which 27.94 million Baht was 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 supply 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, 2021, 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

Type of Business	Business of tap water and water production for Industries or steam
Rights and Benefits	<p>(1) Exemption of import duty on machinery as approved by the Board of Directors.</p> <p>(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.</p> <p>(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.</p>

### 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 characteristics:

#### (1) Business Contract and Concession

##### a) A Contract to Produce and Supply Tap Water 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 in an area of 46 Rai 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 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.

### d) Quality of Tap Water

The tap water produced and distributed by PTW is in accordance with the standards stipulated in the Contract to Produce and Supply Tap Water 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. Tap water produced by PTW has, throughout the past, always met said production and quality standards.

### (3) Benefits of Investment Promotion

As of December 31, 2021, PTW has investment promotion certificate that receive privileges from the Office of the Board of Investment as follows:

Investment Promotion	5187(2)/2556
Certificate Number	
Date	May 27, 2013
Type of Business	Business of utility and basic services
Rights and Benefits	(1) Exemption of import duty on machinery as approved by the Board of Directors. (2) Exemption from corporate income tax for the net profit from the promoted business combined not exceeding 150% of the investment excluding cost of land and working capital, only the cost of repairing machinery and equipment damaged due to flooding, plus the amount of The remaining corporate income tax is for a period of 8 years starting from the date of earning that business in the event of a loss during the period of corporate income tax exemption. The promoted person is allowed to deduct the annual loss incurred during that period from the net profit incurred after the corporate income tax exemption period for a period of not more than 5 years from the date of expiration. Determine that time by choosing to deduct from the net profit of a particular 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.
Investment Promotion	59-0392-1-00-1-0
Certificate Number	

Date	March 21, 2016
Type of Business	Business of tap water and water production for Industries or steam
Rights and Benefits	<ol style="list-style-type: none"><li>(1) Exemption of import duty on machinery as approved by the Board of Directors.</li><li>(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.</li><li>(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.</li></ol>

### 3. Right to Produce Tap Water and Wastewater Treatment in Bang Pa-In Industrial Estate (BIE)

#### (1) Business Rights and Agreements

##### a) Right to Produce Tap Water

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 Sri 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 14,588 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 entered into a system maintenance management agreement with TTW. The 30-year contract period is equal to that of the tap water purchase agreement, starting from the date of commencement of business on July 21, 2004, until the expiration of the agreement, which shall be on July 20, 2034, in order to carry out management and maintenance of all operations. On August 7, 2009, TWO was also hired by TTW to manage the water production and distribution system and the wastewater collection and treatment system in Bang Pa-in Industrial Estate, Phra Nakhon Sri Ayutthaya Province.

#### 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 Contract for operation and maintenance for wastewater treatment plant Phase. 3, Amata City Chonburi Industrial Estate, for a period of 1 year, from January 1, 2022 to December 31, 2022 (in the process of negotiating for a new contract)

b) The contract for operation and maintenance of the water supply system, Amata City Chonburi Industrial Estate (Phase 1), for a period of 1 year, from January 1, 2022 to December 31, 2022 (in the process of negotiating for a new contract extension).

c) The contract for the operation and maintenance of the water supply system Phase 1, Amata City Industrial Estate, Rayong, for a period of 10 years, from August 1, 2010 to December 31, 2020. The contract is currently being extended until December 26, 2039.

d) The contract for the operation and maintenance of the raw water system Raw water supply piping system water supply pipe system and waste water collection system Amata City Chonburi Industrial Estate Period 9 years 7 months from 1 June 2017 to 31 December 2026

e) The contract for the operation and maintenance of the raw water system Raw water supply piping system water supply pipe system and wastewater collection system in Amata City Rayong Industrial Estate for a period of 9 years and 7 months from June 1, 2017 to December 31, 2026.

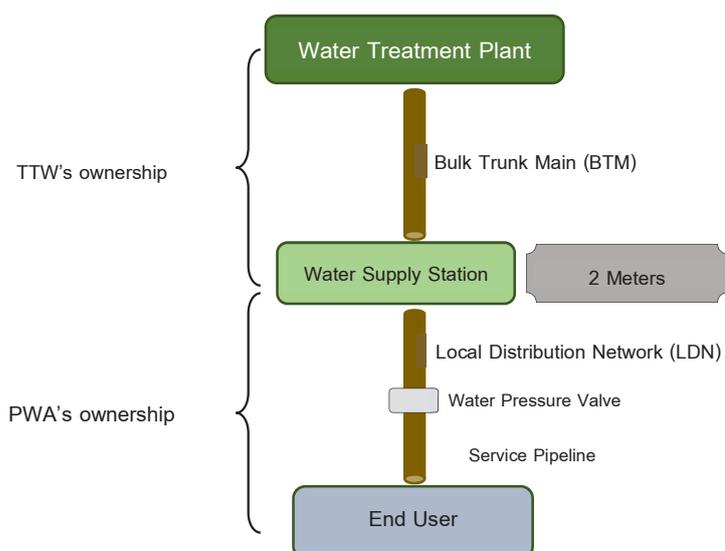
f) The Concession contract for study, design, construction and operation of the sludge removal system of the 1/1 water supply system in Amata City Rayong Industrial Estate for a period of 20 years, from December 26, 2019 to December 26, 2039.

### (2) Marketing and Competition

#### 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 then distributes the tap water to water users via water distribution mains 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, Sampran 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 2021, 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 2021, Nakhon Pathom province had a population of 921,946 people and Samut Sakhon province had a population of 586,194 people, totaling 1,508,140 people, which was an increase of 0.08% from the population in 2020. While compared with the year 2011 (10 years ago), the total population of both provinces was 1,365,162 people or an increase of 10.47%.

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 expansion of areas, 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 2021, Pathum Thani province had a population of 1,187,933 people, increased by 0.98% as compared with the year 2020. And when compared with the year 2011, Pathum Thani province had a population of 1,010,898 people, or increased by 17.51%. Details of the population of Nakhon Pathom, Samut Sakhon, and Pathum Thani provinces during the years 2012-2021 are as follows:

The Population during 2012-2021 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

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 2021, there were 5,470 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 2,832 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.

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 2021, there were 3,033 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 supply of adequate water to meet the continuously increasing water demand in these areas. A survey and study in the service area by Team Consulting Co., Ltd. in May of 2017 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 2021 data, industrial water users account for 39% of the total water supply distributed by PWA, followed by commercial and household water users, which accounted for 14% and 47% respectively.

The factors that drive water consumption in service areas depend on the production activities of the industrial sector. The water sales volume on weekends and public holidays is lower than on business days due to the industrial sector shutdown, 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 construction underway in order to connect Moh Chit, Saphan Mai, Khu Khot, and Lum Luk Ka Districts. This railway line is completed and 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.

### (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 was 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 2019 – 2021

Unit : Cubic meter per day

Description	2019	2020	2021
Production Capacity	540,000	540,000	540,000
Average Water Sales Volume	455,122	453,155	419,939
Utilization of Production (%)	84%	84%	78%

In 2021, TTW had an average water supply volume of 419,939 cubic meters/day, or equaled to 78% of the total water supply capacity of 540,000 cubic meters/day. The water supply volume of TTW decreased by 7.58% as compared to the year 2020 because the water sales volume of PWA decreased by 2.5%, which the water consumption in the commercial and industrial sectors decreased by 11.7% and 4.9%, respectively, due to the continued economic slowdown and the epidemic situation of the 2019 Coronavirus (COVID-19), and the water consumption in the household sector increased by 2.3% because PWA and the company installed pipes to expand the area and enhance the water supply pressure to support the expansion of communities and cities in Nakhon Pathom and Samut Sakhon provinces.

#### (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.

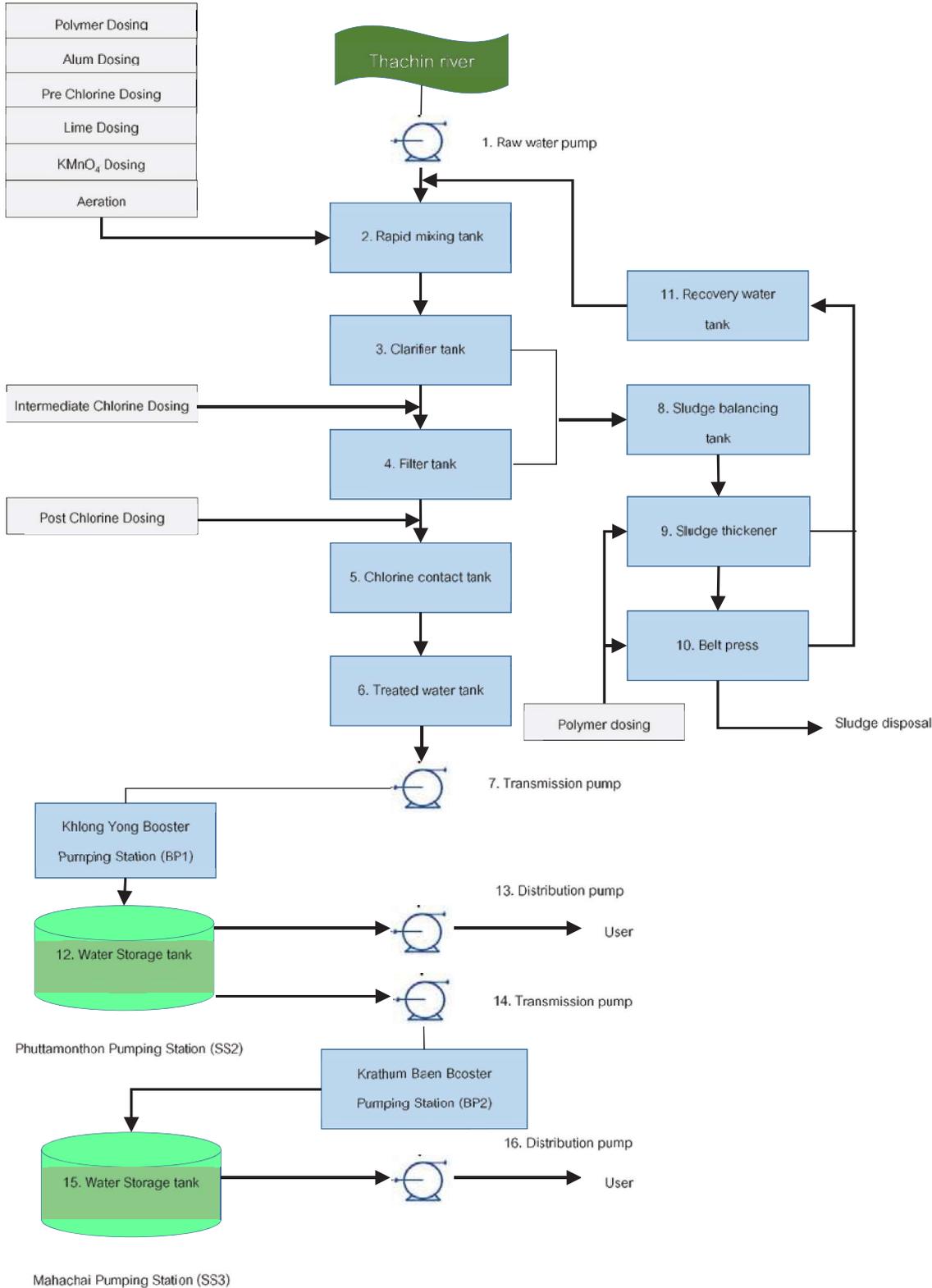
(b) There must be no impurities, either dissolved or suspended, in tap water.

(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, 2021, 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 2019 – 2021

Unit : Cubic meter per day

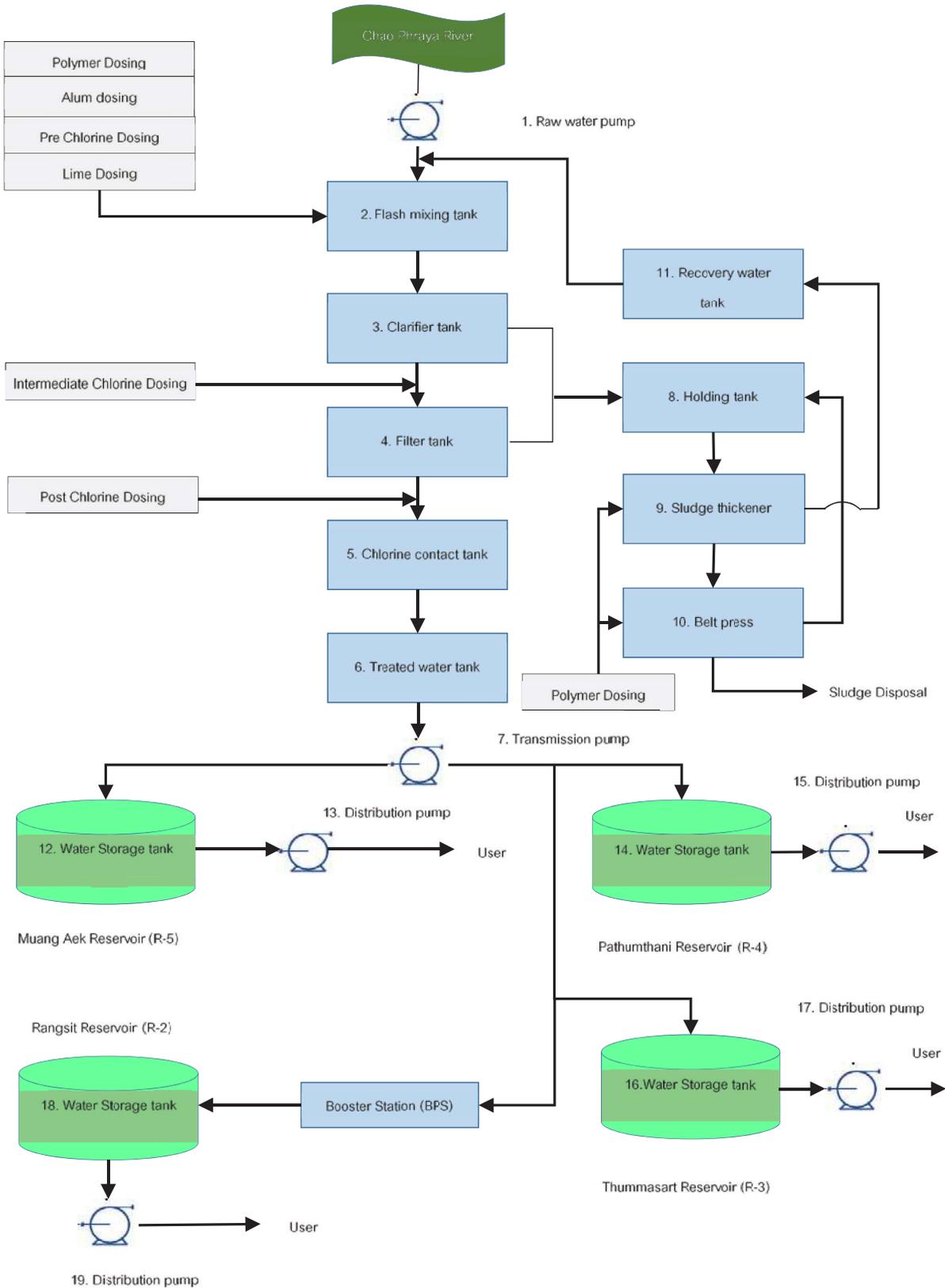
Description	2019	2020	2021
Production Capacity	488,000	488,000	488,000
Average Water Sales Volume	408,042	418,373	378,160
Utilization of Production (%)	84%	86%	77%

In 2021, PTW had an average water supply volume of 378,160 cubic meters/day, or equaled to 77% of the total water supply capacity of 488,000 cubic meters/day. The water supply volume of PTW decreased by 9.86% as compared to the year 2020 because the water sales volume of PWA slightly increased by 0.6% due to the expansion of Pathum Thani province, which caused the household sector's water consumption to increase by 2.9%, but the water consumption in the commercial and industrial sectors decreased by 2.4% and 4.6%, respectively, due to the continued economic slowdown and the epidemic situation of the 2019 Coronavirus (COVID-19).

#### (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, Potassium permanganate, Liquid chlorine, Polyelectrolyte, 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	2019		2020		2021	
	MB.	(%)	MB.	(%)	MB.	(%)
Chlorinated water	26.5	48.1	35.0	55.6	25.1	48.5
Potassium permanganate	5.6	10.1	5.5	8.7	4.3	8.2
Liquid Chlorine	11.1	20.2	8.8	14.0	10.4	20.1
Lime	0.0	0.0	0.6	1.0	0.5	1.0
Polymer	8.9	16.1	9.4	14.9	8.4	16.2
<b>Total chemical</b>	<b>52.1</b>	<b>94.5</b>	<b>59.3</b>	<b>94.1</b>	<b>48.9</b>	<b>94.4</b>
Equipment	3.1	5.3	3.7	5.9	2.9	5.6
<b>Total</b>	<b>56.2</b>	<b>100.0</b>	<b>63.0</b>	<b>100.0</b>	<b>51.8</b>	<b>100.0</b>

(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. in advance until the full amount to be paid throughout the 25-year concession period, totaling 5,000 baht in March 2000

(b) The main chemicals used by PTW in tap water production are alum, liquid chlorine, and polyelectrolyte. PTW does not use potassium permanganate in its tap water production due to different raw water characteristics between raw water from 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	2019		2020		2021	
	MB.	(%)	MB.	MB.	(%)	MB.
Water alum	23.8	50.3	21.0	59.5	15.8	52.1
Liquid Chlorine	5.3	11.2	4.1	11.6	4.0	13.1
Polymer	7.0	14.8	6.0	17.0	5.9	19.5
<b>Total chemical</b>	<b>36.1</b>	<b>76.3</b>	<b>31.1</b>	<b>88.1</b>	<b>25.7</b>	<b>84.7</b>
Equipment	11.2	4.5	4.2	11.9	25.7	15.3
<b>Total</b>	<b>47.3</b>	<b>80.8</b>	<b>35.3</b>	<b>100.0</b>	<b>30.3</b>	<b>100.0</b>

(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

## Part 1 Business Operation and Operating Performance

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 2021, 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	94
Tap Water Pressure	92	92
Tap Water Supply Continuity	92	92
Appropriateness of Dress Code	94	96
Etiquette and Politeness	94	97
Service Attentiveness	92	96
Information Accuracy	93	93
Information Speed	94	95
Documentation Completeness	93	93
Communication Efficiency Levels	92	95
Problem Solving Speed and Efficiency	91	94
Support for PWA Activities	93	94
Average Satisfaction	93	94

### Business Development

#### Business Environment

The COVID-19 virus has brought changes and new challenges that affect the disruptive dominos. Businesses that can adapt to keep up with changes will be able to create sustainable growth. In the year 2022, the countries around the world and Thailand will experience the new trends of the digital economy, the contactless economy, which uses information, technology, and innovation under changed consumer behavior, and the green economy, which is defined by environmental friendliness as being part of the product life cycle, including using clean technology, reducing carbon emissions in production processes (Decarbonization), emphasizing waste management, and recycling.

Throughout the year 2021, TTW focuses on the measures of COVID-19 prevention by setting measures to control employees while working, including taking care of security in every office area to reduce the COVID-19 virus' extension. In addition, the company also set up a business continuity management plan for supplying tap water to the Provincial Waterworks Authority adequately, continuously, and environmentally friendly.

### (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) 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.

### (3) Law

#### The Water Resources Act, B.E. 2561 (2018)

The Water Resources Act, B.E. 2561 (2018), is a set of laws for the management of national water resources, taking into account all relevant dimensions with the aim of achieving balanced and sustainable efficiency and effectiveness, including allowing people to participate in water resource management. In 2021, the ministerial regulation for "water organization" comes into effect as specified in the Water Resources Act, B.E. 2561, and Thailand has registered to establish a water user organization for the first time in order to receive the benefit of participating in water resource management.

#### 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"> <li>- Creating professionalism in business operations.</li> <li>- 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.</li> <li>Improving the quality of water and quality of life from upstream to downstream.</li> <li>- Using the information for management.</li> </ul>
2. The development in 3 dimensions: economy, society, and environment.	<ul style="list-style-type: none"> <li>- Focusing on the projects and beneficial project development processes that has no conflicts or negative impacts on the economy, society, and environment</li> </ul>

## Part 1 Business Operation and Operating Performance

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 Assets of the Company and its subsidiaries

As of December 31, 2021, the Company and its subsidiaries had main assets used in business operations, as follows:

Assets	Net Value (million baht)	Nature of Ownership	Obligations
<u>TIW</u>			
Land Building and Equipment	785.3	Owner	N/A
Assets for production of treated water	8,589.8	Owner	N/A
Rights to produce and sell treated water and treat wastewater	1,029.1	Own rights	N/A
Total	10,404.2		
<u>TWO</u>			
Land Building and Equipment	65.5	Owner	N/A
Intangible assets	10.8	Own rights	N/A
Total	76.3		
<u>PTW</u>			
Assets for production of treated water	1,039.0	Own rights	N/A
Equipment	122.4	Owner	N/A
Total	1,161.4		
Grand Total	11,641.9		

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, 2021, the company's shareholding proportion in PTW represented 98 percent of the registered capital. The company, as a shareholder, assigned its 5 representatives as Ms.Walainut Trivisvavet, Mr.Phongsarit Tantisuvanitchkul, Dr.Sombat Kitjalaksana, Mr.Tanat Siricharoen, and Mr.Somkiat Pattamamongkolchai 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, 2021, 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.Tanat Siricharoen 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, 2021, 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.

### (5) Work that has not yet been delivered

There are no projects under development and construction.

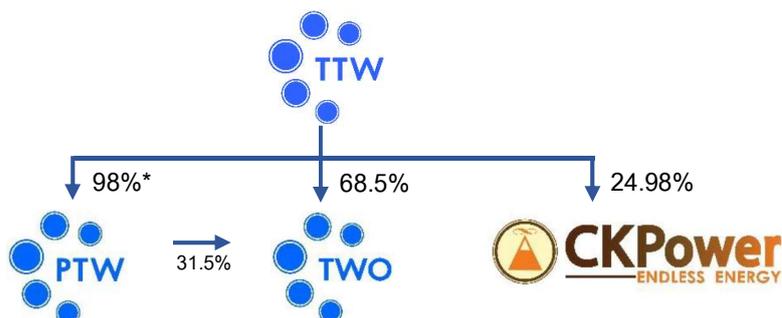
## 1.3 Shareholding Structure of the Company and its subsidiaries

### 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, 2021, was as follows:

## Part 1 Business Operation and Operating Performance

Chart of Shareholding Structure and the Company's Shareholding Percentage as of December 31, 2021



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
<b>Subsidiaries</b>					
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%	1,313.3
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%	380.3
<b>Other Companies</b>					
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 Companies Invested by the Company

#### 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, 2021, 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, 2021, 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, 2021, 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 Company's core company, via SouthEast Asia Energy Company Limited.
- Bang Pa-in Cogeneration Company Limited
- Bangkhenchai Company Limited

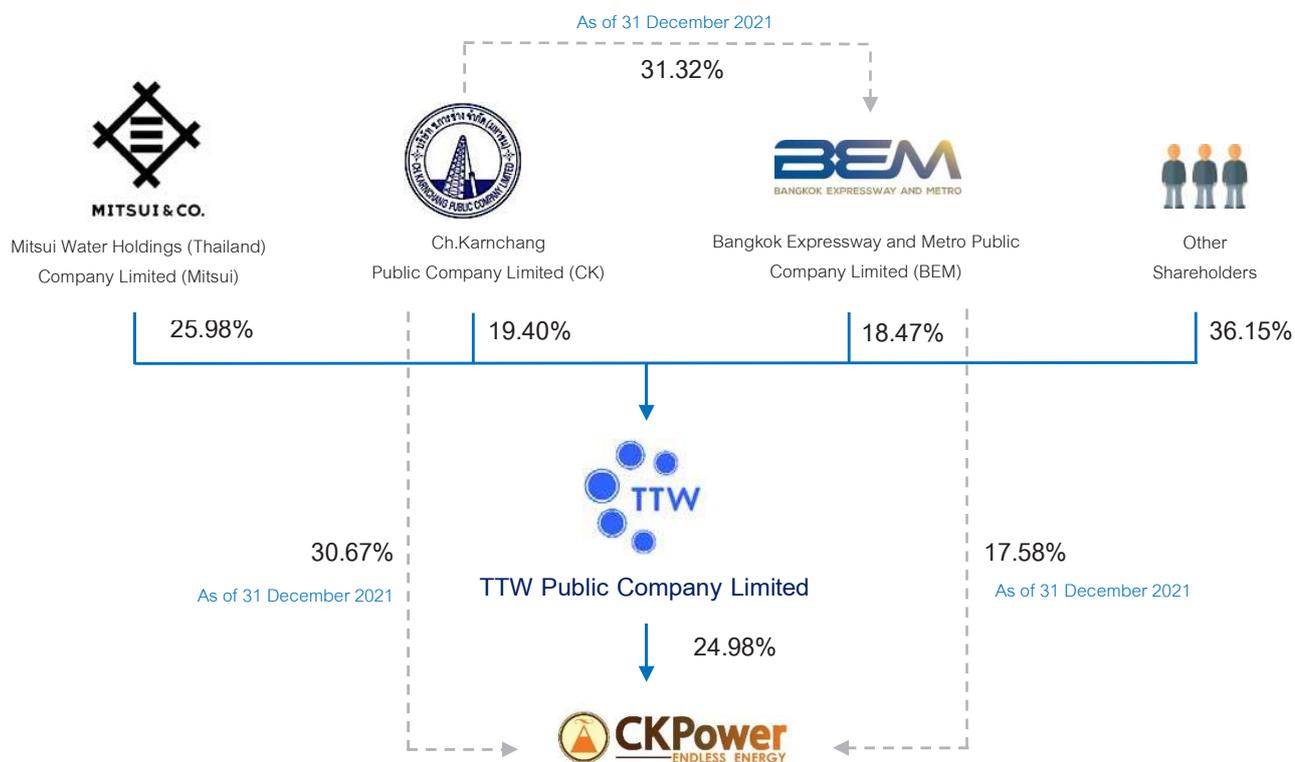
Investment in power plants of 3 associated companies, comprising:

- Xayaburi 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.

### 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, 2021, 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.Kamchang 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.	143,974,317	3.61
5.	Bangkok Life Assurance Public Company Limited	122,174,200	3.06
6.	Mr. Min Tienworn	90,000,000	2.25
7.	Mr. Paisarn Chartpitak	44,500,000	1.12
8.	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	42,974,200	1.08
9.	Bank of Ayudhya Public Company Limited	28,754,200	0.72
10.	STATE STREET EUROPE LIMITED	26,818,471	0.67
	<b>Total</b>	<b>3,046,672,788</b>	<b>76.36</b>
	Others	943,327,212	23.64
	<b>Grand Total</b>	<b>3,990,000,000</b>	<b>100.00</b>

Remark :

- Shareholder names are compiled by Thailand Securities Depository Company Limited, the Company's Registrar.
- 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](http://www.set.or.th/nvdr))
- As of 30 December 2021, the Company has 83 foreign shareholders from a total of 30,560 shareholders, foreign shareholders hold a total of 124,891,400 shares or 3.13 percent of total issued shares.
- As of 30 December 2021, minority shareholders (free float) are numbered 29,077, holding 22.52 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.Kamchang Public Company Limited	774,077,400	19.40
3.	Bangkok Expressway and Metro Public Company Limited	736,900,000	18.47
	<b>Total</b>	<b>2,547,477,400</b>	<b>63.85</b>

- 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
	<b>Total</b>	<b>9,000,000</b>	<b>100.00</b>

## Part 1 Business Operation and Operating Performance

- Top 10 shareholders of CH.Karnchang Public Company Limited as of May 11, 2021 which was the closing date of the share register for the right to receive the dividend comprised:

No.	Name	Number of Shares	Shareholding Percentage
1	Mahasiri Siam Company Limited	247,512,365	14.61
2	CH.Karnchang Holding Company Limited	189,396,530	11.18
3	Thai NVDR Co., Ltd.	123,690,436	7.30
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	UOB KAY HIAN (HONG KONG) LIMITED – Client Account	30,988,400	1.83
8	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	22,102,098	1.30
9	K20 Select Long Term Equity Dividend Fund	17,379,100	1.03
10	Viriyah Insurance Public Company Limited	15,545,200	0.92
<b>Total</b>		<b>807,612,341</b>	<b>47.68</b>

- Top 10 shareholders of Bangkok Expressway and Metro Public Company Limited as of May 10, 2021, which was the closing date of the share register for the right to receive the dividend comprised:

No.	Name	Number of Shares	Shareholding Percentage
1	CH. Karnchang Public Company Limited	4,787,121,829	31.32
2	Mass Rapid Transit Authority of Thailand	1,256,259,584	8.22
3	Thai NVDR Co., Ltd.	1,074,854,135	7.03
4	Krung Thai Bank Public Company Limited	815,356,075	5.33
5	Social Security Office	581,811,900	3.81
6	Mr. Wichai Wachiraphong	349,802,957	2.29
7	Bangkok Bank Public Company Limited	303,448,709	1.99
8	SOUTH EAST ASIA UK (TYPE C) NOMINEES LIMITED	299,047,369	1.96
9	STATE STREET EUROPE LIMITED	295,908,582	1.94
10	Mr. Min Tienworn	188,000,000	1.23
<b>Total</b>		<b>9,951,611,140</b>	<b>65.12</b>

### (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
<b>Total</b>		<b>12,000,000</b>	<b>100.00</b>

**Remark** : Information as of December 31, 2021. In 2021 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
<b>Total</b>		<b>600,000</b>	<b>100.00</b>

**Remark** : Information as of December 31, 2021. In 2021 the shareholdings in TWO remained unchanged.

### (3) Shareholders' agreement

As of December 31, 2021, 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, 2021, 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, 2021

Debenture Symbol	Issue Date of Debentures	Total Value of Debentures (Million Baht)	Maturity	Maturity Date	Interest Rate per annum	Rating
TTW222A	22 February 2012	2,000	10 years	22 February 2022	4.60%	AA-
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-
<b>Total</b>		<b>5,400</b>				

### 1.6 Policy on Dividend Payment

#### (1) TTW 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	2017	2018	2019	2020	2021
Earning per share (Baht)	0.68	0.67	0.72	0.71	0.69
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)	88.67	89.76	83.86	83.99	87.09

Note: \* The Dividend payment for the second half of 2021 will be approved at the 2022 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

TTW Public Company Limited conducts risk management in business operations so that organizational levels based-risks in each aspect can be managed to reach the acceptable levels, by the encouragement from the management that makes the operational plans become practical and successful.

The Company has appointed a Risk Management Officer (RMO) consisting of representatives from all departments. Each department must present various risks that affect operations. Establish an action plan and report quarterly risk management results to the RMO, and summarize the risk management results at the quarterly meeting. To bring the results of risk management to report to the Risk Management and Corporate Governance Committee (RM&CGC). The Board of Directors (BOD) on a quarterly basis and/or in the event of changes in politics, economy, society, the company will always review the topic of risk. to keep up to date and up-to-date and can adjust strategies or action plans in a timely manner in order to correct or reduce the severity of the impact in various fields in case of any incident

In 2021, the Company reviewed the corporate risk register and updated the list of risks arising from both internal and external factors due to the constantly changing global environment. This year, Thailand and the entire world were greatly affected by the coronavirus disease 2019 (Covid-19) pandemic. The Company has measures in place to prevent possible impacts from such an epidemic on the production process, including measures relating to personnel operations, and in support of work in a variety of fields. The Company also added additional preventative measures that would enable the Company to continue operating its business as specified. Employees are required to comply with these measures, as they are strictly defined by the Company in order to reduce any risk that could affect the production process or the tap water supply process. The Company also maintains policies for its productions and operations in accordance with the recommendations of the World Health Organization (WHO) for the disinfection of tap water. In addition, a reserve of all necessary products for the production system and key machinery parts is kept for preventative purposes so that in the event of unexpected delays, continuous production will remain ensured. By implementing corporate risk management in accordance with the risk management framework and strategies, risks in each area are reduced from extremely high level risk to low level risk and, with continued risk reduction, these can become what is termed 'acceptable risk' for the Company. The Risk Management Framework is divided into three main areas: Strategic, Operating, and Financial. Under this framework, the Company has established a risk register that contains a list of risks and includes measures for risk control, management, and the monitoring of risk management performance in accordance with its continuously developing plan.

### 2.2 Business Risks

#### 1. Strategic Risks

The water supply was not according to the business plan. There were 5 risk factors.

- a. To provide support to the project to lay pipes, strengthen the pressure and/or expand the area to increase the water distribution of the PWA in the service area according to the contract
- b. Follow up movements of other tap water producers, both public and private, that may affect the Company's water distribution volume. both now and in the future
- c. Follow up on water loss management in the Company's service area
- d. Follow up and analyze the abnormality of the company's water distribution volume.
- e. Manage the management of the maintenance of machinery, main equipment, and electrical systems, as well as determine solutions and preventive measures.

#### 2. Operational Risks

##### **Risks from changes in raw water quality**

The company has established a plan for appropriately monitoring raw water quality, which includes sampling water samples for water quality analysis and coordinating information exchange with relevant agencies such as the Metropolitan Waterworks Authority, the Regional Environmental Office 5, and the Royal Irrigation Department, etc.

##### **Risks from information security threats**

The company may receive the risk of information security threats from a connection with computer systems and the Internet, which may cause damage to the company's business. Therefore, the company has established criteria, policies, and procedures for assessing and managing the risks of the use of information technology, including assessing the environment and the status of information systems and information risk management systems. The water production control system is designed with as few external connections as possible. In addition, the company has also formulated a business continuity plan in case of an emergency.

#### 3. Financial Risks

**new businesses in water, energy and the environment.** There were 2 risk management measures.

1. Tracking the information and the movement in business related to the company both domestically and internationally including changing in laws.
2. Studies and develop the investment projects in infrastructure according to government policies and investment plans and seek allies.

##### **Risk from Coronavirus Disease 2019 (COVID-19) Epidemic**

From the epidemic situation of Coronavirus Disease 2019 (COVID-19), the company has set various measures important and necessary according to the situation that occurs by referring to the Business Continuity Plan, which considers the risks and impacts that will occur to the company, employees and

stakeholders both in the short and long term. and implementing actionable measures to address the situation in line with government recommendations, such as providing workplace bubbles and seals and Factory Accommodation Isolation.

The company has established measures to maintain social distancing in the workplace. and wear a mask, Measures for cleanliness of working equipment, Measures to record details of employees' travel to various locations, as well as have COVID-19 tests using an Antigen Test Kit (ATK) at the beginning of the week before everyone comes to work.

From the implementation of various measures enabling the company to continue its business as usual and employees are safe and still in good health without being affected in any way

### 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 16 issues, which can be linked to the 14 United Nations Sustainable Development Goals (UN SDGs). 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	SDGs
Corporate Governance	<ul style="list-style-type: none"> <li>■ Good Corporate Governance</li> <li>■ Risk Management and Business Continuity</li> <li>■ Crisis Management in the COVID-19 Situation</li> </ul>	<ul style="list-style-type: none"> <li>● Creating guidelines for working under the principles of good corporate governance until it becomes a culture.</li> <li>● The number of violations of the company's code of conduct is 0.</li> <li>● Managing the company's risks to an acceptable level..</li> <li>● The number of risk situations that have an impact on the company's business operations is 0.</li> </ul>	    
Business Processes Development	<ul style="list-style-type: none"> <li>■ Goods and Services Responsibility</li> <li>■ Innovation and Technology</li> <li>■ Supply Chain Management</li> </ul>	<ul style="list-style-type: none"> <li>● The water supply volume that supplied to customers :                             <ol style="list-style-type: none"> <li>1) TTW is 163,970,833 cubic meter.</li> <li>2) PTW is 148,336,712 cubic meter</li> </ol> </li> <li>● The ratio of customer satisfaction survey results is not less than 90%.</li> <li>● The number of times that the water distribution to customers has been interrupted due to the COVID-19 situation is 0.</li> <li>● The number of customer complaints is 0.</li> <li>● The number of stakeholders that were affected by the company's</li> </ul>	   

Policies	Sustainability Issues	Goals	SDGs
		<p>business operations is 0.</p> <ul style="list-style-type: none"> <li>● The production efficiency has increased from the year 2020.</li> <li>● The cost of electricity has decreased from the year 2015 due to using of Solar Rooftop</li> <li>● The number of work process improvement issues through Kaizen activities (Kaizen) is not less than 363 issues.</li> <li>● The ratio of key partners' performance evaluation is 100%.</li> <li>● The number of partners that have an impact on business operations is 0.</li> <li>● The ratio of goods received on time as agreed with the buyer and seller or as stipulated in the purchase order is 90%.</li> <li>● The number of partner complaints is 0.</li> </ul>	
Social Value	<ul style="list-style-type: none"> <li>■ Employee and Personnel Development</li> <li>■ Occupational Health and Safety</li> <li>■ Social and Community Development</li> </ul>	<ul style="list-style-type: none"> <li>● The ratio of employee satisfaction survey results is not less than 80%.</li> <li>● The number of resigned employees has decreased from the year 2020.</li> <li>● Number of training hours has increased from the year 2020.</li> <li>● The ratio of employees who receive the annual health checks is 100%.</li> <li>● The number of occupational illnesses is 0.</li> <li>● The number of accidents in operations is 0.</li> <li>● The number of community complaints is 0.</li> </ul>	
Sustainable Environmental	<ul style="list-style-type: none"> <li>■ The Eco-Friendly Process of</li> </ul>	<ul style="list-style-type: none"> <li>● The cost of using chlorine per</li> </ul>	

Policies	Sustainability Issues	Goals	SDGs
<p>Management</p>	<p>Manufacturing Goods and Services</p> <ul style="list-style-type: none"> <li>■ Waste Management</li> <li>■ Climate Change and Energy Conservation</li> <li>■ Water Management</li> <li>■ Biodiversity</li> <li>■ Cooperation for Environmental Conservation between organizations</li> <li>■ Compliance with Environmental Laws</li> </ul>	<p>product unit has decreased from the year 2020.</p> <ul style="list-style-type: none"> <li>● The amount of electricity consumption per product unit has decreased by not less than 0.05%.</li> <li>● The amount of greenhouse gas emissions per product unit has decreased by not less than 0.05%.</li> <li>● The ratio of water recycling is not less than 5% of the total amount of water used in the production process.</li> <li>● The number of stakeholders complaints that related to the impact of the company's business operations per conservation area or natural resource is 0</li> <li>● The number of internal inspections of an environmental management system (ISO 14001) is not less than 1 time.</li> <li>● To receive the certification of an environmental management system (ISO 14001) from external agencies.</li> <li>● The number of violations of environmental laws is 0.</li> </ul>	

### 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

## Part 1 Business Operation and Operating Performance

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 2021, the company can summarize the operating results of responding to the stakeholders' expectations or needs as follows:

Needs / Expectations	Participation	Result
<b>Employees</b>		
<ul style="list-style-type: none"> <li>- Paying reasonable compensation and benefits</li> <li>- Work safety</li> <li>- Knowledge and potential development</li> <li>- Independently expressing opinions and suggestions.</li> <li>- Equality and Fairness</li> <li>- Stability and career advancement</li> <li>- Good working environment</li> <li>- Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively.</li> </ul>	<ul style="list-style-type: none"> <li>- Executives and staff meeting activities</li> <li>- Kaizen activities</li> <li>- Exchanging knowledge and experiences in the water treatment plant management</li> <li>- Training to develop personnel competencies at the executives and employees level</li> <li>- Health and safety activities</li> <li>- Various communication channels</li> <li>- Listening to employee complaints and opinions</li> <li>- Providing scholarships to employees' children</li> <li>- Monthly employee birthday activities</li> <li>- Preparing of a place and environment for good working atmosphere</li> <li>- Preparing of a workplace and equipment to prevent the COVID-19 pandemic</li> </ul>	<ul style="list-style-type: none"> <li>- The statistics of the lost time injury is 1 time.</li> <li>- The number of training hours increased by 3.02% from the year 2020.</li> <li>- Employee satisfaction survey results increased by 7.69% from the year 2020</li> <li>- The number of promoted employees increased by 63% from year 2020</li> </ul>

Needs / Expectations	Participation	Result
<b>Shareholders / Investors</b>		
<ul style="list-style-type: none"> <li>- The company's performance has continuous improved.</li> <li>- Business growth</li> <li>- Consistently earning good returns</li> <li>- Business stability</li> <li>- Good corporate governance</li> <li>- Equitable treatment of shareholders</li> <li>- Receiving an accurate and complete information in a timely manner</li> <li>- Appropriate and effective risk management</li> <li>- Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively</li> </ul>	<ul style="list-style-type: none"> <li>- The annual general meeting of shareholders</li> <li>- An annual report</li> <li>- Quarterly performance reports</li> <li>- Listed companies and investors meeting activities</li> <li>- Inviting investors to visit the production processes</li> <li>- The disclosure of information via various communication channels</li> <li>- Securities analyst meeting</li> <li>- Equitable treatment of retail investors and institutional investors</li> <li>- Determining the duration of the accurate information disclosure equally in accordance with the relevant regulations</li> <li>- Communicating information and appropriately preparing an annual general meeting of shareholders under the preventative measures for COVID-19 pandemic</li> </ul>	<ul style="list-style-type: none"> <li>- The net sales of the company's business operations increased by 6.14% from the year 2020</li> <li>- The company was listed on the list of Thailand Sustainability Investment (THSI) for the sixth year in a row</li> <li>- The assessment result of good corporate governance was in excellent level</li> <li>- The company had received the Sustainability Discloser Award for the third year in a row</li> </ul>
<b>Customers</b>		
<ul style="list-style-type: none"> <li>- The tap water is of the expected quality with adequate amount and continuity.</li> <li>- Correctly receiving product and service information</li> <li>- Keeping contracts or agreements with fairness</li> <li>- Continuously supporting the</li> </ul>	<ul style="list-style-type: none"> <li>- Supplying of high-quality tap water as specified in the contract with adequate quantity and continuity</li> <li>- Supporting for installing water supply pipes and enhancing the water supply pressure</li> <li>- Preparing meeting in</li> </ul>	<ul style="list-style-type: none"> <li>- The customer satisfaction score in 2021 is 94.50 %</li> <li>- The water supply volume increased by 8.68% from the year 2020</li> <li>- The number of water users increased by 3.79% from the year 2020</li> </ul>

Needs / Expectations	Participation	Result
<p>customer's activities</p> <ul style="list-style-type: none"> <li>- Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively</li> </ul>	<p>accordance with the specified circle</p> <ul style="list-style-type: none"> <li>- Preparing meeting to listen to problems and complaints</li> <li>- Inviting customers to visit the tap water production processes</li> <li>- Providing the information of raw water quality, tap water quality, and other information via appropriate channels</li> <li>- Supporting training for customer's potential</li> <li>- The off-site meeting</li> <li>- Preparing the workplace and the good quality of life for customers</li> <li>- Providing scholarships to employees' children</li> <li>- Organizing social activities with the company</li> <li>- Surveying customer satisfaction and responding to the customer needs</li> <li>- Communicating information and appropriately preparing the meeting under the preventative measures for COVID-19 pandemic</li> </ul>	
<b>Partners / Suppliers</b>		
<ul style="list-style-type: none"> <li>- Complying with commercial terms</li> <li>- Keeping contracts or agreements with fairness</li> <li>- Participating in solving problems and developing operational processes</li> </ul>	<ul style="list-style-type: none"> <li>- Fairly complying with commercial terms and agreements</li> <li>- Communicating accurate and clear information</li> <li>- Regularly preparing meetings to discuss operational</li> </ul>	<ul style="list-style-type: none"> <li>- The ratio of goods received on time as agreed with the buyer and seller or as stipulated in the purchase order is 94%</li> <li>- The number of partner complaints is 0</li> </ul>

Needs / Expectations	Participation	Result
<ul style="list-style-type: none"> <li>- Promoting and supporting of various activities</li> <li>- Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively</li> </ul>	<ul style="list-style-type: none"> <li>improvements</li> <li>- Cooperating in solving partner issues</li> <li>- Communicating information and appropriately preparing the meeting under the preventative measures for COVID-19 pandemic</li> </ul>	
<b>Communities / Societies</b>		
<ul style="list-style-type: none"> <li>- Supporting activities that are beneficial to the community</li> <li>- Do not make a negative impact on the community</li> <li>- Participating in solving community problems</li> <li>- Conducting the business with transparency</li> <li>- Taking care and supporting the prevention of the COVID-19 pandemic situation appropriately and effectively</li> </ul>	<ul style="list-style-type: none"> <li>- Preparing meeting to listen to community opinions</li> <li>- Arranging a conversation and the community visit</li> <li>- Participating in activities with government agencies and private agencies to carry out social activities</li> <li>- Conducting the opinion and complaints surveys</li> <li>- Setting up the project to improve the quality of life and well-being of the communities</li> <li>- Supporting the communities to prevent the COVID-19 pandemic situation</li> </ul>	<ul style="list-style-type: none"> <li>- The number of communities that gain the benefits is 113 communities</li> <li>- The number of projects or social responsibility activities is 7 projects</li> <li>- The communities earn revenue from the production of bottled water in the amount of 272,800 baht.</li> <li>- The number of community's complaints that were affected by the company's business operations is 0</li> </ul>
<b>Environmental Agencies</b>		
<ul style="list-style-type: none"> <li>- Participating in solving problems and conserving energy and the environment</li> <li>- Do not make a negative impact on the environment</li> <li>- Supporting activities that are beneficial to the environment</li> <li>- Taking care and supporting the</li> </ul>	<ul style="list-style-type: none"> <li>- Setting up projects/activities to conserve energy and the environment both internal and external organization</li> <li>- Publicizing of environmental conservation projects/activities</li> <li>- Preparing a meeting with environmental agencies to</li> </ul>	<ul style="list-style-type: none"> <li>- The number of projects or activities in environmental conservation is 4 projects</li> <li>- The amount of greenhouse gases per product unit increased by 6.88% from the year 2020</li> <li>- The amount of electricity consumption per product unit</li> </ul>

Needs / Expectations	Participation	Result
prevention of the COVID-19 pandemic situation appropriately and effectively	discuss problems. - Supporting the environmental agencies to prevent the COVID-19 pandemic situation	increased by 2.28% from the year 2020 - The number of communities that gain the benefits from sediment-derived products is 2 communities: Wat Sukwattanaram School and Thairath Wittaya 4 School - The number of complaints about environmental issues from the outside is 0

### 3.3 Sustainability Management in Environmental Dimensions

#### 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 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 Must 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)

Climate change is becoming more and more intense throughout the year 2021. The Company has set a target to reduce electricity consumption and greenhouse gas emissions per unit of product (Scope 2) by not less than one percent. 0.05 per year in the past year, the company has conducted an assessment of indirect greenhouse gas emissions from electricity use (Scope 2) by itself. Directly from business operations (Scope 1), indirect greenhouse gas emissions from electricity consumption (Scope 2) and other indirect greenhouse gas emissions From business operations (Scope 3) to support the global average temperature control of not more than 1.5 degrees Celsius under the Paris Agreement (Paris Agreement) under the United Nations Framework Convention on Climate Change. and promote more environmentally friendly business operations

### 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 2021, which the Sustainable Development Report is in accordance with the Global Reporting Initiative (GRI), GRI Standards, published on the company's website at <http://www.ttwplc.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 2019, 2020, and 2021, the tap water sales revenue of the Company and its subsidiaries equaled THB 5,993.4 million, THB 6,059.4 million and THB 5,682.4 million respectively, with an increase in 2020 and a decrease in 2021 of 1.1% and 6.2%, respectively, compared to the same period of the previous year. Revenue from tap water sales that increased in 2020 and decreased in 2021 can be explained as follows:

In 2020, revenue from tap water sales increased by THB 66.0 million, or 1.1%, due to the following reasons:

1) Revenue from tap water sales of the Company decreased by THB 5.8 million, or 0.1%, as a result of a 0.2 million cubic meter decrease in the volume of tap water sold, as well as an increase in tap water prices compared to the previous year, representing an increase in tap water sales revenue of THB 11.7 million. Also, tap water sales in Bang Pa-In Industrial Estate decreased by 0.7 million cubic meters, representing a decrease in tap water sales revenue within Bang Pa-In Industrial Estate of THB 17.5 million, or 7.9%.

2) Revenue from the tap water sales of PTW increased by THB 71.8 million, or 3.8%, as a result of a 4.2 million cubic meter, or 2.8%, increase in the amount of tap water sold by PTW.

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, while tap water prices showed an increase compared to the previous year. This represented a decrease in tap water sales revenue of THB 164.4 million. Tap water sales in the 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 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 volume of water sold by PTW, as well as a decrease in tap water prices compared to the previous year.

##### 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 2019, 2020, and 2021, the services revenue of the Company and its subsidiaries equaled THB 119.5 million, THB 120.2 million, and THB 123.7 million respectively, with an increase of 0.6% in 2020 and 2.9% in 2021 compared to the same periods of the previous year. For revenue from services, the increases in 2020 and 2021 can be explained as follows:

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In 2020, revenue from services increased by THB 0.7 million, or 0.6%, as a result of an increase in service revenues in the Amata Industrial Estate.

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.

### Other Revenues

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

In 2019, 2020, and 2021, other revenues of the Company and its subsidiaries equaled THB 38.5 million, THB 13.3 million, and THB 11.7 million, respectively, with a decrease of 65.5% in 2020 and 12.0% in 2021 compared to the same periods of the previous year. For revenue from services, the decreases in 2020 and 2021 can be explained as follows:

In 2020, other revenues decreased by THB 25.2 million, or 65.5%, due to decreased returns on mutual funds.

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

### Expense Analysis

(Unit: MB)

Description	2021	2020	2019
Cost of sales of treated water and services	1,844.6	1,861.7	1,794.7
Administrative expenses	255.3	263.9	251.6
Finance cost	249.5	274.5	304.5
Income tax expenses	651.0	685.4	697.0
<b>Total</b>	<b>3,000.4</b>	<b>3,085.5</b>	<b>3,047.8</b>

### 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 2019, 2020, and 2021, the tap water sales and service expenses of the Company and its subsidiaries equaled THB 1,794.7 million, THB 1,861.7, and THB 1,844.6 million, respectively, accounting for 29.2%, 30.1%, and 31.7% of total revenue, respectively. The rate of increase in 2020 and 2021 compared to the same period of the previous year was 3.7% and 0.9%, respectively, which can be explained as follows:

In 2020, the principle cost of tap water sales and services increased by THB 67.0 million due to an increase of 3.9 million cubic meters in the volume of tap water sold, resulting in a depreciation increase of THB 34.3 million, as well as an increase of THB 19.6 million in electricity costs, THB 7.8 million in production personnel expenses, and THB 7.2 million in other production expenses, and THB 2.4 million in chemical fees, and a decrease of THB 4.3 million in maintenance and spare parts costs.

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 fees, 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.

### Administrative Expenses

In 2019, 2020, and 2021, the administrative expenses of the company equaled THB 251.6 million, THB 263.9 million, and THB 255.3 million, respectively. The rates of increase in 2020 and decrease in 2021 compared to the same period of the previous year were 4.9% and 3.3%, respectively, which can be explained as follows:

In 2020, administrative expenses of the Company increased by THB 12.3 million compared to the same period of the previous year due to CSR expenses for community, social, and environmental activities.

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.

### Share of Profits from Investment in Associate Companies

The share of profits from investment in associate companies in 2019, 2020, and 2021 was THB 280.3 million, THB 101.1 million, and THB 544.3 million, respectively. The rates of decrease in 2020 and increase in 2021 compared to the same period of the previous year were 63.9% and 438.4%, respectively, which can be explained as follows:

In 2020, the share of profits from investment in associate companies decreased by THB 179.2 million, or 63.9%, due to a decrease in the electricity sales of the subsidiaries of said associate companies compared to the same period of the previous year.

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.

### Finance Income

Finance income in 2019, 2020, and 2021 was THB 14.2 million, THB 10.2 million, and THB 4.6 million, respectively. The decrease in finance income in 2020 and 2021 compared to the same period of the previous year can be explained as follows:

In 2020, the finance income of the Company decreased by THB 4.0 million, or 28.2%, due to decreased interest income on bank deposits.

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.

## Part 1 Business Operation and Operating Performance

### Financial Costs

Finance costs in 2019, 2020, and 2021 were THB 304.5 million, THB 274.5 million, and THB 249.5 million, respectively. The decrease in financial costs compared to the same period of the previous year can be explained as follows:

In 2020, the financial costs of the Company decreased by THB 30.0 million, or 9.9%, due to repayments of debentures totaling THB 500 million, repayment of loans, and refinancing loans with reduced interest rates.

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.

### Income Tax Expenses

Income tax expenses in 2019, 2020, and 2021 were THB 697.0 million, THB 685.4 million, and THB 651.0 million, respectively. The decrease in corporate income tax in 2020 and 2021 compared to the same period of the previous year can be explained as follows:

In 2020, income tax expenses decreased by THB 11.6 million, or 1.7%, due to reduced profit before tax expenses compared to the same period of the previous year.

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.

### Net Profit

In 2019, 2020, and 2021, the Company and its subsidiaries recorded a net profit of THB 3,147.3 million, THB 2,971.8 million, and THB 3,120.0 million, respectively, accounting for 51.06% , 47.91% , and 53.63%, respectively, of the total revenue of the Company and its subsidiaries. The rate of net profit to total revenue in 2021 increased from the previous year, for the reasons are mentioned in each of the previous topics.

### Financial Position Analysis

(Unit: MB)

Description	31 Dec 2021	31 Dec 2020	31 Dec 2019
Total assets	22,503.9	22,842.4	23,158.1
Total liabilities	8,308.7	9,142.8	10,033.3
Total shareholders' equity	14,195.2	13,699.6	13,124.8

### Assets Analysis

The majority of the assets of the Company and its subsidiaries are non-current assets, which represent approximately 81-84% of total assets. As at December 31, 2021, the Company and its subsidiaries had total assets of THB 22,503.9 million, a decrease of THB 338.5 million compared to December 31, 2020

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, 2021, the Company and its subsidiaries held cash and cash equivalents totaling THB 66.8 million, a decrease of THB 25.2 million compared to December 31, 2020.

### Trade and Other Receivables

As of December 31, 2021, the trade and other receivables of the Company and its subsidiaries totaled THB 514.2 million, a decrease of THB 43.7 million compared to December 31, 2020, due to a sales volume decrease from the same period of the previous year. The majority of trade receivables in the amount of THB 480.1 million are from the Provincial Waterworks Authority, which has a collection period of no more than 30 days from the date of invoice.

### Raw Materials and Supplies

As of December 31, 2021, the raw materials and supplies of the Company and its subsidiaries were valued at a total of THB 25.0 million, most of which consisted of chemicals used for tap water production at THB 5.4 million and spare parts for maintenance of the production system and water supply system at THB 19.6 million. The main chemicals used have an average turnover rate of no more than 3 months, while the spare parts for maintenance and repairs are kept in stock in accordance with established projections.

### Other Current Financial Assets

As of December 31, 2021, the other current financial assets of the Company and its subsidiaries were valued at THB 3,596.9 million, an increase of THB 285.0 million compared to December 31, 2020, because the company and its subsidiaries have increased their investment in financial assets.

### Other Noncurrent Financial Assets

As of December 31, 2021, the other noncurrent financial assets of the Company and its subsidiaries were valued at THB 4.4 million, a decrease of THB 8.4 million compared to December 31, 2020.

### Investments in Associate Companies

As of December 31, 2021, the Company and its subsidiaries had investments in associate companies totaling THB 6,219.6 million, an increase of THB 264.6 million compared to December 31, 2020, because the recording of profit shares from investments in associated companies according to accounting standards increased from the operating results of the associated companies.

### Property, Plant, and Equipment

As of December 31, 2021, the Company and its subsidiaries held property, plant, and equipment assets in the amount of THB 973.2 million, an increase of THB 102.7 million compared to December 31, 2020, due to the increase in the subsidiary's land.

Company-owned Assets for Government Sector Tap Water Production to be Transferred at the End of Concession of Subsidiary

## Part 1 Business Operation and Operating Performance

As of December 31, 2021, 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 9,628.8 million, a decrease of THB 683.1 million compared to December 31, 2020, due to depreciation recorded for that period.

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

As of December 31, 2021, 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 1,029.1 million, a decrease of THB 52.5 million due to amortization recorded for that period.

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

As of December 31, 2021, the Company and its subsidiaries held the rights to operate production and distribution of tap water from business acquisition valued at THB 348.2 million, a decrease of THB 194.5 million due to amortization recorded for that period.

### Liability Analysis

The majority of the liabilities of the Company and its subsidiaries consist of bank loans and the issuance of debentures, accounting for approximately 90-92% of total liabilities. As of December 31, 2021, the Company and its subsidiaries had total liabilities equaling THB 8,308.7 million, most of which were loans and debentures totaling THB 7,497.8 million. The loans amount to THB 2,100 million are borrowed with floating interest rates and a quarterly principal payment. Debentures, totaling THB 5,400 million, have fixed interest rates.

As of December 31, 2021, the Company and its subsidiaries had total liabilities amounting to THB 8,308.7 million, a decrease of THB 834.1 million compared to December 31, 2020, due to the Company's repayment of long-term loans.

### Shareholder Equity Analysis

As of December 31, 2021, the Company and its subsidiaries had shareholder equity of THB 14,195.2 million, an increase of THB 495.6 million compared to December 31, 2020, due to the Company's annual net profit of THB 3,120.0 million and dividend payment of THB 2,393.5 million in 2021.

### Net Cash Flow

(Unit: MB)

Description	2021	2020	2019
Net cash from operating activities	3,772.2	4,081.9	3,977.0
Net cash used in investment activities	(610.6)	(639.3)	(646.3)
Net cash used in financing activities	(3,186.8)	(3,427.2)	(3,353.5)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(25.2)</b>	<b>15.4</b>	<b>(22.8)</b>

### Cash Flow from Operating Activities

In 2020, the Company and its subsidiaries had a net cash flow from operating activities totaling THB 4,081.9 million, an increase of 104.9 million, or 2.6%, from the same period of the previous year due to a decrease in financial costs of THB 30.0 million and an increase in depreciation and amortization of THB 49.4 million.

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 %, from the same period of the previous year due to a decrease in financial costs of THB 25.0 million and an increase in depreciation and amortization of THB 63.0 million.

### Cash Flow Used in Investment Activities

In 2020, the Company and its subsidiaries had cash flow used in investment activities totaling THB 639.3 million, a decrease of THB 7.0 million, or 1.1%, from the same period of the previous year. This is because in 2020, the Company and its subsidiaries had an increase of THB 351.6 million in tap water production assets, an increase of THB 8.7 million in dividend income, and a decrease of THB 990.7 million in investment in associate companies.

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%, from the same period of the previous year. This is because in 2021, the Company and its subsidiaries held property, plant, and equipment assets increased by THB 112.8 million, and the assets in tap water production between the government and the Company and its subsidiaries decreased by THB 128.3 million.

### Cash Flow Used in Financing Activities

In 2020, the Company and its subsidiaries had cash flow used in financing activities totaling THB 3,427.2 million, an increase of THB 73.7 million from the same period of the previous year. This is because in 2020, the Company repaid long-term loans totaling THB 65 million more than in the previous year.

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 2020, the Company repaid long-term loans totaling THB 260 million more than in the previous year.

### **Key Financial Ratios**

#### Liquidity Ratio

The liquidity ratios for 2019, 2020, and 2021 were 0.90%, 2.86%, 1.40%, 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 ratios in 2021 decreased because the debentures due within one year increased as compared to the same period of the previous year.

## **Part 1** Business Operation and Operating Performance

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The average collection period for 2019, 2020, and 2021, was 33 days, 33 days, and 33 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 2019, 2020, and 2021 was 70.6% , 69.9% , and 68.2%, respectively, with a slight decrease in the gross profit margin for 2021 compared to the same period of the previous year.

The net profit ratio of the Company and its subsidiaries in 2019, 2020, and 2021 was 51.1%, 47.9%, and 53.6%, respectively. The net profit ratio increased in 2021 due to increased share of profits from investments in associates compared to the same period of the previous year.

### Operating Efficiency Ratio

The return on total assets ratio of the Company and its subsidiaries in 2019, 2020, and 2021 was 13.5%, 12.9%, and 13.8%, respectively, while the return on fixed assets of the Company and its subsidiaries in 2019, 2020, and 2021 was 22.6%, 22.6%, and 25.2%, respectively. The increase in the return on assets and in the return on fixed assets was due to an increase in 2021 of the total net profits 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 2019, 2020, and 2021 was 0.8% , 0.7% , and 0.6%, respectively, with a decrease in the debt to equity ratio at the end of 2021 as compared to the end of 2020 due to the Company's gradual repayment of loans under contracts.

Dividend payout ratios in 2019, 2020, and 2021 were 76.1%, 80.5%, and 76.7% 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 Operating Lease Commitments. 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 2021. The financial statement present fairly, in all material respects, the financial position of the Company's and its subsidiaries as at 31 December 2021, 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 2021, compared with the audited financial statements for the years ended 31 December 2020 and 2019 are shown as follows:

#### Statement of financial position

Description	Consolidated financial statements					
	2021		2020		2019	
	Baht	%	Baht	%	Baht	%
<b>Assets</b>						
<b>Current assets</b>						
Cash and cash equivalents	66,762,188	0.29	91,969,201	0.40	76,570,736	0.33
Current investments	-	-	-	-	3,035,146,734	13.10
Trade and other receivables	514,176,972	2.28	557,910,547	2.44	564,935,313	2.44
Raw materials and supplies	25,043,636	0.11	26,184,756	0.11	27,203,379	0.12
Other current financial assets	3,596,937,742	15.98	3,311,925,335	14.50	-	-
Other current assets	25,775,192	0.11	29,039,472	0.13	26,834,644	0.12
<b>Total current assets</b>	<b>4,228,695,730</b>	<b>18.79</b>	<b>4,017,029,311</b>	<b>17.58</b>	<b>3,730,690,806</b>	<b>16.11</b>
<b>Non-current assets</b>						
Other non-current financial assets	4,350,000	0.02	12,775,000	0.06	-	-
Investment in associate	6,219,581,998	27.64	5,954,960,757	26.07	5,898,575,219	25.47
Other long-term investments	-	-	-	-	18,525,000	0.08
Property, plant and equipment	973,209,214	4.32	870,535,587	3.81	794,731,564	3.43
Assets for production of treated water with public sector agency:						
Assets that are owned by the Company	8,589,844,176	38.17	8,965,354,337	39.25	9,209,922,045	39.77
Assets that must be transferred at end of concession of subsidiary	1,039,022,681	4.62	1,346,521,003	5.89	1,560,957,228	6.74
Rights to produce and sell treated water and treat waste water from private sector agency	1,029,071,471	4.57	1,081,618,436	4.74	1,132,361,681	4.89
Rights to produce and sell treated water from business acquisition	348,233,006	1.55	542,693,038	2.38	738,173,529	3.19
Intangible assets	10,799,525	0.05	11,958,702	0.05	13,723,623	0.06
Deferred tax assets	4,916,736	0.02	5,270,213	0.02	5,333,758	0.02
Advance payment to subcontractor - related party	36,344,230	0.16	23,268,100	0.10	46,693,920	0.20
Other non-current assets	19,827,983	0.09	10,453,049	0.05	8,425,283	0.04
<b>Total non-current assets</b>	<b>18,275,201,020</b>	<b>81.21</b>	<b>18,825,408,222</b>	<b>82.42</b>	<b>19,427,422,850</b>	<b>83.89</b>
<b>Total assets</b>	<b>22,503,896,750</b>	<b>100.00</b>	<b>22,842,437,533</b>	<b>100.00</b>	<b>23,158,113,656</b>	<b>100.00</b>

## Part 1 Business Operation and Operating Performance

Description	Consolidated financial statements					
	2021		2020		2019	
	Baht	%	Baht	%	Baht	%
<b>Liabilities and shareholders' equity</b>						
<b>Current liabilities</b>						
Trade and other payables	129,712,834	0.58	204,991,415	0.90	159,504,289	0.69
Current portion of long-term loans	460,000,000	2.04	760,000,000	3.33	3,060,000,000	13.21
Current portion of debentures	2,000,000,000	8.89	-	-	500,000,000	2.16
Current portion of lease liabilities	11,059,693	0.05	11,165,584	0.05	-	-
Income tax payable	291,118,055	1.29	296,782,239	1.30	300,517,164	1.30
Accrued interest	63,536,058	0.28	63,607,016	0.28	74,172,239	0.32
Other current liabilities	66,169,405	0.29	69,512,922	0.30	70,396,726	0.30
<b>Total current liabilities</b>	<b>3,021,596,045</b>	<b>13.43</b>	<b>1,406,059,176</b>	<b>6.16</b>	<b>4,164,590,418</b>	<b>17.98</b>
<b>Non-current liabilities</b>						
Long-term loans, net of current portion	1,640,000,000	7.29	2,100,000,000	9.19	300,000,000	1.30
Debentures, net of current portion	3,397,806,704	15.10	5,396,523,382	23.62	5,395,839,598	23.30
Lease liabilities, net of current portion	51,047,071	0.23	60,578,185	0.27	-	-
Provision for long-term employee benefits	73,379,121	0.33	62,271,119	0.27	58,691,879	0.25
Deferred tax liabilities	124,908,676	0.56	117,397,423	0.52	114,176,349	0.50
<b>Total non-current liabilities</b>	<b>5,287,141,572</b>	<b>23.50</b>	<b>7,736,770,109</b>	<b>33.87</b>	<b>5,868,707,826</b>	<b>25.35</b>
<b>Total liabilities</b>	<b>8,308,737,617</b>	<b>36.93</b>	<b>9,142,829,285</b>	<b>40.03</b>	<b>10,033,298,244</b>	<b>43.33</b>
<b>Shareholders' equity</b>						
<b>Share capital</b>						
Registered						
3,990,000,000 ordinary shares of Baht 1 each	3,990,000,000	17.73	3,990,000,000	17.47	3,990,000,000	17.23
Issued and fully paid-up						
3,990,000,000 ordinary shares of Baht 1 each	3,990,000,000	17.73	3,990,000,000	17.47	3,990,000,000	17.23
Share premium	2,637,769,601	11.72	2,637,769,601	11.55	2,637,769,601	11.39
Retained earnings						
Appropriated - statutory reserve	399,000,000	1.77	399,000,000	1.75	399,000,000	1.72
Appropriated - other reserve	1,691,230,767	7.52	1,691,230,767	7.40	1,691,230,767	7.30
Unappropriated	6,148,710,378	27.32	5,441,831,795	23.82	4,883,932,137	21.09
Other components of shareholders' equity	(712,824,379)	(3.17)	(504,584,818)	(2.21)	(520,795,516)	(2.25)
<b>Equity attributable to owners of the Company</b>	<b>14,153,886,367</b>	<b>62.90</b>	<b>13,655,247,345</b>	<b>59.78</b>	<b>13,081,136,989</b>	<b>56.48</b>
Non-controlling interests of the subsidiaries	41,272,766	0.18	44,360,903	0.19	43,678,423	0.19
<b>Total shareholders' equity</b>	<b>14,195,159,133</b>	<b>63.08</b>	<b>13,699,608,248</b>	<b>59.97</b>	<b>13,124,815,412</b>	<b>56.67</b>
<b>Total liabilities and shareholders' equity</b>	<b>22,503,896,750</b>	<b>100.00</b>	<b>22,842,437,533</b>	<b>100.00</b>	<b>23,158,113,656</b>	<b>100.00</b>

**Statement of comprehensive income**

Description	Consolidated financial statements					
	2021		2020		2019	
	Baht	%	Baht	%	Baht	%
<b>Profit and loss:</b>						
<b>Revenues</b>						
Sales of treated water to public sector agency:						
Sales of treated water - minimum offtake quantities	5,092,028,057	87.46	5,126,926,939	82.65	5,085,877,040	82.49
Sales of treated water - above minimum offtake quantities	388,149,113	6.67	729,810,640	11.77	687,426,954	11.15
Sales of treated water to private sector agencies	202,222,569	3.47	202,679,433	3.27	220,114,991	3.57
Total sales of treated water	5,682,399,739	97.60	6,059,417,012	97.69	5,993,418,985	97.21
Service income	123,673,267	2.12	120,237,398	1.94	119,466,124	1.94
Other income	11,681,278	0.20	13,291,821	0.21	38,528,951	0.62
<b>Total revenues</b>	<b>5,817,754,284</b>	<b>99.92</b>	<b>6,192,946,231</b>	<b>99.84</b>	<b>6,151,414,060</b>	<b>99.77</b>
<b>Expenses</b>						
Cost of sales of treated water and services	1,844,646,460	31.68	1,861,674,233	30.01	1,794,674,181	29.11
Administrative expenses	255,301,401	4.38	263,911,682	4.25	251,618,218	4.08
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	51,874,965	0.89	51,415,245	0.83	55,752,740	0.90
Amortisation of rights to produce and sell treated water from business acquisition	194,460,032	3.34	195,480,491	3.15	194,946,391	3.16
<b>Total expenses</b>	<b>2,346,282,858</b>	<b>40.30</b>	<b>2,372,481,651</b>	<b>38.24</b>	<b>2,296,991,530</b>	<b>37.25</b>
<b>Net Profit before share of profit from investment in associate, finance cost and income tax expenses</b>	<b>3,471,471,426</b>	<b>59.62</b>	<b>3,820,464,580</b>	<b>61.60</b>	<b>3,854,422,530</b>	<b>62.52</b>
Share of profit from investment in associate	544,317,400	9.35	101,097,638	1.63	280,254,547	4.55
<b>Profit before finance cost and income tax expenses</b>	<b>4,015,788,826</b>	<b>68.97</b>	<b>3,921,562,218</b>	<b>63.23</b>	<b>4,134,677,077</b>	<b>67.07</b>
Finance income	4,631,501	0.08	10,170,447	0.16	14,176,972	0.23
Finance cost	(249,486,104)	(4.28)	(274,534,160)	(4.43)	(304,542,661)	(4.94)
<b>Net Profit before income tax expenses</b>	<b>3,770,934,223</b>	<b>64.77</b>	<b>3,657,198,505</b>	<b>58.96</b>	<b>3,844,311,388</b>	<b>62.36</b>
Income tax expenses	(650,959,542)	(11.18)	(685,387,474)	(11.05)	(696,977,417)	(11.30)
<b>Net Profit for the year</b>	<b>3,119,974,681</b>	<b>53.59</b>	<b>2,971,811,031</b>	<b>47.91</b>	<b>3,147,333,971</b>	<b>51.06</b>
<b>Other comprehensive income:</b>						
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>						
Loss on change in value of available-for-sale investments - net of income tax	-	-	-	-	(160,000)	(0.00)
Share of other comprehensive income from associate	(208,619,561)	(3.58)	16,210,698	0.26	23,348,185	0.38
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>						
Actuarial gain (loss) - net of income tax	(3,129,627)	(0.05)	-	-	2,467,757	0.04
<b>Other comprehensive income for the year</b>	<b>(211,749,188)</b>	<b>(3.64)</b>	<b>16,210,698</b>	<b>0.26</b>	<b>25,655,942</b>	<b>0.42</b>

## Part 1 Business Operation and Operating Performance

Description	Consolidated financial statements					
	2021		2020		2019	
	Baht	%	Baht	%	Baht	%
Total comprehensive income for the year	2,908,225,493	49.95	2,988,021,729	48.17	3,172,989,913	51.47
Profit attributable to:						
Equity holders of the Company	3,103,911,658	53.31	2,951,464,151	47.58	3,127,907,180	50.73
Non-controlling interests of the subsidiaries	16,063,023	0.28	20,346,880	0.33	19,426,791	0.32
<b>Total comprehensive income attributable to:</b>	<b>3,119,974,681</b>	<b>53.59</b>	<b>2,971,811,031</b>	<b>47.91</b>	<b>3,147,333,971</b>	<b>51.05</b>
Equity holders of the Company	2,892,162,470	49.67	2,967,674,849	47.84	3,153,563,122	51.15
Non-controlling interests of the subsidiaries	16,063,023	0.28	20,346,880	0.33	19,426,791	0.32
	<b>2,908,225,493</b>	<b>49.95</b>	<b>2,988,021,729</b>	<b>48.17</b>	<b>3,172,989,913</b>	<b>51.47</b>
Basic earnings per share						
Profit attributable to equity holders of the Company	0.78		0.74		0.78	

### Cash flows statement

Description	Consolidated financial statements		
	2021	2020	2019
	Baht	Baht	Baht
Cash flows statement			
Cash flows from operating activities			
Net cash from operating activities	3,772,228,029	4,081,947,353	3,977,021,103
Cash flows from investing activities			
Net cash from (used in) investing activities	(610,604,084)	(639,306,543)	(646,309,455)
Cash flows from financing activities			
Net cash used in financing activities	(3,186,830,958)	(3,427,242,345)	(3,353,482,979)
Net increase (decrease) in cash and cash equivalents	(25,207,013)	15,398,465	(22,771,331)
Cash and cash equivalents at beginning of year	91,969,201	76,570,736	99,342,067
Cash and cash equivalents at end of year	66,762,188	91,969,201	76,570,736

**Financial Ratio**

Description	Unit	Consolidated financial statements		
		2021	2020	2019
<b>Liquidity ratios</b>				
Current ratio	Time	1.40	2.86	0.90
Quick ratio	Time	1.38	2.82	0.88
Receivable turnover	Time	10.83	11.01	10.82
Average Collection Period	Day	33	33	33
<b>Profitability ratios</b>				
Gross profit margin	%	68.23	69.87	70.64
Net profit margin	%	53.59	47.91	51.05
Return on equity	%	22.37	22.16	24.69
<b>Efficiency ratio</b>				
Return on assets	%	13.76	12.92	13.54
Return on fixed assets	%	25.15	22.63	22.60
<b>Debt service coverage ratio</b>				
Debt / Equity	Time	0.59	0.67	0.76
Dividend / Net Profit	%	76.72	80.54	76.06

### 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, 33<sup>rd</sup> 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](mailto:ir@ttwplc.com)  
Website : [www.ttwplc.com](http://www.ttwplc.com)  
Social Media : Facebook : TTWPLC, Instagram : TTWPLC

### 5.2 Other Information

- None -

### Legal Dispute

As of December 31, 2021, 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

Debenture registrar and payment agent  
(TTW222A TTW255A  
TTW232A and TTW272A)

CIMB Thai Bank Public Company Limited  
44 Langsuan Road, Lumpini, Pathumwan,  
Bangkok 10330.  
Tel 0 2626 7503-4  
Website : [www.cimbthai.com](http://www.cimbthai.com)

# Part 2 Corporate Governance



### 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

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. 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) 2019 of the Thai Institute of Directors Association (IOD), the ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard), and all related best practices of the Stock Exchange of Thailand (SET), etc., to enable the Company to achieve its vision and mission with both stability and sustainability.

#### 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.

By adhering to guidelines for good corporate governance in accordance with the criteria in all 5 categories as follows:

### Section 1 Rights of Shareholders

The Company recognizes the importance and equality of all shareholders, both minor shareholders and institutional investors; therefore, the company encourages shareholders to exercise their basic legal rights in all aspects, including sharing of business profits, trading or transferring of shares, receiving sufficient information about the business, shareholder meeting attendance to exercise voting rights in appointing and/or removing directors, determination of director remunerations, appointment of auditors and determination of audit fees, and all matters affecting the Company. In addition, the Company supports and treats shareholders equally in all matters such as providing an important and up-to-date information via the Company website, providing opportunities for shareholders to propose items for the agenda and nominate candidates for directorship, arranging 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.

#### 1. Basic Rights of Shareholders

- The right to buy, sell, transfer shares, and the right to receive share certificates.
- The right to receive correct, adequate, and timely information in a format suitable for decision making.
- The right to receive a share of the profit of the business.
- The right to attend and vote in shareholders' meetings to jointly decide on important policy changes of the company.
- The right to elect and remove directors include the determination of the remuneration for the Board of directors.
- The right to give the approval to appoint an auditor and set the audit fee.
- The right to purchase shares in proportion to the pre-existing shares.

#### 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 began in early 2020 continuing until 2021, which still has to be vigilant and maintain social distance continuously. The company is aware and concerned about the health and safety of all attendees. Therefore, the 2021 Annual General Meeting of

Shareholders is scheduled to be held in electronic format (E-AGM) under the relevant rules and measures in the situation of the COVID-19 epidemic. The details are as follows.

### **Before the Shareholders' Meeting Date**

The Annual General Meeting of Shareholders for 2021 of the Company (“the meeting”) had to be held by Electronic Means only, and the Company engaged Digital Access Platform Company Limited (DAP), which was a subsidiary of the Stock Exchange of Thailand (SET) to provide the service and system by conducting via Cisco WebEx Meeting system for attending the meeting, and DAP e-Services system for e-Voting, in which the system standard and criteria were in line with the conditions and procedures as stipulated in the Emergency Decree Governing E-Meeting B.E.2563 (2020) and announcement of Ministry of Digital Economy RE: Standard of Security and Safety of E-Meeting B.E.2563 (2020), which the Company placed great emphasis on the security of shareholders' personal information, by preparing a Personal Data Protection Notice for the 2021 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:

- The meeting schedule and agenda were distributed via the SET portal and TTW's website on March 8, 2021, before delivering the meeting documents by post, 30 days prior to the AGM date. The record date for the rights to attend the meeting and receive dividends was also detailed in the meeting notice.
- The meeting notice and agenda, in both Thai and English, were sent to shareholders by clearly separating each agenda item as prescribed in Chapter 4 of TTW's Articles of Association: Shareholders' Meeting. The appointment of directors and consideration of directors' remuneration were under 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 (form A, B, and C), as required by the Department of Business Development, Ministry of Commerce, and an annual report, which were delivered to shareholders on March 8, 2021, 30 days before the AGM date. Notice and supporting documents were published for 3 consecutive days in newspapers to notify shareholders in advance so that they could have adequate information before attending the meeting. Also, other relevant details were published on TTW's website before sending hard copies

to shareholders in order to allow them to have enough time to review such information. Meeting notices were delivered to shareholders by post on March 17, 2021, 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

- To encourage the institutional investors' attendance, the Investor Relations Unit coordinated with the institutional investors on their submission of registration documents to TTW 7-14 days in advance for the document checking in order to facilitate the administrative procedures on the actual meeting day
- To facilitate the shareholders including institutional investors can exercise their rights conveniently, the Company has prepared a user manual for the Electronic Meeting System for the Annual General Meeting of Shareholders (e-AGM) published on the Company's website. including contained in the attachment of the meeting invitation letter to inform shareholders and institutional investors about the practice of registration, proxying and meeting attendance via electronic media.
- Provide an opportunity for shareholders and institutional investors to submit questions related to the agenda to the Board of Directors at least 10 days prior to the shareholders' meeting date via the Company's website, or by email of the company secretary at [cg@ttwplc.com](mailto:cg@ttwplc.com) or fax number 02-4206064 through the news system of the Stock Exchange of Thailand, along with the dissemination of the invitation letter for the annual general meeting of shareholders, by determined the criteria for sending questions in advance on the company website [www.ttwplc.com](http://www.ttwplc.com) to ensure the shareholders' utmost benefits and legal rights.

### On the Shareholders' Meeting Date

TTW strongly encouraged shareholders to exercise their rights by attending and voting at the shareholders' meeting. The meeting was conducted in a transparent, correct, and accountable manner ranging from the registration, vote counting to the result from the announcement, in order not to violate or deprive of the shareholders' rights. Shareholders' inquiries and opinions were welcomed and taken into consideration as follows:

As the 2021 Annual General Meeting of Shareholders is during the COVID-19 epidemic situation, the company has held an Electronic Meeting (e-AGM) under the rules and regulations in the epidemic situation.

- The company has notified the guidelines Registration method, proxy method, and procedures for attending the AGM via electronic media (e-AGM) to shareholders via the meeting invitation. and facilitate information to shareholders via telephone and e-mail
- Shareholders unable to attend the meeting can exercise their voting rights by appointing the independent directors to vote on his or her behalf.

- The company conducts meetings via electronic media using Cisco WebEx Meeting system for attendance and DAP e-Services system for voting. The meeting allowing shareholders to raise questions via the DAP e-Services system before voting. The Company Secretary reads shareholders' questions to inform the meeting and answer them in any agendas.
- Directors, executives, and external auditors from EY Office Limited (EY) attended the AGM altogether in order to answer shareholders' questions and acknowledge their opinions. For the AGM 2021, 12 directors included the Chairman and directors attended the meeting, which accounted for 100 percent of the total number of the Board members (Mr.Kaoru Umehara and Mr.Hideo Matsumoto attended the meeting via VDO Conference as per the minutes of 2021 AGM). The Chairman of the Board, the Chairmen of all subcommittees, and the President together with senior executives also attended the meeting and explained details of information regarding agenda items and answered shareholders' questions.
- 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.
- One volunteer shareholder was invited to observe the vote-counting process. Representatives from the Thai Investors Association also observed the meeting.
- Provide auditors who do not perform the audit duties of the company and lawyers who are not corporate counsel Witness the meeting.
- Shareholders, who registered after the meeting had already started, were allowed to vote for the ongoing and the remaining agenda items.
- The shareholders' meeting was convened according to the sequence of the agenda. Each agenda presentation included 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.
- Shareholders were equitably treated and were allowed to raise questions and opinions. All questions were addressed and clarified by the Chairman and completely recorded in the minutes of the meeting.
- 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 2021 AGM, there were 264 shareholders attended the meeting, which 26 shareholders attended the meeting by themselves and 11 shareholders by proxies, represented 3,011,676,744 shares which accounted for 75.48% of the total issued shares.

### After the Shareholders' Meeting Date

- After the AGM, TTW concluded resolutions for each agenda item to shareholders and SET via SET Link according to SET's criteria of information disclosure. In 2021, meeting resolutions were notified on April 8, 2021, immediately after the meeting.
- TTW prepared 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](http://www.ttwplc.com) on April 22, 2021 which occurred within 14 days after the meeting date as required by SET's criteria.
- TTW disseminated images and sounds recorded in the meeting on its website for absent shareholders' acknowledgement.
- The shareholders' meeting approved the dividend payment, the company notified the meeting resolution including, details of dividend payment to shareholders through the SET Link and coordinated with the TSD and announced the dividend payment on Newspaper to ensure that shareholders receive the complete and accurate dividend rights.

### 3. Company Visit and Knowledge Enhancement for Shareholders and Investors

Because of the Covid-19 pandemic, the Company exercised caution in the organization of its meeting to provide information to investors, analysts, shareholders, and other interested parties. The Company, therefore, chose to communicate said information via other channels, including by phone, email, and conference calls, using such platforms as ZOOM Meeting and MS-Teams. This allowed the Company to continue to communicate and to disclose accurate and complete information consistently with transparency and efficiency.

### Section 2 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 in advance candidates for director positions from September 1, 2020, to December 31, 2020, with all rules and procedures disclosed on the Company 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.

### Section 3 Role of Stakeholders

#### 1. Rights of Stakeholders

In addition, to protect the rights of shareholders, the Board 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, in good corporate governance policy and the code of ethics for business, the Board had clearly provided the guidelines for fulfilling the needs of stakeholders in each group, for the directors, executives, and staff adhered to could be summarized as follows;

##### Shareholders

The Company is committed to representing shareholders in conducting business in a transparent manner with regard to the long-term growth of the Company's value, have good returns, provide information to all parties equally.

##### 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.

The Company places great importance on long-term human resource development and has put in place policies and practices regarding the development and creation of opportunities for employees in terms of learning and development of potential. The Company believes that its personnel is its most valuable resource in driving the Organization as a whole towards a common goal and, therefore, is determined to develop its personnel and provide them with appropriate knowledge, abilities, and a good quality of life. To this end, the Company has adopted a professional management system in human resource management in order to increase potential and capacity of employees to maximize benefits. The Company has also organized appropriate learning programs that began on the day employees first start work with the Company until the day

they retire, and encourages employees at all levels to acquire new knowledge and additional skills by attending seminars and workshops with leading institutions. Additionally, the Company continues developing employee participation across the Board by the employee satisfaction survey, the employee engagement survey, the employee participation in welfare management occupational health and safety, which the company has specified as policies and guidelines about workplace safety and hygiene through the Occupational Safety and Health Committee to ensure safety for life as well as the property of employees and the company. The company considers safety both for the operation of the employees and to the utility users by providing training to a team of technicians and engineers, as well as employees who work regularly in the water supply process so that they can perform their duties efficiently and safely, due diligence in the care of its employees.

Throughout 2021 and 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 2021, 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.

### **Customer**

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 the year 2021, 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 93 percent.

### 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 disciplinary 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 2021, 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.

### 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 the policies for dealing with counterparts properly, which emphasize fair treatment to them, as overseen and directed by the company in accordance with its bylaws. Counterpart Selection Criteria of TTW as follows:

1. Follow the quality policies, environment, sanitation health, and safety of the company.
2. Complying 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 upon customers.

In 2021, no dispute occurred between TTW and its subsidiary companies and business counterparts or contractual counterparties to resist bribery and corruption.

### **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 of 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 the competitors fairly and responsibly.

1. Do not participate in the agreement between the company and its competitors.
2. Do not make agreements with competitors that restrict inappropriate competition, such as discussions about costs or pricing with competitors.
3. 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.
4. Do not make any agreements which limit business opportunities without unfair treatment to business partners, dealer, or another person.
5. 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.
6. Do not discriminate in any actions of the company to stakeholders to be affected by that operation.

In 2021, no dispute occurred between TTW or its subsidiary companies and the competitors.

### **Business Competitor**

Competitors are third parties that the company must compete in accordance with their business practices. Competition must proceed fairly, not distorting fraudulent information or using any other method that is not correct according to the good competitive environment. The company is the largest tap water supplier and distributor in Thailand by producing and supplying water to the Provincial Waterworks Authority that is a

partner without direct competitors. However, the company also stipulates a policy and practice regarding competitors.

1. Treat competitors within the framework of fair and fair competition etiquette.
2. Conduct within the framework of good competition.
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.

### 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.

### 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 update 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 development of a quality of life and Co-operate with local creative communities and society for sustainability.

### Development "Quality of community life" in the area around the Water Treatment Plant and Environmental Implementation

The Company is committed to being an organization that drives the economy and infrastructure of the country to thrive in line with the civilized country through building quality utilities according to international standards, along with social responsibility and balance stewardship of the environment.

The company gives importance to communities around the company's water supply regularly by supporting initiatives and developing various projects that cover both education, occupational hygiene, and environmental care for a better quality of life for people in the community by carrying out social work in 3 dimensions. Community and society information is disclosed in the Sustainable Development Report 2021 on the Company's website <https://www.ttwplc.com/th/download/sd-report>

### 2. Observation of 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 2021, 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.

### 3. Non-infringement of Intellectual Property and Copyright

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 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.

1. Comply with the laws related to the intellectual property of Thailand and all countries where the company goes into business which is considered the basic norm.

2. Reveal which work, invention, and any knowledge caused by the performance of duties or support promoted by the company and let the supervisor know correctly, completely, and immediately.

3. Maintain, protect and protect the intellectual property rights of the company both inside and outside the country including respecting and not violating the intellectual property rights of others.

4. Maintain important documents trade secrets and any other information that is confidential to the company, business partners, and stakeholders in a safe place. There are appropriate and standardized access methods that are not disclosed to other unrelated persons. This duty continues being in effect even after being out of the status of being an executive or employee of the company.

5. Do not use the intellectual property and confidential information of the company, partners, and stakeholders to reproduce, modify or use in any way for personal benefits or other persons without permission.

6. Report to the supervisor when seeing an action that is a violation of intellectual property or may lead to a violation of intellectual property or actions that may cause any disputes about the company's intellectual property or another person.

7. Support cooperation in intellectual property with external agencies, both government and private sectors.

#### 4. Social and Environmental Responsibility

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 2021 disclose on the company's website <https://www.ttwplc.com/th/download/sd-report>

#### Environmental Education and Training for Employees

The majority of environmental management issues arise from genuine misunderstandings. The Company, therefore, has prescribed guidelines for educating and raising awareness directly and indirectly among its employees by encouraging attendance of various training courses related to environmental preservation. In 2021, there are training and courses were provided as follow: Low Carbon for Sustainable Development, energy Conservation Course: Energy Saving Techniques in Buildings, Energy Conservation Course: Energy Saving in Air Conditioning Systems, Courses on climate change issues that are driving the business sector Policy Program for Supporting Low Carbon Business Operations and courses on climate assessment and information-based risk assessment, etc.

#### Efficient Use of Resources

TTW supports the recycling of materials through a promoting campaign for efficient use of resources, such as using both sides of the paper, turning off air-conditioners and electricity during an office break or a

long absence of executive management from their rooms, and using a carpool for a same operation or direction. The implementation of these projects may not yield a clear result in terms of reduction in energy costs or expenditures; however, it would help employees develop personal awareness. TTW has established policies and guidelines as follows:

1. To operate and develop an energy management system appropriately. It is regarded as a part of TTW's business operation to be implemented in accordance with laws and other relevant regulations.
2. To continuously improve the energy efficiency which is appropriate to business nature, technology and following the best practice.
3. To set TTW's annual plan and goal for energy conservation appropriately each year and communicate to all employees for accurate understanding and compliance.
4. TTW regards that energy conservation is the responsibility of all executives and employees at all levels to cooperate and follow the measure in order to accomplish its goals.
5. To support human resources, budget, time, training courses, and encourage all employees' participation through presenting their opinions that are valuable to energy management.
6. The Management and Green Committee will review and revise the energy conservation policy, goal, and energy management plan to ensure their appropriateness and consistency with the current situation on an annual basis.

### 5. Company Contact Channels

Stakeholders may contact the company to express opinions, suggestions, or any complaints that are not fraud or corruption-related via the following channels:

Channels	Electronic mails	Telephone numbers
Board of Directors And Company Secretary Department	cg@ttwplc.com	02 019 9490 – 3 , 02 019 9484 - 9 Ext. 1103, 1106
Investor Relations	ir@ttwplc.com	02 019 9490 – 3 , 02 019 9484 - 9 Ext. 1108, 1110

The mailing address is: TTW Public Company Limited, 30/130 Moo 12 Buddha Monthon 5 Road, Raikhing, Sampran, Nakhon Pathom 73210

### Section 4 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.

### 1. Information Disclosure Channels

TTW constantly updates significant information via the following channels:

- Regulatory agencies: SET's website ([www.set.or.th](http://www.set.or.th)) and SEC's website ([www.sec.or.th](http://www.sec.or.th))
- TTW's website at [www.ttwplc.com](http://www.ttwplc.com)
- Form 56-1 One Report
- 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

### 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

### 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 2021, 25 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 Director 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

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 2021, during the spread of coronavirus disease 2019 (COVID-19), other ongoing activities as follows:

Activities	Times
Analyst Meeting	1
Opportunity Day	2
Conference Call	6
Seminars and meetings with investors and securities analysts.	2
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	3 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

### 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 2021, 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.

### Section 5 Board Responsibilities

The Board of Directors recognizes and places great importance on its duties toward shareholders as Company business owners who have appointed directors to act and be responsible for the supervision of business administration in the best interests of the shareholders. As such, its Fiduciary Duty comprises 4 important duties: Duty of Care: performing duties responsibly, Duty of Loyalty: performing duties with integrity to protect the interests of the Company and the shareholders, Duty of Obedience: compliance with laws, objectives, regulations, Board resolutions, and shareholders' meeting resolutions, and Duty of Disclosure: accurate, complete, transparent, and timely disclosure of information to shareholders. The roles, duties, and responsibilities of the Board of Directors can be summarized as follows:

#### 1. Duties of the Board of Directors

- The Board of Directors is responsible for overseeing the operations of the Company: ensuring compliance with the law, the objectives and regulations of the Company, and the resolutions of shareholders' meetings. All members of the Board shall perform their duties with honesty and integrity, and carefully protect the interests of the Company, in compliance with the principles and regulations prescribed by the SET and SEC.
- The Board of Directors is responsible for determining the vision, mission, strategies, policies, direction, and operational goals of the Company, as well as for providing supervision, ensure that management has implemented said strategies and policies for the efficient achievement of the Company's objectives and goals. In 2021, the Board of Directors reviewed the vision, mission, strategies, direction, and business operation objectives of the Company, as well as its key policies, to ensure these are appropriate and are in line with current economic and environmental conditions and in accordance with the principles of good corporate governance. The Board of Directors also monitored and ensured that the strategies of the Company implemented, reporting business and operational results to the Board of Directors on a

quarterly basis, particularly for the purpose of ensuring that the financial and operational goals were on target with the strategic plans of the Company.

- The Board of Directors is responsible for determining investment budgets and annual budgets, and supervise management operations, in order to achieve said budgets and maximize the benefits of the Company, its shareholders, and general stakeholders.
- The Board of Directors is responsible for providing financial reports and general important information to shareholders in an adequate, complete, correct, and timely manner, and for providing a regulatory system and effective internal control and audit system with appropriate risk management measures in place and ensuring regular follow-up on such matters. The Board of Directors has also established confidentiality agreements with consultants and other service providers and ensures verification of said parties in accordance with the policies and systems they will be operating under before access to any confidential information is allowed.
- The roles and responsibilities of the Board of Directors, subcommittees, and executive management are clearly separated and defined, and the roles, duties, and responsibilities of each are clearly communicated to the Board of Directors, subcommittees, management, and employees of the Company on a regular basis.
- The Board of Directors is responsible for all shareholders about the Company's business operations. Oversight of all business operations is carried out in accordance with policies, guidelines, and objectives that will bring maximum benefit to shareholders and all stakeholder groups.
- The Board of Directors is responsible for the assessment and approval of human resource management strategies, the executive development plan, corporate structure, and compensation structure, as well as the supervision of criteria and procedures for the recruitment, removal, and termination of directors and executive management.
- The Board of Directors is responsible for overseeing the performance evaluation process of executive management, ensuring it is effective and correlates with the common goals of the Company.
- The Board of Directors is responsible for the communication of the vision, goals, and performance of the Company, ensuring the directors, executives, and employees throughout the organization have a clear knowledge and understanding of such. This also includes the monitoring of the progress, efficiency, and successful implementation of strategies in correlation with the Company's short-term goals.

### 2. Structure of the Board of Directors

The Board of Directors plays a vital role in corporate governance for the best interests of the Company. The Board of directors consists of at least 5 members as stipulated in the Articles of Association. Said persons must have the proper qualifications as specified by law. No less than 3 persons and at least 1 in 3 of the total number of directors must be independent directors. Any changes to the number of directors must receive the

approval of the shareholders through a majority vote of not less than two in thirds of shareholders in attendance at the meeting and who are eligible to vote.

As of December 31, 2021, TTW's Board comprises 12 directors as follows:

- 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 Nomination and Remuneration Committee is responsible for screening all candidates for director positions, whether for positions as representatives of shareholders or for positions as independent directors. The Committee shall consider the suitability of said candidates based on the appropriateness of their skills and experience necessary for enhancing the strength of the Board in overseeing the business operations of the Company. The Committee also reviews the candidates' work history for transparency, ethics and morality, responsibility, maturity, and professionalism. The structure of the Board of Directors is reviewed annually. As of 2021, the current Board structure consists of 10 male directors and 2 female directors. Said directors are experts in the areas of engineering, accounting, finance, economics, business administration, and law. The Board comprises a variety of professions and expertise essential and beneficial to the business of the Company and its subsidiaries and provides an appropriate check and balance system within the Board structure that in turn will benefit the Company and its shareholders.

### 3. Policy and Procedures for Directors and Executives Holding Director's Positions in Other Companies

The Board of Directors recognizes the importance of efficiency in the positions of managing directors. In order for the directors are able to devote their time to oversee the Company's business; therefore, Company policy stipulates a limitation on the number of listed companies in which directors and executives may hold Board positions. Non-executive directors may hold positions on the Board of no more than 5 other listed companies. Executive directors may hold positions on the Board of no more than 2 other listed companies. At present, there are no directors on the Board of the Company who hold more than the number of positions specified above.

### 4. Subcommittees

In order to study and examine the information on important issues, the Board of Directors has appointed the members with appropriate knowledge and expertise as a subcommittee to increase the efficiency in corporate governance, the committee member as follows:

**Position in Subcommittees**

Name of Directors	Subcommittees				
	Executive Committee	Audit Committee	Executive Committee	Risk Management & Corporate Governance Committee	Executive Committee
1. Mr.Phongsarit Tantisuvanitchkul	Chairman	-	Director	-	Non-executive director
2. Dr.Sombat Kitjalaksana	Director	-	-	-	Non-executive director
3. Mr.Hideo Matsumoto	Director	-	-	Director	Non-executive director
4. Mr.Suvich Pungchareon	Director	-	-	-	Non-executive director
5. Ms.Walainut Trivisvavet	Director	-	-	Director	Managing Director
6. Mr.Phairuch Mekarporn	-	Chairman		Director	Independent Director
7. Mr.Somnuk Chaidejsuriya	-	Director	Director	Chairman	Independent Director
8. Mrs.Payao Marittanaporn	-	-	-	Director	Non-executive director
9. Mr.Yuttana Yimgarund	-	Director	Chairman	-	Independent Director
10. Mr.Kaoru Umehara	-	-	Director	-	Non-executive director

Note – Chairman and Vice Chairman not holding a position in a sub-committee

In this regard, the subcommittee structure, the duties, and responsibilities under the charter of all 4 sub-committees are disclosed in Section 7.3 Subcommittee.

**Board of Director Contact**

By post	By email	By Phone
Office of Managing Director TTW Public Company Limited 30/130 Moo 12, Buddha Monthon 5 Road, Raikhing, Sampran, Nakhon Pathom 73210	cg@ttwplc.com	(+622) 019-9490-3 (+622) 019-9484-9 <b>Ext.</b> 1103, 1106

**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 as follows:

1. Compliance with the Business Code of Conduct and Ethics

The company in the business code of conduct and ethics means TTW Public Company Limited and the Group. This requires all executives and employees to be responsible for understanding and following the preliminary guidelines as specified in the company's business code of conduct which covers the following issues:

- 1.1 The persuasion, encouragement, and motivation the executives and employees to collaborate to create value for the business.
  - 1.2 The creation of confidence that the legal rights of stakeholders be protected.
  - 1.3 The treatment of stakeholders and all related parties with honesty, transparency, and fairness.
  - 1.4 The encouragement everyone to responsible for getting familiar and complying with the business code of conduct and ethics and company's related policies.
2. In case of getting doubt in the compliance or considering that there are any part of the document should be revised or improved can report to the supervisor in the hierarchy.
3. Guidelines for business Conduct
- 3.1 The company adheres to comply with the laws applicable to the company and trading business strictly and in accordance with business ethics.
  - 3.2 The company believes that to conduct its business with integrity, ethics, and morals is correct and sustainable business conduct guidelines. The company insist to conduct business with open communication both inside and outside the organization that must be accurate, fair, and provide the appropriate communication channels for each situation.
  - 3.3 The company, executives, and employees will not communicate, publish, announce both inside and outside the organization with oral or written communications that are untrue, misrepresented, malicious or damaged to the reputation of an individual or group of people. The verbal communication of executives and staff are required with good language and tone of voice that do not affect the image and reputation of the company.
  - 3.4 The company will manage the operations with integrity, records of accounting correctly, propose the use of budget clearly, including evaluating investment projects with honesty, accuracy, transparency.
  - 3.5 The company expects an honesty from employees at all levels in compliance with the company's policy, accounting rules, and other internal controls. If employees found the violation of rules or policies of the company that will result in corruption and dishonor to the company, the employees should inform their supervisor immediately.
  - 3.6 The company will operate the business by taking into account the duties and responsibilities towards the nation, religion, and monarchy institutions, including the law and good morals.
  - 3.7 The company adheres to create a good working atmosphere and give opportunities for opinions comments, and suggestions that are beneficial to the public.
  - 3.8 The company will not discriminate on the basis of race, religion, gender, marital status, or physical disabilities.

### 4. Treatment of Shareholders

- 4.1 The company will use the best effort to create growth in order for the shareholders to receive good returns.
- 4.2 The company respects the rights of shareholders to obtain necessary information to assess the company's management in order to make decision in voting on agendas of the shareholders' meeting. The company will disclose the operating results with the correct and truthful information and report on the company's financial position to shareholders constantly.
- 4.3 The company has a policy to record accounting transactions accurately and completely in accordance with accounting standards and relevant laws through the audits from an internal auditor, external auditor, and the audit committee.
- 4.4 The company will respect and maintain legal rights of shareholders, and shareholders will be treated with honesty, transparency and fairness.

### 5. Treatment of business counterparts and contract parties

- 5.1 The company intends to provide goods and services in a standardized manner and ethics. It operates under the following principles:
  - (1) There is competition from bidders and select appropriately and fairly.
  - (2) There are criteria for evaluating and selecting business counterparts and contract parties.
  - (3) Prepare an appropriate contract format.
  - (4) Provide a management and monitoring system to ensure that compliance with the conditions of the contract completely in order to prevent the corruption at every step of the procurement process.
- 5.2 The company intends to provide services according to professional standards with good quality, honesty and fairness.
- 5.3 The company has a policy to maintain the confidentiality of its business counterparts and contract parties in order to conduct business fairly and independently, and do not conduct business illegally between business counterparts and contract parties as well as do not bribe or provide any things to others for business benefits.
- 5.4 The company maintains conducting the business fairly. It is based on decision making criteria by comparing conditions, prices, quality, and services transparent and verifiable manner. However, it is forbidden to demand that business counterparts and contract parties give or receive any benefits in business operations.
- 5.5 The company adheres to develop and maintain sustainable relationships with business counterparts and contract parties about clear objectives in terms of product and management that is worthy of monetary value, technical quality, and mutual trust.

- 5.6 The company require to properly conduct business between its business counterparts and contract parties, and be protected by laws related to consumer protection.
6. Treatment of business competitors
- 6.1 The company has a policy to conduct business fairly and without imputing or destroying competitors.
- 6.2 The company has a policy to compete with competitors according to the rules and framework of the competition law.
7. Treatment of Customers
- 7.1 The company has a policy to create customer satisfaction on the basis of maintaining the best interests of the company.
- 7.2 The company has a policy in terms of producing and distributing tap water in order to meet the three characteristics as follow:
- (1) Cleanliness in accordance with the requirements of industrial product standards.
  - (2) Sufficiency in terms of pressure and water supply, and
  - (3) Continuity in both production processes and water supply.
- 7.3 The company will provide professional services to customers that exceed their expectations.
8. Treatment of Directors, Executives, and Employees
- 8.1 The company has a policy to determine remuneration for directors, executives, and employees at an appropriate and fair level.
- 8.2 The company pays attention on the welfare, security, and career advancement of employees.
- 8.3 The company has a policy for directors, executives and employees to be protected in performing their duties according to the law.
- 8.4 The company attempt to prevent accidents, injuries, and pain from occupation by the serious cooperation of all employees, and will limit and manage security risks that occur from working according to operating procedures.
- 8.5 The company will provide the design of tools, equipment for the preparation of training procedures and operational control by taking into account the safety of employees' life and property including the segment that the company has run business.
- 8.6 The company will cooperate with government agencies and other organizations to halt any emergency or accident resulting from operations with speed, efficiency and guardedness.
- 8.7 The company will comply with laws and regulations strictly, and will apply international standards for safety management in the case that do not have applicable laws and regulations.
9. Duties to the Community, Society, Environment and Government

9.1 The company has a policy to operate its business with consideration to the community, society, environment, and the government sector, and will comply with all applicable community, social, environmental, and governmental laws and regulations.

9.2 An omission to comply with the relevant laws, rules, and regulations may result in the person who did such omission and the company will be held legally responsible for both civil and criminal law. Such person may be received disciplinary action and be terminated in accordance with the company's regulations. Therefore, in the event that there are doubts and do not understand about such laws, rules, and regulations if such laws, rules, and regulations are applicable to themselves or not, such persons should consult with their respective supervisors to find clarification on the matter.

### 10. Conflicts of Interests

10.1 All executives and employees should avoid an action that may cause any conflict between the personal interests of the employees and the interests of the company in contact with partners and others.

10.2 Executives and employees will not use confidential information of the company to disclose to other person during the company's employment or upon leaving the company's employment without permission from the company.

10.3 Executives or employees become directors or consultants in other companies or other business association organizations whether they acts on behalf of the company or not, it must not be in direct conflict with their interests and duties and must be approved by the company according to the company's regulations.

10.4 In the case of executives or employees and family members participate or are a shareholder in any business which may have benefits or cause business conflicts with the company, such person must inform the company in writing.

10.5 In case of conflict of interest due to the events at that time and without the intention of management, employees, and related persons. If such person is aware that he or she is in such situation, he or she must report such incidents to the supervisor immediately for further solutions.

### 11. Use of inside Information for Securities Trading

Management and employees will strictly follow the document "Guidelines for the Prevention of Use of inside Information" determined by the company that will not use inside information especially important information which has not been disclosed to the public under the Securities and Exchange Act, the regulations of the Stock Exchange of Thailand, and any other relevant laws for personal benefit or third parties, which affects the price or trading of securities of the company and relevant companies.

### 12. Gambling, Drinking Alcohol, and Drugs

12.1 The Company has a policy to prohibit executives and employees from possessing, buying, selling, moving, using, or drinking alcoholic beverages, drugs, or controlled substances (except prescription drugs) while they work or conduct the business of the company except for banquets or other festive events that hold outside the company's area.

12.2 Executives and employees are prohibited from playing or being a participant in all types of gambling both inside and outside working hours or in the area of the company.

### 13. Disclosure and Confidentiality

13.1 The company has a policy to manage an information in the company effectively and publicize a necessary, accurate, and appropriate information to the public.

13.2 The company has a policy to maintain confidential information to be under the supervision of the responsible agency clearly and appropriately that includes the supervision of computer networks and software.

13.3 Employees must not disclose the company's information that have not been disclosed to the public, employees must not use any information that they has been known or prepared form their duties in the company to use for personal benefits.

Confidentiality of information including personal information of employees which means an information about income and benefits and medical information. Such information will be able to publicize to inside or outside person the company to use when it is absolutely necessary. Employees who are responsible for this personal data must comply with the said policy with extreme guardedness and keeping confidentiality strictly.

### 14. Assets of the Company

Employees should use the company's assets economically and with the maximum benefit, and do not used the company's assets for personal benefit. All employees must be responsible for supervising about the company's assets from being lost, damaged, misused, stolen, and destroyed. It does not only cover the performance of employees but also pay attention to the procedures of security and the alertness for the situation and events that may occur and cause the company's assets damaged, stolen, or misused.

Company's assets includes cash, financial instruments, company information, intellectual property, computer system software, software, electronic mail, documentation, tools, facilities, vehicles, company name, company logo, and equipment.

### 15. Other Work or Activities outside Working Hours

Employees who require to work or do activities outside of working hours must be approved by the supervisor in accordance with the company's regulations.

### 16. Gifts and Hospitality

The company has a policy to conduct business with transparency and morality. Therefore, executives and employees should not damage the company's reputation by misconducting of any action that may be a charge of honesty and fairness, the guidelines that should be complied as follow:

- 16.1 The company requires the executives and employees to avoid giving or receiving anything or any benefits from business counterparts or who are involved in the company's business, excepting in festivals or traditions and it is the suitable value which the receiver should consider.
- 16.2 In the case of executives and employees received gifts in the form of money or items of high value, they should inform their supervisors and return such gifts or items.
- 16.3 Executives or employees should avoid giving or receiving hospitality that exceeds the normal circumstance from other persons who conducts a business that is related to the company's business.

### 17. Exceptions to Comply with the Business Code of Conduct and Ethics

The violations of the business code of conduct and ethics in this handbook may also cause a violator to be penalized by the provisions of the law and related regulations, and in some cases may result in the company that the company must be responsible according to such laws and regulations. In the event of occurring of such violations, the violator is not only punished by law but may also be received disciplinary action according to the company's regulations that such violator may receive the exclusion or displacement.

### 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](mailto: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 2021, 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 August 2021 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 with consistent with the current situation and be up-to-date.

In 2021, the Board of Directors has reviewed and approved the Sub-Committees' Charters, such as the Executive Committee, Audit Committee, Risk Management and Corporate Governance Committee and Nomination and Remuneration Committee.

#### 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 2021, 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](http://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, which has been conducted since 2006, 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.

### 6.3.2 Adherence to Corporate Governance Best Practice Policy

A review of the Corporate Governance Policy in 2021 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.	

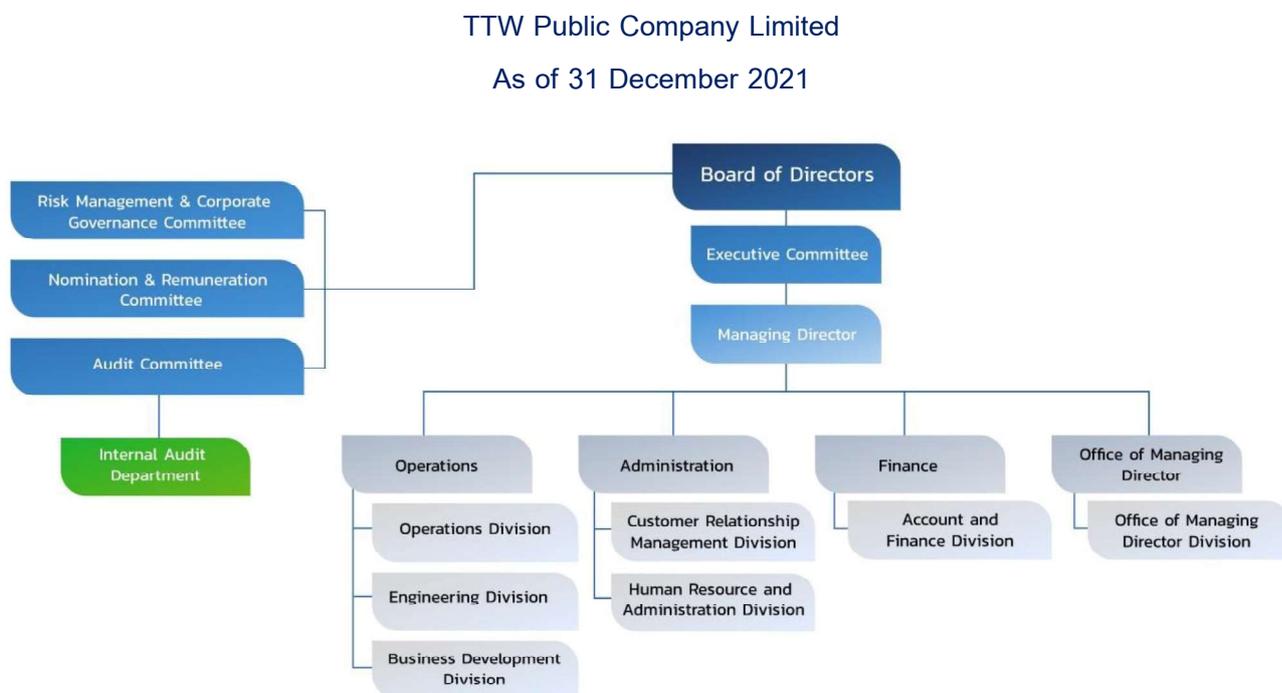
### 6.3.3 Other practices in accordance with good corporate governance' principles

In the past year, the Company's Board of Directors and all employees consistently complied with good corporate governance policies. In the year 2021, there are no situations in which the operations do not comply with the policy. As a result of this commitment, in 2021, the Company received a number of awards and accreditations for its good corporate governance as follows:

1. The Thai Institute of Directors (IOD) announced the results of their Corporate Governance Report of Thai Listed Companies for 2021 (CGR), with TTW receiving a rating of "excellent".
2. TTW was selected for the Thailand Sustainability Investment (THSI) listing for the year 2021 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 2021 Annual General Meeting of Shareholders.

7. Organizational Structure and significant information about the Board and its Sub-Committee, management, employees and others

7.1 Organizational Structure



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.

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

## Part 2 Corporate Governance Policy

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 2021, 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
<b>Total</b>	<b>12</b>	<b>100.00</b>

- 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 Tantisuvanitchkul	✓	✓	-	✓	✓	✓
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	✓	✓	✓	✓	✓	✓
<b>Total</b>	<b>12</b>	<b>8</b>	<b>5</b>	<b>12</b>	<b>12</b>	<b>12</b>

### 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.

### 5. 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 director 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 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 2021, the company's Board of Directors comprises the following 12 members:

Director	Position	Date of Appointment	Number of meeting in 2021
1. Dr.Thanong Bidaya	Independent Director and Chairman of the Board of Directors	17 December 2008	4/4
2. Mr.Plew Trivisvavet	Director and Vice Chairman of the Board of Directors	22 May 2008	4/4
3. Mr.Phongsarit Tantisuvanitchkul	Director, Chairman of the Executive Committee, and Nomination and Remuneration Committee	25 February 2019	4/4
4. Mr.Phairuch Mekarpon	Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee	22 May 2008	4/4
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	4/4
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	4/4
8. Mr.Suvich Pungchareon	Director and Executive Committee	22 May 2008	4/4
9. Mrs.Payao Marittanaporn	Director and Risk Management and Corporate Governance Committee	17 February 2015	4/4
10. Mr.Kaoru Umehara	Director and Nomination and Remuneration Committee	20 August 2020	4/4
11. Mr.Hideo Matsumoto	Director, Executive Committee, and Risk Management and Corporate Governance Committee	21 December 2017	4/4
12. Ms.Walainut Trivisvavet	Director, Executive Committee, and Risk Management and Corporate Governance Committee, and Managing Director	1 March 2018	4/4

Remark (\*) The resolution of the Board of Directors meeting no.4/2021 held on December 7, 2021 was appointed Mr.Yuttana Yimgarund to be an Independent Director, Chairman of the Nomination and Remuneration Committee and the Audit Committee in order to replace Dr.Patarut Dardarananda who resigned from his position on December 6, 2021.

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

### Authorized Directors of the Company

1. 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
2. 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 Director 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, 2021, 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 five directors, and at least one in 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 three in four 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 in 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 Scope of powers, duties, and responsibilities of the Board of Directors**

1. Supervising 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. Determining 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. Approving vision, missions, corporate values as anticipated by the Company, and the business ethics.

4. Arranging for and supervising the administration in compliance with the good corporate governance principles.

5. Considering approval for budget for investment and budget for the company's annual business operations, including monitoring the use of the company's resources.

6. Providing complete, correct, and sufficient reports on financial information, data, and general information which are important to shareholders, and affirming the certification of the reported information.

7. Arranging 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 Risk Management Committee and Nomination and Remuneration Committee as a guideline for their duties.

9. Supervising the Executive Committee, Sub-committees, and the management to comply with the specified policy.

10. Considering 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. Considering 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, 2021, the Executive Committee comprises five members, per names and number of their meeting attendances listed below:

Name	Position	Number of Meetings in 2021
1. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Executive Committee	5/5
2. Dr.Sombat Kitjalaksana	Executive Committee	5/5
3. Mr.Suvich Pungchareon	Executive Committee	5/5
4. Mr.Hideo Matsumoto	Executive Committee	5/5
5. Ms.Walainut Trivisvavet	Executive Committee and Secretary to the Executive Committee	5/5

### 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 Baht 50 (Fifty) Million 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, 2021, the Audit Committee comprises three independent directors, per names and number of their meeting attendances listed below:

Name	Position	Number of Meetings in 2021
1. Mr.Phairuch Mekarporn	Chairman of the Audit Committee	5/5
2. Mr.Somnuk Chaidejsuriya	Audit Committee	5/5
3. Mr.Yuttana Yimgarund	Audit Committee	-

Remark (\*) Mr. Yuttana Yimgarund was appointed from the Board of Directors Meeting No.4/2021 held on 7 December 2021

Dr.Patarut Dardarananda former member of the Audit Committee holding office until 6 December 2021, attended the Audit Committee Meeting 5/5 times

The Internal Audit Manager is the secretary to the 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 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 Internal Audit Committee Charter and Internal 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, 2021, the Risk Management and Corporate Governance Committee comprises 2 independent directors, 2 non-executive directors, and 1 executive director, totaling 5 persons, per names and number of their meeting attendances listed below:

Name	Position	Number of Meetings in 2021
1. Mr.Somnuk Chaidejsuriya	Chairman of the Risk Management and Corporate Governance Committee	4/4
2. Mrs.Payao Marittanaporn	Risk Management and Corporate Governance Committee	4/4
3. Mr.Phairuch Mekarporn	Risk Management and Corporate Governance Committee	4/4
4. Mr.Hideo Matsumoto	Risk Management and Corporate Governance Committee	4/4
5. Ms.Walainut Trivisvavet	Risk Management and Corporate Governance Committee and Secretary to the Risk Management and Corporate Governance Committee	4/4

#### 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 regularly report to the Board of Directors on what needs to be improved to comply with the specified policies and strategies.
- (8) 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.
- (9) To perform other duties as assigned by the Board of Directors.

#### 4. Nomination and Remuneration Committee

As of December 31, 2021, the Nomination and Remuneration Committee comprises two independent directors and two non-executive directors, totaling 4 persons, per names and number of their meeting attendances listed below:

Name	Position	Number of Meetings in 2021
1. Mr.Yuttana Yimgarund	Chairman of the Nomination and Remuneration Committee	-
2. Mr.Phongsarit Tantisuvanitchkul	Nomination and Remuneration Committee	2/2
3. Mr.Somnuk Chaidejsuriya	Nomination and Remuneration Committee	2/2
4. Mr.Kaoru Umehara	Nomination and Remuneration Committee	2/2

Remark (\*) Mr. Yuttana Yimgarund was appointed from the Board of Directors Meeting No.4/2021 held on 7 December 2021

Dr.Patarut Dardarananda former Chairman of the Nomination and Remuneration Committee holding office until 6 December 2021, attended the Audit Committee Meeting 2/2 times

The DeputyManaging Director - Administration 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-leveled 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, 2021, was as follows:

#### 1. Pathum Thani Water Company Limited : PTW

PTW's Board of Directors consisted of 5 directors, per names and number of their meeting attendance listed below:

Name	Position	Number of Meeting in 2021
1. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Board of Directors	6/6
2. Dr.Sombat Kitjalaksana	Director	6/6
3. Mr.Tanat Siricharoen	Director	6/6
4. Mr.Somkiat Pattamamongkolchai	Director	6/6
5. Ms.Walainut Trivisvavet	Director, Managing Director and Secretary	6/6

**PTW's Authorized Directors**

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

**2. Thai Water Operations Company Limited : TWO**

TWO's Board of Directors consisted of 3 directors, per names and number of their meeting attendance listed below:

Name	Position	Number of Meeting in 2021
1. Mr.Ratn Santaannop	Chairman of the Board of Directors	4/4
2. Mr.Tanat Sirichareon	Director	4/4
3. Ms.Walainut Trivisvavet	Director, Managing Director and Secretary	4/4

**TWO's Authorized Directors**

Any two of these three directors, Mr.Ratn Santaannop, Mr.Tanat Siricharoen, 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 strictly approved, 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, 2021, the Company had a total of 9 executives as follows:

Name of Executive	Position
1. Ms.Walainut Trivisvavet	Managing Director
2. Mr.Tanat Siricharoen	Deputy Managing Director, Operations Group
3. Mr.Phakpoom Thaweewittayarut	Deputy Managing Director, Administration Group
4. Mr.Somkiat Pattamamongkolchai	Deputy Managing Director, Finance Group
5. Ms.Sudarat Chiamchan	Assistant Managing Director, Office of Managing Director and Company Secretary

Name of Executive	Position
6. Mr.Hongthong Artit	Business Development Director
7. Mr.Pipat Katikul	Operations Director
8. Mr.Chatchawan Tienprasertkij	Customer Relationship Management Director
9. Mrs.Busawan Pholprasert	Acting Human Resource and Administrative Director

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

## Part 2 Corporate Governance Policy

- 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 2021, 2020 and 2019

Description	2021		2020		2019	
	No. of Executives	Amount (Baht)	No. of Executives	Amount (Baht)	No. of Executives	Amount (Baht)
Compensation	9	20,894,440	8	19,645,200	8	18,623,664
Bonus	9	6,743,390	8	4,149,650	8	6,337,352
Provident Fund	9	1,889,684	8	1,704,180	8	1,608,360
<b>Total</b>	-	<b>29,527,514</b>	-	<b>25,499,030</b>	-	<b>26,569,376</b>

### Remuneration for Executives of subsidiaries

- None -

## 7.5 Personnel

As of December 31, 2021, the company and its subsidiaries had a total of Executives and Employee as follows:

TTW Public Company Limited	141	persons
Pathum Thani Water Company Limited	29	persons
Thai Water Operations Company Limited	158	persons
<b>Total</b>	<b>328</b>	<b>persons</b>

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
<b>Office of Managing Director</b>				
Office of Managing Director	8	-	-	8
Internal Audit Division	2	-	-	2
<b>Administration Group</b>				
Human Resources and Administrative Division	28	2	-	30
Customer Relationship Management Division	14	-	-	14
<b>Finance Group</b>				
Account and Finance Division	14	-	-	14

Company's Structure	TTW	PTW	TWO	Total
Operations Group				
Operations Division	73	27	158	258
Engineering Division	-	-	-	-
Business Development Division	1	-	-	1
<b>Total</b>	<b>141</b>	<b>29</b>	<b>158</b>	<b>328</b>

In 2021, 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 forklift safety courses, chlorine leak suppression with KIT-B equipment courses, and basic maintenance and cathodic corrosion prevention courses, etc., totaling 612 hours of training and seminar.

- **External Training Courses** such as 2021 operating guidelines courses under the Skills Development Promotion Act, B.E. 2545, TW-05: Adaptive Network-based Infrastructure Attacking, Confined Space Worker courses, and Occupational Safety, Health, and Environment Committee of the Workplace courses, etc., with an average of 249 hours of training and seminars.

- **Online Training Courses** such as basic labor law that human resources professional should know, Process Control Supervisor of Bottled Drinking Water courses, Natural Mineral Water, and Edible Ice courses, S&P Global CSA (Beginner) for DJSI and S&P ESG Index courses, Company Secretary Professional Development Program 2021, Corporate Governance Report of Thai Listed Companies 2023 (CGR Workshop),

Black Rock Asia Pacific C-Suite Summit: Investing for the future (Virtual Event) courses, and Company Secretary Professional Development Program courses, etc., totaling 929 hours of training and seminar.

### Executives

- **External Training Courses** such as document preparation for human resources work in accordance with the Personal Data Protection Act B.E. 2562, Class 5, Data Analysis to Best Excellence course, Low Carbon for Sustainable Development online seminar course, and Water Distribution Pipeline Network Management and Wastewater Management course, etc.

In addition, the company also encourages employees to attend various training courses related to environmental conservation, which are the external training courses as follows: Low Carbon for Sustainable Development course, Energy Conservation course: Energy Saving in Buildings, Energy Conservation course: Energy Saving in Air Conditioning Systems, Climate Change Issues that are Driving the Business Sector courses, Low Carbon Business Support Policy course, and Fundamentals of Climate Assessment and Information-Based Risk Assessment courses, 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 2021, 2020 and 2019

Unit: Million Baht

Company	2021	2020	2019
TTW	84.60	78.97	79.62
PTW	11.71	11.43	11.55
TWO	55.65	59.54	58.25
<b>Total</b>	<b>151.96</b>	<b>149.94</b>	<b>149.42</b>

### 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:

**Health insurance and Life insurance** such as medical expense, annual physical examinations by providing an inspection program for employees of each age and gender appropriately, health insurance, life insurance, and accident insurance programs in addition to the government's social security program.

**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, first aid room, gym, and 4 strains of influenza vaccine according to the standards of the World Health Organization (WHO). In addition, in 2021, 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. Disinfectants are sprayed around the office area and water treatment plants, including the COVID-19 testing is carried out with an Antigen Test Kit (ATK) every week before all employees go to work in order 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. 2554 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.

### Environmental Quality, Occupational Safety, and Health Policies

TTW is determined to implement the environment quality, occupational safety, and health activities by emphasizing the participation of our personnel in order to ensure continuing development as follows:

1. Producing running water with quality that is responsive to the needs of customers.
2. Ensuring maximum satisfaction from direct and indirect customers.
3. Improving and developing knowledge, ability, skill, and expertise of our employees on continuing basis to ensure that they have consciousness on environment quality and occupational safety and health.

4. Complying with the laws and requirements on the nature and problems relating to the environment and work safety of the company.
5. Preventing pollution from the company's business activities that may affect the natural environment, including the efficient use of energy and resources.
6. Preventing and mitigating accidents, danger, and illness that occurred to our employees and those who involve with the operation of the company while performing the duties.
7. Preparing for any possible emergency incident and working to ensure that such incidents would not affect personnel and properties that are inside and outside of the company.

The management was responsible for supporting on budget, manpower, time sufficiently and appropriately to drive quality, environment, occupational health and safety to be in accordance with the policies, objectives, and goals set.

### 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. Every time machinery is being repaired or cleaned, said machine must be turned off completely and a "Danger. Do not start the machine." sign must be placed visibly on the machine.
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.

**Occupational Safety, 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 Occupational Safety, Health and Environment Committee as follows:

**Occupational Health, Safety and Environment Committee**

Name	Position	Position in OHSEC
1. Mr.Prem Liemsakul	Employer representatives, Executive level	Chairman of OHSEC
2. Mrs.Benjawan Rattalengsak	Employer representatives, Commanding level	Committee
3. Mr.Tanet Srisoontornthai	Employee representative Operational level	Committee
4.Mr.Phonlakit Asawawarakul	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)
2019	0	0	0
2020	0	0	0
2021	1	1.08	6,505

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 Director appointed Mr.Somkiat Pattamongkolchai who had knowledge and abilities in the fields of accounting and finance, to serve as the Deputy Managing Director, Finance Group, holding the position of top management in accounting and finance (details of his profile appear on 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: Corporate Affairs Director, to hold offices as 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 as enclosure in attachment 1.

### 3) Head of Internal Audit

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 quarter acknowledgment, and then the Chairman of the Audit Committee will report the results to the Board of Directors of the Company. Details of Head of Internal Audit as enclosure 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. Detail of the qualification of the position of the Head of Compliance can be found in attachment 3.

### 7.6.2 Investor Relations

The Company appointed Mr.Chanon Inpithuk as 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](mailto:ir@ttwplc.com)

Websit : [www.ttwplc.com](http://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. Sumalee Reewarabandith, Certified Public Accountant No. 3970, and Mrs. Poonnart Paochareon: Certified Public Accountant No. 5238, 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

Description	2021	2020	2019
Examination of annual financial statement	660,000	660,000	660,000
Review of financial statements for the first 3 quarters	600,000	600,000	600,000
Review of BOI compliance	80,000	80,000	80,000
<b>Total</b>	<b>1,340,000</b>	<b>1,340,000</b>	<b>1,340,000</b>
Review TFRS#9 and TFRS#16	-	50,000	-
Review Annual Report (Form 56-2)	80,000	80,000	80,000
<b>Grand Total</b>	<b>1,420,000</b>	<b>1,470,000</b>	<b>1,420,000</b>

#### 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 Director's Performance during 2021

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 2021, 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

Besides, the Board has delegated responsibility for managing the Company's day-to-day business and operations to the Management through the Executive Committee within the limits set out in an approval authority.

The followings are the summary of significant tasks that have been undertaken by the Board during 2021

- 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 2021
- Considered the appointment of the Company's auditor and fixed the audit fee of the year 2021.
- Called the Annual General Meeting of Shareholders for 2021.
- 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 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 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 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 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 2021, the Company notified the Stock Exchange of Thailand that at the expiration of the period for proposing directors by minority shareholders, no proposals had been received from shareholders.

### **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 2021, the Company encouraged its 3 Directors and Company Secretaries to attend the following IOD training courses.

- Director's Briefing 6/2021: Introduction to PDPA and its Awareness for Organization.
- Director's Briefing : What Your Board Needs to Know about C-Suite Succession in time of Uncertainty.
- Director's Briefing 4/2021 : Women on Boards – Why now and How to?.
- Director's Briefing 11/2021 : What Your Board Needs to Know about C-Suite Development.
- Director's Briefing 13/2021 : How Boards have Risen to the Covid-19 Challenge, and What's Next.
- Company Secretary Forum : Empowering Board Evaluation Through the Company Secretary Lens.
- The role of the Company Secretary in raising the level of CG in Anti-Corruption.

### 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 Tantisuvanitchkul			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.

### 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 of the entire Board. 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 duties of the directors, (5) relationship with 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 Corporate Governance Committee. The evaluation 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 evaluation of performance and to return to the Company for analysis and evaluation 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 evaluation 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 2021, the Board of Directors has approved the evaluation 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 members 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.4/2021 on December 7, 2021, resolved to acknowledge the self-assessment of the Board of Directors and Subcommittee for the year 2020 consisting of 6 topics as follows:

### Self-Assessment of the Board of directors as a whole

Description	Full Score	Avg. Evaluated Score	
		2021	2020
1. Board structure and qualifications	4	3.9	3.9
2. Roles, duties, and responsibilities of the Board	4	3.8	3.8
3. The Board meeting	4	3.9	3.8
4. Duties of directors	4	4.0	3.9
5. Relationship with management	4	3.9	3.8
6. Director's self-improvement and management training	4	3.8	3.8
<b>Overall Assessment</b>	<b>4</b>	<b>3.9</b>	<b>3.8</b>

### Self-Assessment of committee as a whole

Descriptions	Full Score	Avg. Evaluated Score	
		2021	2020
1. Board structure and qualifications	4	3.9	3.8
2. The committee meeting	4	3.9	3.8
3. In line with the duties and responsibilities of particular committee, the member give priority and devotes sufficient time	4	3.8	3.7
3.1 Executive committee	4	3.9	3.8
3.2 Audit committee	4	3.8	3.6
3.3 Nomination and remuneration committee	4	3.9	3.7
3.4 Risk Management and Corporate Governance committee			
<b>Overall Assessment</b>	<b>4</b>	<b>3.9</b>	<b>3.7</b>

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

Descriptions	Full Score	Avg. Evaluated Score	
		2021	2020
1. Board structure and qualifications	4	4.0	3.9
2. The committee meeting	4	4.0	3.8
3. Roles, duties, and responsibilities of the Board	4	3.9	3.8
<b>Overall Assessment</b>	<b>4</b>	<b>4.0</b>	<b>3.8</b>

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 3.9 out of 4 points and the self-assessment of the Board of Directors with an average score of self-evaluation of each director is 4.0 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 2021, this evaluation occurred at the meeting of the Board of Directors no. 4/2021, on December 7, 2021, whereby all were made aware of the performance evaluation of the Managing Director. The evaluation was carried out by non-executive directors. The performance evaluation of the Managing Director is as follows:

Description	Full Score	Avg. Evaluated Score	
		2021	2020
1. Set up & Deployed Strategy	5	4.5	4.6
2. Management & Decision Making	5	4.5	4.4
3. Communication & Relation with Stakeholder	5	4.6	5.0
4. Competency in Finance & Accounting	5	4.6	4.7
5. Performance compare with planning and targets	5	4.6	4.6
6. Self-Learning& Development	5	4.6	4.7
<b>Overall Assessment</b>	<b>5</b>	<b>4.6</b>	<b>4.67</b>

### 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 and sub-committees meetings, as well as were present at the Annual General Meeting of Shareholders for 2021. The Meeting attendance in 2021 is specified in the table below:

Attendance / Total Number of Meeting in 2021

Name of Directors	AGM	Board of Directors	Executive Committee	Audit Committee	Risk Management & Corporate Governance Committee	Nomination and Remuneration Committee	Attendance (%)
1. Dr.Thanong Bidaya	1/1	4/4	-	-	-	-	100
2. Mr.Plew Trivisvavet	1/1	4/4	-	-	-	-	100
3. Mr.Phongsarit Tantisuvanitchkul	1/1	4/4	5/5	-	-	2/2	100
4. Mr.Phairuch Mekarporn	1/1	4/4	-	5/5	4/4	-	100
5. Mr.Somnuk Chaidejsuriya	1/1	4/4	-	5/5	4/4	2/2	100
6. Dr.Sombat Kitjalaksana	1/1	4/4	4/5	-	-	-	90
7. Mr.Suvich Pungchareon	1/1	4/4	5/5	-	-	-	100
8. Mrs.Payao Marittanaporn	1/1	4/4	-	-	4/4	-	100
9. Dr.Patarut Dardarananda <sup>(1)</sup>	1/1	3/3	-	5/5	-	1/1	100
10. Mr.Yuttana Yimgarund <sup>(2)</sup>	-	-	-	-	-	-	-
11. Mr.Kaoru Umehara	1/1	4/4	-	-	-	2/2	100
12. Mr.Hideo Matsumoto	1/1	4/4	5/5	-	4/4	-	100
13. Ms.Walainut Trivisvavet	1/1	4/4	5/5	-	4/4	-	100

**Remark:** <sup>(1)</sup> Dr.Patarut Dardarananda resigned from the Board of Directors on 6 December 2021

<sup>(2)</sup> Mr.Yuttana Yimgarund was appointed as the Board of Directors on 7 December 2021

In the year 2021, the Company held 20 meetings of the Board of Directors, with the average attendance of the entire Board of Directors meeting attendance at 99% and the average attendance ratio of the Individual Directors meeting at 99% of the total number of meetings. There was one non-executive meeting held without any other management present; this was Board Meeting no. 4/2021 held on December 7, 2021. In summary, throughout 2021 and 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 the duties and responsibilities of the Board of Directors approved by the shareholders. The Nomination and Remuneration Committee shall consider

the type of remuneration guidelines and payment methods compensation and other benefits for the Board of Directors, subcommittee and executive managements to be appropriate with the responsibilities consistent with the company's performance including market conditions and propose to the shareholders meeting for approval 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 business of the company, markets, and competitors, the remuneration must be at the appropriate with 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 able to perform their duties to achieve the goal according to the business direction of the company. Which defines the composition of compensation in two 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 2021, the company paid the compensations to directors a total of 20,294,000 Baht, which comprised 5,650,000 Baht as the Retainer Fee, 1,339,000 Baht as the Attendance Fee, and 13,305,000 Baht as the Bonus for the year 2020.

### Compensation paid to each directors in 2021

(Unit : Baht)

Director Name	Position	Retainer Fee	Attendance Fee	Total	Bonus (2020)	Total
1. Dr.Thanong Bidaya	Independent Director, and Chairman of the Board of Directors	800,000	136,000	936,000	1,600,000	2,536,000
2. Mr. Plew Trivisvavet	Director, and Vice Chairman of the Board of Directors	700,000	68,000	768,000	1,400,000	2,168,000
3. Mr. Phongsarit Tantisuvanitchkul	Director, Chairman of the Executive Committee, and Nomination and Remuneration Committee	600,000	158,000	758,000	1,263,000	2,021,000
4. Mr.Phairuch Mekarporn	Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee	500,000	128,000	628,000	1,181,000	1,809,000

Director Name	Position	Retainer Fee	Attendance Fee	Total	Bonus (2020)	Total
5. Dr.Patarut Dardarananda <sup>(1)</sup>	Former Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee	419,430	81,000	500,430	1,068,000	1,568,430
6. Mr.Yuttana Yimgarund <sup>(2)</sup>	Independent Director, Chairman of the Nomination and Remuneration Committee, and Audit Committee	30,570	-	30,570	-	30,570
7. Mr.Somnuk Chaidejsuriya	Independent Director, Chairman of the Risk Management and Corporate Governance Committee, Audit Committee, and Nomination and Remuneration Committee	500,000	138,000	638,000	1,175,000	1,813,000
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	108,000	458,000	900,000	1,358,000
10. Mrs.Payao Marittanaporn	Director, and Risk Management and Corporate Governance Committee	300,000	88,000	388,000	881,000	1,269,000
11.Mr.Shunsuke Murai	Former Director, and Nomination and Remuneration Committee	-	-	-	475,000	475,000
12.Mr.Kaoru Umehara	Director, and Nomination and Remuneration Committee	300,000	78,000	378,000	275,000	653,000
13. Mr.Hideo Matsumoto	Director, Executive Committee, and Risk Management and Corporate Governance Committee	400,000	128,000	528,000	1,050,000	1,578,000
14. Ms.Walainut Trivisvavet	Director, Executive Committee, Risk Management and Corporate Governance Committee, and Managing Director	400,000	128,000	528,000	1,137,000	1,665,000
<b>Total</b>		<b>5,650,000</b>	<b>1,339,000</b>	<b>6,989,000</b>	<b>13,305,000</b>	<b>20,294,000</b>

**Remark :**

1) Dr.Patarut Dardarananda was appointed as the Chairman of the Nomination and Remuneration Committee since 1 August 2020 to 6 December 2021.

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

**Comparison of Compensations paid to Directors in 2021, 2020, and 2019**

Description	2021		2020		2019	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	13	5,650,000	13	6,200,666	12	6,312,000
Attendance Fee	12	1,339,000	13	1,526,400	12	1,554,450
Incentive Fee / Bonus	14	13,305,000	13	18,420,000	15	18,115,016
<b>Total</b>	<b>-</b>	<b>20,294,000</b>	<b>-</b>	<b>26,147,066</b>	<b>-</b>	<b>25,981,466</b>

**b. Other remuneration and benefits**

- None -

### Remuneration for directors of subsidiaries

In 2021, the subsidiaries paid remuneration to its directors and executives as follows:

#### 1. Pathum Thani Water Company Limited

##### a. Directors's remuneration

##### 1) Monetary remuneration

Director Name	Position	Retainer Fee	Attendance Fee	Total	Bonus (2020)	Total
1. Mr.Phairuch Mekarporn	Former Chairman of the Board of Directors	-	-	-	396,038	396,038
2. Mr.Phongsarit Tantisuvanitchkul	Chairman of the Board of Directors	285,600	71,400	357,000	253,962	610,962
3. Mr.Chayodom Kanchanomai	Former Vice Chairman of the Board of Directors	-	-	-	570,492	570,492
4. Mr.Luckchai Pattamacharoen	Vice Chairman of the Board of Directors	176,172	53,550	229,722	29,508	259,230
5. Dr.Patarut Dardarananda	Former Director	-	-	-	243,716	243,716
6. Dr.Sombat Kitjalaksana	Director	190,400	47,600	238,000	156,284	394,284
7. Mr.Chaiwat Utaiwan	Former Director	-	11,900	11,900	299,454	311,354
8. Mr.Tanat Siricharoen	Director	190,400	47,600	238,000	100,546	338,546
9. Mr.Hideo Matsumoto	Former Director	-	-	-	299,454	299,454
10.Mr.Somkiat Pattamongkolchai	Director	190,400	47,600	238,000	100,546	338,546
11. Ms.Walainut Trivisvavet	Director, and Managing Director	190,400	47,600	238,000	400,000	638,000
<b>Total</b>		<b>1,223,372</b>	<b>327,250</b>	<b>1,550,622</b>	<b>2,850,000</b>	<b>4,400,622</b>

#### Comparison of Compensations paid to PTW's Directors in 2021, 2020, and 2019

Description	2021		2020		2019	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	6	1,223,372	11	1,332,800	6	1,305,298
Attendance Fee	7	327,250	11	303,450	6	290,624
Incentive Fee / Bonus	11	2,850,000	6	4,080,233	6	4,039,479
<b>Total</b>	<b>-</b>	<b>4,400,622</b>	<b>-</b>	<b>5,716,483</b>	<b>-</b>	<b>5,635,401</b>

##### 2) Other remuneration and benefits

- None -

#### 2. Thai Water Operations Company Limited

##### a. Directors' remuneration

##### 1) Monetary remuneration

In 2021, there is no remuneration for the directors of Thai Water Operations Company Limited.

Comparison of Compensations paid to TWO's Directors in 2021, 2020, and 2019

Description	2021		2020		2019	
	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)	No. of Directors	Amount (Baht)
Retainer Fee	-	-	4	270,000	4	540,000
Attendance Fee	-	-	-	-	-	-
Incentive Fee / Bonus	-	-	4	570,000	4	570,000
Total	-	-	-	840,000	-	1,110,000

2) Other remuneration and benefits

- None -

8.1.3 Corporate Governance Concerning 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 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.

### 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.

In 2021, the Directors, executives, and employees of the Company strictly complied with the guidelines for the prevention of internal information usage and, no trading was carried out utilizing internal data in any way.

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 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, coupled with the use of common sense and appropriate reasons for committing an action on a case by case basis. 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, 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 with, 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.

### 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 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 important Company 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, 2021

Director / Executive	Position	TTW shares held as of December 31, 2020	Increase/ (Decrease) in TTW shares held in 2021	TTW shares held as of December 31, 2021	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. Tanat Sirichareon	Deputy Managing Director, Operations Group	-	-	-	-
Spouse and minor children		-	-	-	-
Mr. Phakpoom Thaweewittayarut	Deputy Managing Director, Administration Group	3,000	(3,000)	-	-
Spouse and minor children		-	-	-	-
Mr. Somkiat Pattamamongkolchai	Deputy Managing Director, Finance 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. Pipat Katikul	Operations Director	-	-	-	-
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		-	-	-	-

### 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 2021, the Risk Management Committee assessed the potential for corruption. By assessing the risk of corruption, separated from other risks, in particular, and reporting risks to the Board of Directors with an internal audit unit to supervise the implementation of the risk assessment report.

#### Training and Communication

In 2021, the Company communicated and organized training to educate employees regarding anti-corruption policies and all related policies. This included the publication of anti-corruption articles and guidelines, outlining good practices for employees at all levels articles, lectures: regarding anti-corruption practices during 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 news Boards within the Company.

#### 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 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 follow.

### 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](mailto: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 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. Working group assigned will consider screening information to propose steps and proper management methods.

3. The working group that has been assigned to present the measures that have violated or not complied with the code of conduct and 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 stakeholders who are the complainants if the complainant discloses himself.

In 2021, there were no complaints from stakeholders.

## 8.2 Report of the Audit Committee's Performance 2021

### 8.2.1 Number of meetings' attendance:

Name	Position	Number of Meetings in 2021
1. Mr.Phairuch Mekarporn	Chairman of the Audit Committee	5/5
2. Mr.Somnuk Chaidejsuriya	Audit Committee	5/5
3. Mr.Yuttana Yimgarund	Audit Committee	-

Remark (\*) Mr. Yuttana Yimgarund was appointed from the Board of Directors Meeting No.4/2021 held on 7 December 2021

Dr.Patarut Dardarananda former member of the Audit Committee holding office until 6 December 2021, attended the Audit Committee Meeting 5/5 times

### 8.2.2 Report of the Audit Committee's Performance

Audit Committee As of 31 December 2021	Summary of key duties and responsibilities
Mr. Phairuch Mekarporn (Chairman) Mr. Somnuk Chaidejsuriya Mr. Yuttana Yimgarund	<p>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:</p> <ol style="list-style-type: none"> <li>1. Review the Company's financial reports to ensure the correctness.</li> <li>2. Review the internal control and internal audit systems of the Company to ensure the suitability and efficiency.</li> <li>3. Review the Company's operations in accordance with the requirements, laws, regulations, and policies that are related to the Company's business.</li> <li>4. Consider disclosing information in case of connected transactions or transactions that may have conflicts of interest to ensure accuracy, completeness, and timeliness.</li> <li>5. Consider the qualification, performance, and independence of auditors.</li> <li>6. Consider the performance of the internal audit unit under the scope of powers, duties, and responsibilities according to the Audit Committee Charter</li> </ol>

The Audit Committee's performance report can be considered from Attachment 6: the Audit Committee Report.

### 8.3 Summary of other sub-committees's 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 As of 31 December 2021	Summary of key duties and responsibilities
<p><b>Executive Committee</b> Mr. Phongsarit Tantisuvanitchkul (Chairman) Dr. Sombat Kitjalaksana Mr. Suvich Pungchareon Mr. Hideo Matsumoto</p>	<p>The Board of Directors is responsible for considering the company's strategy, goals, and business plans, including monitoring the company's performance and financial position and supervising the company's operations in accordance with the vision, mission, strategy, and policies of the Board of Directors and the laws, rules, and regulations of the company.</p> <p>The information on the attendance number of the Executive Committee can be considered from Item 8.1.2: Board of Directors' Attendance.</p>
<p><b>Risk Management and Corporate Governance Committee</b> Mr. Somnuk Chaidejsuriya (Chairman) Mr. Phairuch Mekarporn Mrs. Payao Marittanaporn Mr. Hideo Matsumoto Ms. Walainut Trivisvavet</p>	<p>The Risk Management and Corporate Governance Committee is responsible for stipulating risk management policies and assessing, monitoring, and controlling the company's overall risks to an acceptable level, as well as supervising the performance of the Board of Directors and the management in accordance with the principles of good corporate governance and supervising the performance of the corporate social responsibility units.</p> <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 Risk Management and Corporate Governance Committee performance report can be considered from Attachment 6.</p>
<p><b>Nomination and Remuneration Committee</b> Mr. Yuttana Yimgarund (Chairman) Mr. Somnuk Chaidejsuriya Mr. Phongsarit Tantisuvanitchkul Mr. Kaoru Umehara</p>	<p>The Nomination and Remuneration Committee is responsible for considering the process of director nomination, reviewing the composition of the Board of Directors, considering the succession plan, and evaluating the Board of Directors' performance.</p> <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 Nomination and Remuneration Committee performance report can be considered from Attachment 6.</p>

### 9. Internal Control and Related Party Transactions

#### 9.1 Internal Control

TTW's Board of Directors and the management team recognize the importance of internal control and risk management systems. If the business operation may occur risk, all departments in the Company must have measures to manage such risk. Nowadays, the natural environment is changing and increasing in severity, including the occurrence of disease, which may affect business operations directly or indirectly, or may affect the economy and society in terms of performance. Each department in the organization must determine measures to reduce the risk to a reduced or acceptable level and monitor whether the specified measures are implemented and effective in good control and risk management to ensure that the performance can be carried out and achieve the objectives which will result in stable and sustainable business growth with efficiency and effectiveness. If the company has an efficient and appropriate resource management and control system, the company will be able to achieve its goals.

The Board of Directors recognizes the importance of internal control systems and assigns the Auditing Committee, which comprises 3 independent committee members, to supervise the internal control system of the company efficiently and correctly in accordance with good corporate governance principles, transparency, precision, and reliability. At the meeting on November 10, 2020, the Board of Directors resolved to approve a total of 5 internal auditing plans. In 2021, the internal audit section performed 5 internal audits. The Company has an Internal Audit Section, and the manager of this section has completed training courses relating to internal audit. The company's internal audit department is the inspector in accordance with the plan approved by the Audit Committee. After the audit is completed, the Internal Audit Section shall report the results of the audit to the Managing Director. The Internal Audit Section shall also report the results of the internal audit directly to the Company's Auditing Committee in order to ensure independence in performing the audit.

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, which is widely recognized in respect of principle and content of assessment in 2021.

#### 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, 2021, 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 2021 (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, 2021	Accounting Period Ended December 31, 2020	
<b>Tap Water and wastewater treatment</b>			
• Accounts receivable	17.0	17.3	• 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	80.0	54.9	
• Service income	20.7	14.2	
<b>Improvement of water supply project</b>			
• Project costs during construction	88,715.9	441,586.0	• 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	36,344.2	-	
			• TTW's subsidiaries engaged CK to improve the water supply and distribution system at Pathum Thani water treatment plant amount 340 million baht, period of 18 months, which the price had been considered by independent engineering as a reasonable price.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2021	Accounting Period Ended December 31, 2020	
			<ul style="list-style-type: none"> <li>• 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 .</li> </ul>

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

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2021	Accounting Period Ended December 31, 2020	
<b>Investment in PTW</b> <ul style="list-style-type: none"> <li>• Dividend income</li> <li>• Management income</li> <li>• Interest income</li> <li>• Long term loans</li> <li>• Interest receivable</li> </ul>	<p>938,385.5</p> <p>6,000.0</p> <p>3,007.6</p> <p>57,160.0</p> <p>10.2</p>	<p>963,533.7</p> <p>6,000.0</p> <p>5,226.2</p> <p>114,300.0</p> <p>20.3</p>	<ul style="list-style-type: none"> <li>• 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</li> <li>• 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.</li> <li>• 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.</li> </ul>

**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 2 common Executives, namely: (1) Ms.Walainut Trivisvavet and (2) Mr.Tanat Siricharoen.

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2021	Accounting Period Ended December 31, 2020	
Engagement for the production and wastewater treatment systems Management <ul style="list-style-type: none"> <li>• Sale and service cost</li> <li>• Security bond creditor</li> <li>• Administration cost income</li> </ul>	37,301.4  5,000.0  10,527.0	36,731.6  5,000.0  11,043.0	<ul style="list-style-type: none"> <li>• 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.</li> <li>• 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.</li> </ul>

**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, 2021, 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, 2021	Accounting Period Ended December 31, 2020	
<ul style="list-style-type: none"> <li>• Dividend income</li> </ul>	71,076.6	60,923.0	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

**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, 2021	Accounting Period Ended December 31, 2020	
<b>Tap water sales and waste water treatment</b> <ul style="list-style-type: none"> <li>• Trade receivables</li> <li>• Sales of treated water income</li> <li>• Service income</li> </ul>	4,339.4  43,459.6  2,809.5	4,357.7  47,203.7  3,051.6	<ul style="list-style-type: none"> <li>• Tap water and wastewater treatment service charges at the rate as specified in the Notification of the Industrial Estate Authority of Thailand.</li> </ul>

**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, 2021	Accounting Period Ended December 31, 2020	
<b>Tap Water sales and waste water treatment</b> <ul style="list-style-type: none"> <li>• Trade receivables</li> <li>• Sales of treated water income</li> <li>• Service income</li> </ul>	-  5.7  1.5	1.3  15.5  4.0	<ul style="list-style-type: none"> <li>• Tap water and wastewater treatment service charges at the rate as specified in the Notification of the Industrial Estate Authority of Thailand.</li> </ul>

**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.

## Part 2 Corporate Governance Policy

Transaction	Transaction Volume (Thousand Baht)		Transaction Nature / Necessity and Justification
	Accounting Period Ended December 31, 2021	Accounting Period Ended December 31, 2020	
<p>Lease of area in Industrial Estate for new raw water pumping station construction and laying raw water pipelines</p> <ul style="list-style-type: none"> <li>Land rental</li> </ul>	1,320.0	1,200.0	<ul style="list-style-type: none"> <li>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.</li> </ul>
<p>Service Fee</p> <ul style="list-style-type: none"> <li>Service Fee</li> </ul>	1,326.3	1,326.3	<ul style="list-style-type: none"> <li>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.</li> </ul>
<p>Memorandum of agreement for payment of construction costs Bang Pa-In Industrial Estate Flood Protection Dam</p> <ul style="list-style-type: none"> <li>Service Fee</li> <li>Trade payables and Other payables</li> </ul>	1,542.9 275.1	1,543.5 275.3	<ul style="list-style-type: none"> <li>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.</li> </ul>
<p>Pumping Service</p> <ul style="list-style-type: none"> <li>Service Fee</li> <li>Trade payables and Other payables</li> </ul>	2,501.5 465.0	2,485.0 429.8	<ul style="list-style-type: none"> <li>BLDC pumps the treated wastewater into the public railways to TTW at a comparable cost to the actual cost.</li> </ul>
<p>Tap Water sales and waste water treatment</p> <ul style="list-style-type: none"> <li>Sales of treated water income</li> <li>Service income</li> </ul>	1,194.5 304.8	1,172.9 319.6	<ul style="list-style-type: none"> <li>Water supply and wastewater treatment fees are charged at a rate that equates to other customers in Bang Pa-in Industrial Estate.</li> </ul>

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, 2021	Accounting Period Ended December 31, 2020	
<b>Solar rooftop electricity generation project</b> <ul style="list-style-type: none"> <li>• Electricity cost</li> <li>• Accrued expenses</li> </ul>	12,912.6  1,203.1	13,614.1  1,128.4	<ul style="list-style-type: none"> <li>• 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.</li> </ul>

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, 2021	Accounting Period Ended December 31, 2020	
<b>Raw material cost</b> <ul style="list-style-type: none"> <li>• Chemical cost</li> <li>• Trade payables and Other payables</li> </ul>	8,456.7  1,432.5	9,321.4  2,028.5	<ul style="list-style-type: none"> <li>• Chemical price is the selling price that is comparable to what the company buys from other general sellers in the market.</li> </ul>



Part 3  
Financial  
Statements

### 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.

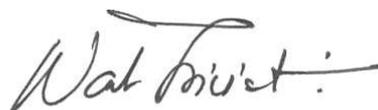
The Board of Directors had delegated this responsibility to the Audit Committee which comprises qualified and experienced independent director with qualifications that fully meet the requirement of the Securities and Exchange Commission and related rules and regulations. The Audit Committee oversaw the internal control process to ensure its effectiveness and efficiency. They had also reviewed the financial statement for its accuracy, reliability and adequately disclosed 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 2021 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 2021, 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 2021, 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 as issued by the Federation of Accounting Professions as relevant to my audit of the financial statements, and I have fulfilled my other ethical responsibilities in accordance with the Code. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

### **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 995 million (Separate financial statements: Baht 530 million), of which the expenses during this year accounted for 42% of total expenses in the consolidated financial statements (35% 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 affect 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: 22 February 2022

TTW Public Company Limited and its subsidiaries

Statement of financial position

As at 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	7	66,762,188	91,969,201	56,255,966	86,240,045
Trade and other receivables	6, 8	514,176,972	557,910,547	356,501,108	377,588,129
Current portion of long-term loans to related party and interest receivable	6	-	-	57,170,179	57,160,299
Raw materials and supplies	9	25,043,636	26,184,756	14,520,410	14,679,939
Other current financial assets	10	3,596,937,742	3,311,925,335	2,645,282,783	2,346,040,003
Other current assets		25,775,192	29,039,472	21,919,314	24,545,535
<b>Total current assets</b>		<b>4,228,695,730</b>	<b>4,017,029,311</b>	<b>3,151,649,760</b>	<b>2,906,253,950</b>
<b>Non-current assets</b>					
Long-term loans to related party, net of current portion	6	-	-	-	57,160,000
Other non-current financial assets	11	4,350,000	12,775,000	-	-
Investments in subsidiaries	12	-	-	1,472,091,587	1,693,585,736
Investment in associate	13	6,219,581,998	5,954,960,757	5,218,706,282	5,218,706,282
Property, plant and equipment	14	973,209,214	870,535,587	785,323,140	791,518,922
Assets for production of treated water with public sector agency:					
Assets that are owned by the Company	15	8,589,844,176	8,965,354,337	8,589,844,176	8,965,354,337
Assets that must be transferred at end of concession of subsidiary	16	1,039,022,681	1,346,521,003	-	-
Rights to produce and sell treated water and treat waste water from private sector agency	17	1,029,071,471	1,081,618,436	1,029,071,471	1,081,618,436
Rights to produce and sell treated water from business acquisition	18	348,233,006	542,693,038	-	-
Intangible assets	19	10,799,525	11,958,702	-	-
Deferred tax assets	28	4,916,736	5,270,213	-	-
Advance payment to subcontractor - related party	6	36,344,230	23,268,100	36,344,230	-
Other non-current assets		19,827,983	10,453,049	3,052,941	6,226,704
<b>Total non-current assets</b>		<b>18,275,201,020</b>	<b>18,825,408,222</b>	<b>17,134,433,827</b>	<b>17,814,170,417</b>
<b>Total assets</b>		<b>22,503,896,750</b>	<b>22,842,437,533</b>	<b>20,286,083,587</b>	<b>20,720,424,367</b>

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**
**Statement of financial position (continued)**
**As at 31 December 2021**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
<b>Liabilities and shareholders' equity</b>					
<b>Current liabilities</b>					
Trade and other payables	6, 20	129,712,834	204,991,415	88,909,737	134,580,581
Current portion of long-term loans	21	460,000,000	760,000,000	460,000,000	760,000,000
Current portion of debentures	22	2,000,000,000	-	2,000,000,000	-
Current portion of lease liabilities	23	11,059,693	11,165,584	9,281,986	9,034,535
Income tax payable		291,118,055	296,782,239	218,169,128	213,385,460
Accrued interest		63,536,058	63,607,016	63,536,058	63,607,016
Other current liabilities		66,169,405	69,512,922	46,150,336	47,441,078
<b>Total current liabilities</b>		<b>3,021,596,045</b>	<b>1,406,059,176</b>	<b>2,886,047,245</b>	<b>1,228,048,670</b>
<b>Non-current liabilities</b>					
Retention payable - subsidiary	6	-	-	5,000,000	5,000,000
Long-term loans, net of current portion	21	1,640,000,000	2,100,000,000	1,640,000,000	2,100,000,000
Debentures, net of current portion	22	3,397,806,704	5,396,523,382	3,397,806,704	5,396,523,382
Lease liabilities, net of current portion	23	51,047,071	60,578,185	45,844,295	53,597,703
Provision for long-term employee benefits	24	73,379,121	62,271,119	47,816,192	35,697,678
Deferred tax liabilities	28	124,908,676	117,397,423	108,279,043	95,684,434
<b>Total non-current liabilities</b>		<b>5,287,141,572</b>	<b>7,736,770,109</b>	<b>5,244,746,234</b>	<b>7,686,503,197</b>
<b>Total liabilities</b>		<b>8,308,737,617</b>	<b>9,142,829,285</b>	<b>8,130,793,479</b>	<b>8,914,551,867</b>

The accompanying notes are an integral part of the financial statements.

## TTW Public Company Limited and its subsidiaries

## Statement of financial position (continued)

As at 31 December 2021

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
<b>Shareholders' equity</b>					
<b>Share capital</b>					
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		6,148,710,378	5,441,451,795	3,437,289,740	3,087,872,132
Other components of shareholders' equity		(712,824,379)	(504,204,818)	-	-
Equity attributable to owners of the Company		14,153,886,367	13,655,247,345	12,155,290,108	11,805,872,500
Non-controlling interests of the subsidiaries		41,272,766	44,360,903	-	-
<b>Total shareholders' equity</b>		<b>14,195,159,133</b>	<b>13,699,608,248</b>	<b>12,155,290,108</b>	<b>11,805,872,500</b>
<b>Total liabilities and shareholders' equity</b>		<b>22,503,896,750</b>	<b>22,842,437,533</b>	<b>20,286,083,587</b>	<b>20,720,424,367</b>
		-	-	-	-

The accompanying notes are an integral part of the financial statements.

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Directors

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**TTW Public Company Limited and its subsidiaries**
**Statement of comprehensive income**
**For the year ended 31 December 2021**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
<b>Profit or loss:</b>					
<b>Revenues</b>					
Sales of treated water to public sector agency:					
Sales of treated water - minimum offtake quantities		5,092,028,057	5,126,926,939	3,428,598,957	3,441,906,859
Sales of treated water - above minimum offtake quantities		388,149,113	729,810,640	294,476,847	445,648,261
Sales of treated water to private sector agencies		202,222,569	202,679,433	202,222,569	202,679,433
Total sales of treated water	29	5,682,399,739	6,059,417,012	3,925,298,373	4,090,234,553
Service income		123,673,267	120,237,398	41,055,006	40,034,644
Dividend income	12, 13.1	-	-	1,009,462,131	1,024,456,521
Other income		11,681,278	13,291,821	22,674,928	26,268,301
<b>Total revenues</b>		<b>5,817,754,284</b>	<b>6,192,946,231</b>	<b>4,998,490,438</b>	<b>5,180,994,019</b>
<b>Expenses</b>					
Cost of sales of treated water and services		1,844,646,460	1,861,674,233	1,025,465,957	1,060,615,012
Administrative expenses		255,301,401	263,911,682	216,870,134	224,729,529
Amortisation of investments in subsidiaries	12	-	-	221,494,149	222,100,982
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	17	51,874,965	51,415,245	51,874,965	51,415,245
Amortisation of rights to produce and sell treated water from business acquisition	18	194,460,032	195,480,491	-	-
<b>Total expenses</b>		<b>2,346,282,858</b>	<b>2,372,481,651</b>	<b>1,515,705,205</b>	<b>1,558,860,768</b>
<b>Operating profit</b>		<b>3,471,471,426</b>	<b>3,820,464,580</b>	<b>3,482,785,233</b>	<b>3,622,133,251</b>
Share of profit from investment in associate	13.1	544,317,400	101,097,638	-	-
Finance income		4,631,501	10,170,447	6,016,331	11,520,681
Finance cost		(249,486,104)	(274,534,160)	(249,039,843)	(274,359,356)
<b>Profit before income tax expenses</b>		<b>3,770,934,223</b>	<b>3,657,198,505</b>	<b>3,239,761,721</b>	<b>3,359,294,576</b>
Income tax expenses	28	(650,959,542)	(685,387,474)	(490,434,698)	(508,994,486)
<b>Profit for the year</b>		<b>3,119,974,681</b>	<b>2,971,811,031</b>	<b>2,749,327,023</b>	<b>2,850,300,090</b>

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**  
**Statement of comprehensive income (continued)**  
**For the year ended 31 December 2021**

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2021	2020	2021	2020
<b>Other comprehensive income:</b>					
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>					
Share of other comprehensive income from associate	13.1	(208,619,561)	16,210,698	-	-
<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)	-
<b>Other comprehensive income for the year</b>		<b>(211,749,188)</b>	<b>16,210,698</b>	<b>(6,385,967)</b>	<b>-</b>
<b>Total comprehensive income for the year</b>		<b>2,908,225,493</b>	<b>2,988,021,729</b>	<b>2,742,941,056</b>	<b>2,850,300,090</b>
<b>Profit attributable to:</b>					
Equity holders of the Company		3,103,911,658	2,951,464,151	2,749,327,023	2,850,300,090
Non-controlling interests of the subsidiaries		16,063,023	20,346,880		
		<b>3,119,974,681</b>	<b>2,971,811,031</b>		
<b>Total comprehensive income attributable to:</b>					
Equity holders of the Company		2,892,162,470	2,967,674,849	2,742,941,056	2,850,300,090
Non-controlling interests of the subsidiaries		16,063,023	20,346,880		
		<b>2,908,225,493</b>	<b>2,988,021,729</b>		
<b>Basic earnings per share</b>					
	30				
Profit attributable to equity holders of the Company		0.78	0.74	0.69	0.71
Weighted average number of ordinary shares		3,990,000,000	3,990,000,000	3,990,000,000	3,990,000,000

The accompanying notes are an integral part of the financial statements.

TTW Public Company Limited and its subsidiaries  
Statement of changes in shareholders' equity  
For the year ended 31 December 2021

(Unit: Baht)

Consolidated financial statements											
Equity attributable to owners of the Company											
	Issued and paid-up share capital	Share premium	Appropriated - statutory reserve	Retained earnings		Share of other comprehensive income from associate	Difference on reorganisation of business of group companies	Total other components of shareholders' equity	Total equity attributable to owners of the Company	Equity attributable to non-controlling interests of the subsidiaries	Total shareholders' equity
				Appropriated - other reserve	Unappropriated						
<b>Balance as at 1 January 2020</b>	3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	4,883,552,137	79,947,350	(600,362,866)	(520,415,516)	13,081,136,989	43,678,423	13,124,815,412
Profit for the year	-	-	-	-	2,951,464,151	-	-	-	2,951,464,151	20,346,880	2,971,811,031
Other comprehensive income for the year	-	-	-	-	-	16,210,698	-	16,210,698	16,210,698	-	16,210,698
Total comprehensive income for the year	-	-	-	-	2,951,464,151	16,210,698	-	16,210,698	2,967,674,849	20,346,880	2,988,021,729
Dividend paid	-	-	-	-	(2,393,564,493)	-	-	-	(2,393,564,493)	-	(2,393,564,493)
Decrease in non-controlling interests of the subsidiary from dividend payment of the subsidiary	-	-	-	-	-	-	-	-	-	(19,664,400)	(19,664,400)
<b>Balance as at 31 December 2020</b>	3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	5,441,451,795	96,158,048	(600,362,866)	(504,204,818)	13,655,247,345	44,360,903	13,699,608,248
<b>Balance as at 1 January 2021</b>	3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	5,441,451,795	96,158,048	(600,362,866)	(504,204,818)	13,655,247,345	44,360,903	13,699,608,248
Profit for the year	-	-	-	-	3,103,911,658	-	-	-	3,103,911,658	16,063,023	3,119,974,681
Other comprehensive income for the year	-	-	-	-	(3,129,627)	(208,619,561)	-	(208,619,561)	(211,749,188)	-	(211,749,188)
Total comprehensive income for the year	-	-	-	-	3,100,782,031	(208,619,561)	-	(208,619,561)	2,892,162,470	16,063,023	2,908,225,493
Dividend paid	-	-	-	-	(2,393,523,448)	-	-	-	(2,393,523,448)	-	(2,393,523,448)
Decrease in non-controlling interests of the subsidiary from dividend payment of the subsidiary	-	-	-	-	-	-	-	-	-	(19,151,160)	(19,151,160)
<b>Balance as at 31 December 2021</b>	3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	6,148,710,378	(112,461,513)	(600,362,866)	(712,824,379)	14,153,886,367	41,272,766	14,195,159,133

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**  
**Statement of changes in shareholders' equity (continued)**  
**For the year ended 31 December 2021**

(Unit: Baht)

	Note	Separate financial statements						Total shareholders' equity
		Issued and paid-up share capital	Share premium	Retained earnings		Unappropriated	Total	
				Appropriated - statutory reserve	Appropriated - other reserve			
<b>Balance as at 1 January 2020</b>		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	2,631,136,535	11,349,136,903	
Profit for the year		-	-	-	-	2,850,300,090	2,850,300,090	
Other comprehensive income for the year		-	-	-	-	-	-	
Total comprehensive income for the year		-	-	-	-	2,850,300,090	2,850,300,090	
Dividend paid	33	-	-	-	-	(2,393,564,493)	(2,393,564,493)	
<b>Balance as at 31 December 2020</b>		<u>3,990,000,000</u>	<u>2,637,769,601</u>	<u>399,000,000</u>	<u>1,691,230,767</u>	<u>3,087,872,132</u>	<u>11,805,872,500</u>	
<b>Balance as at 1 January 2021</b>		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)	
<b>Balance as at 31 December 2021</b>		<u>3,990,000,000</u>	<u>2,637,769,601</u>	<u>399,000,000</u>	<u>1,691,230,767</u>	<u>3,437,289,740</u>	<u>12,155,290,108</u>	

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**
**Cash flows statement**
**For the year ended 31 December 2021**

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2021	2020	2021	2020
<b>Cash flows from operating activities</b>				
Profit before tax	3,770,934,223	3,657,198,505	3,239,761,721	3,359,294,576
Adjustments to reconcile profit before tax to net cash provided by (paid from) operating activities:				
Depreciation and amortisation	982,648,657	919,603,338	509,590,284	509,398,653
Reversal of allowance for expected credit losses	(129,543)	(213,841)	-	-
Amortisation of investments in subsidiaries	-	-	221,494,149	222,100,982
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	51,874,965	51,415,245	51,874,965	51,415,245
Amortisation of rights to produce and sell treated water from business acquisition	194,460,032	195,480,491	-	-
Gain on sales/written off of equipment	(1,016,770)	(1,608,389)	(841,504)	(324,441)
Gain on fair value adjustments of financial assets	(5,769,951)	(1,728,693)	(4,523,885)	(1,927,502)
Share of profit from investment in associate	(544,317,400)	(101,097,638)	-	-
Dividend income	-	-	(1,009,462,131)	(1,024,456,521)
Write-off withholding tax deducted at source	2,579,062	1,943,312	-	-
Provision for long-term employee benefits	8,586,368	8,267,240	5,319,055	4,808,146
Finance cost	249,486,104	274,534,160	249,039,843	274,359,356
Profit from operating activities before changes in operating assets and liabilities	4,709,335,747	5,003,793,730	3,262,252,497	3,394,668,494
Operating assets (increase) decrease				
Trade and other receivables	43,863,118	11,858,607	21,097,141	8,536,032
Raw materials and supplies	1,141,120	1,018,623	159,529	825,342
Other current assets	3,264,280	(4,783,892)	2,626,221	(4,726,144)
Other non-current assets	(11,829,041)	166,667	3,173,763	166,667
Operating liabilities increase (decrease)				
Trade and other payables	(75,300,844)	45,319,990	(45,693,107)	30,006,447
Other current liabilities	(3,343,517)	(883,804)	(1,290,742)	(264,595)
Cash paid for long-term employee benefits	(1,390,400)	(4,688,000)	(1,183,000)	(1,128,000)
Cash from operating activities	4,665,740,463	5,051,801,921	3,241,142,302	3,428,084,243
Cash paid for interest expenses	(245,410,891)	(282,458,106)	(245,410,891)	(282,458,106)
Cash paid for income tax	(648,101,543)	(687,396,462)	(471,459,929)	(506,780,917)
<b>Net cash flows from operating activities</b>	<b>3,772,228,029</b>	<b>4,081,947,353</b>	<b>2,524,271,482</b>	<b>2,638,845,220</b>

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**
**Cash flows statement (continued)**
**For the year ended 31 December 2021**

(Unit: Baht)

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	2021	2020	2021	2020
<b>Cash flows from investing activities</b>				
Increase in other current financial assets	(270,817,456)	(272,299,908)	(294,718,895)	(92,109,898)
Decrease in long-term loans to related party	-	-	57,140,000	57,140,000
Increase in property, plant and equipment	(137,454,394)	(24,660,801)	(21,831,885)	(16,667,934)
Increase in assets for production of treated water				
with public sector agency - assets that are owned by the Company	(88,879,019)	(189,678,062)	(88,879,019)	(189,678,062)
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)	(161,944,241)	-	-
Increase in rights to produce and sell treated water				
and treat waste water from private sector agency	(1,568,000)	(672,000)	(1,568,000)	(672,000)
Proceeds from sales of equipment	1,063,841	20,943	873,682	9,610
Dividend received	71,076,597	60,922,798	1,009,462,131	1,024,456,521
Increase in advance payment to subcontractor - related party	(49,631,086)	(50,995,272)	(49,631,086)	-
<b>Net cash flows from (used in) investing activities</b>	<b>(610,604,084)</b>	<b>(639,306,543)</b>	<b>610,846,928</b>	<b>782,478,237</b>
<b>Cash flows from financing activities</b>				
Repayment of long-term loans	(760,000,000)	(500,000,000)	(760,000,000)	(500,000,000)
Repayment of debentures	-	(500,000,000)	-	(500,000,000)
Repayment of principal portion of lease liabilities	(14,178,613)	(14,180,588)	(11,601,304)	(13,047,458)
Dividend paid	(2,393,501,185)	(2,393,397,357)	(2,393,501,185)	(2,393,397,357)
Dividend paid for non-controlling interests of the subsidiary	(19,151,160)	(19,664,400)	-	-
<b>Net cash flows used in financing activities</b>	<b>(3,186,830,958)</b>	<b>(3,427,242,345)</b>	<b>(3,165,102,489)</b>	<b>(3,406,444,815)</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(25,207,013)</b>	<b>15,398,465</b>	<b>(29,984,079)</b>	<b>14,878,642</b>
Cash and cash equivalents at beginning of year	91,969,201	76,570,736	86,240,045	71,361,403
<b>Cash and cash equivalents at end of year</b>	<b>66,762,188</b>	<b>91,969,201</b>	<b>56,255,966</b>	<b>86,240,045</b>

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries**

**Cash flows statement (continued)**

**For the year ended 31 December 2021**

(Unit: Baht)

	<b>Consolidated financial statements</b>		<b>Separate financial statements</b>	
	2021	2020	2021	2020
<b>Supplemental cash flows information</b>				
Non-cash transactions				
Increase in dividend payable	22,263	167,136	22,263	167,136
Increase in accounts receivable from securities trading	-	(3,000,000)	-	-
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	13,286,856	46,693,920	13,286,856	46,693,920
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	27,727,172	-	-
Increase in accounts receivable from sales of equipment	-	(1,620,000)	-	(345,000)
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	(1,678,758)	(42,021,606)	(1,678,758)	(33,863,186)
Increase in lease liabilities due to new lease agreements	1,678,758	42,021,606	1,678,758	33,863,186
Reclassify of other non-current financial assets to other current financial assets	(9,000,000)	(5,000,000)	-	-

The accompanying notes are an integral part of the financial statements.

**TTW Public Company Limited and its subsidiaries****Notes to consolidated financial statements****For the year ended 31 December 2021****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.

**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	
			2021	2020
			(%)	(%)
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 2021. 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 2022**

The Federation of Accounting Professions issued a number of 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, for some standards, providing temporary reliefs or temporary exemptions 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:

$$\text{Depreciation for the period} = \text{Net assets for production of treated water at the beginning of the period} \\ \times \text{Percentage of treated water produced in the period}$$

$$\text{Percentage of treated water produced in the period} = \frac{\text{Current period's actual production of treated water}}{\text{(Actual production of treated water for the period + Projected total production of treated water over the remaining term of the Water Purchase Agreement or the end of useful live of the assets for production of treated water)}}$$

$$\text{Net assets for production of treated water at the beginning of the period} = \text{Total assets for production of treated water - Accumulated depreciation as at the beginning of the period}$$

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:

$$\text{Amortisation for the period} = \text{Net assets for production of treated water that must be transferred at end of concession at the beginning of the period} \times \text{Percentage of treated water produced in the period}$$

$$\text{Percentage of treated water produced in the period} = \frac{\text{Current period's actual production of treated water}}{\text{(Actual production of treated water for the period + Projected total production of treated water over the remaining term of concession for production and sale of treated water)}}$$

$$\text{Net assets for production of treated water that must be transferred at end of concession at the beginning of the period} = \text{Total assets for production of treated water that must be transferred at end of concession} - \text{Accumulated amortisation as at the beginning of the period}$$

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:

Amortisation for the period = Net rights to produce and sell treated water as at the beginning of the period x Percentage of treated water produced in the period

Percentage of treated water produced in the period = 
$$\frac{\text{Current period's actual production of treatment water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of operation rights})}$$

Net rights to produce and sell treated water at the beginning of the period = Total rights to treated water - 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:

Amortisation for the period = Net rights to treat waste water at the beginning of the period x Percentage of waste water treatment in the period

Percentage of waste water treated in the period = 
$$\frac{\text{Current period's actual treatment of waste water}}{(\text{Actual treatment of waste water for the period} + \text{Projected total treatment of waste water over the remaining term of operation rights})}$$

Net rights to treat waste water at the beginning of the period = Total rights to treat waste water - 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.

### **Recognition and derecognition of financial instruments**

Regular way purchases and sales of financial assets are recognised or derecognised on the settlement date, i.e., the date on which an asset is delivered to or by the Group.

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 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		
	2021	2020	2021	2020	
<u>Transactions with subsidiary companies</u>					
(eliminated from the consolidated financial statements)					
Interest income	-	-	3,008	5,226	Minimum Loan Rate minus stipulated margin per annum
Management income	-	-	16,527	17,547	Based on contract
Dividend income	-	-	938,386	963,534	As declared
Cost of sales and services	-	-	37,301	36,732	Based on contract
<u>Transaction with associate</u>					
Dividend income	-	-	71,076	60,923	As declared
<u>Transactions with related parties</u>					
Sales of treated water	44,740	48,460	44,740	48,460	Based on contract
Service income	3,136	3,376	3,136	3,376	Based on contract
Improvement of machinery, equipment of water supply and distribution system	256,776	441,586	124,923	233,470	Based on contract
Cost of sales and services	6,691	6,564	6,691	6,555	Based on contract
Electricity expenses	12,913	13,614	12,913	13,614	Based on contract
Purchase of raw materials	8,457	9,321	8,457	9,321	Selling prices as specified

As at 31 December 2021 and 2020, the balances of the accounts between the Company and those related parties are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	2021	2020	2021	2020
<b><u>Trade and other receivables - related parties (Note 8)</u></b>				
Subsidiaries	-	-	4,187	3,995
Related companies (related by shareholders or committees)	4,356	4,376	4,356	4,376
<b>Total trade and other receivables - related parties</b>	<b>4,356</b>	<b>4,376</b>	<b>8,543</b>	<b>8,371</b>
<b><u>Advance payment to subcontractor - related party</u></b>				
Related company (related by committees)	36,344	23,268	36,344	-
<b>Total advance payment to subcontractor - related party</b>	<b>36,344</b>	<b>23,268</b>	<b>36,344</b>	<b>-</b>
<b><u>Trade and other payables - related parties (Note 20)</u></b>				
Subsidiaries	-	-	3,358	3,212
Related companies (related by shareholders or committees)	10,812	55,287	10,801	36,802
Related companies (entities under the group of Companies of the shareholders)	1,432	2,028	1,432	2,028
<b>Total trade and other payables - related parties</b>	<b>12,244</b>	<b>57,315</b>	<b>15,591</b>	<b>42,042</b>
<b><u>Retention payable - subsidiary</u></b>				
	-	-	5,000	5,000
	-	-	5,000	5,000

**Long-term loans to related party**

As at 31 December 2021 and 2020, the balance of long-term loans between the Company and a related party and the movement are as follows:

		(Unit: Thousand Baht)			
		Separate financial statements			
Company's name	Related by	Balance as at 1 January 2021	Increase during the year	Decrease during the year	Balance as at 31 December 2021
Pathum Thani Water Company Limited	Subsidiary				
Loan		114,300	-	(57,140)	57,160
Interest receivable		20	3,008	(3,018)	10
<b>Total</b>		<b>114,320</b>			<b>57,170</b>

(Unit: Thousand Baht)

	Separate financial statements	
	2021	2020
<b><u>Long-term loans to related party and interest receivable</u></b>		
Pathum Thani Water Company Limited		
Loan	57,160	114,300
Interest receivable	10	20
Total	57,170	114,320
Less: Current portion and interest receivable	(57,170)	(57,160)
<b>Long-term loans to related party, net of current portion</b>	<b>-</b>	<b>57,160</b>

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 2021 and 2020, the Group had employee benefit expenses payable to their directors and management as below.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Short-term employee benefits	56,713	61,910	50,244	52,362
Post-employment benefits	1,912	1,589	1,912	1,263
Total	58,625	63,499	52,156	53,625

## 7. Cash and cash equivalents

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Cash	471	497	109	139
Bank deposits	66,291	91,472	56,147	86,101
Total	66,762	91,969	56,256	86,240

As at 31 December 2021, bank deposits in saving accounts carried interests 0.125% per annum. (2020: bank deposits in saving accounts and fixed deposits carried interests between 0.125% and 0.250% per annum)

**8. Trade and other receivables**

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
<u>Trade receivables - related parties</u>				
Aged on the basis of due dates				
Not yet due	4,348	4,368	4,348	4,368
Past due				
Up to 3 months	8	8	8	8
Total trade receivables - related parties	4,356	4,376	4,356	4,376
<u>Trade receivables - unrelated parties</u>				
Aged on the basis of due dates				
Not yet due	505,582	544,841	344,281	365,216
Past due				
Up to 3 months	2,302	3,075	2,302	3,075
Total trade receivables - unrelated parties	507,884	547,916	346,583	368,291
Total trade receivables	512,240	552,292	350,939	372,667
<u>Other receivables</u>				
Other receivables - related parties	-	-	4,187	3,995
Other receivables - unrelated parties	19,553	24,322	11,221	11,566
Interest receivables - unrelated parties	1,937	979	1,375	581
Total other receivables	21,490	25,301	16,783	16,142
Less: Allowance for expected credit losses	(19,553)	(19,682)	(11,221)	(11,221)
Total other receivables - net	1,937	5,619	5,562	4,921
Total trade and other receivables - net	514,177	557,911	356,501	377,588

The normal credit term is 7 days to 25 days.

**9. Raw materials and supplies**

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Raw materials	5,465	6,240	3,717	4,074
Spare parts	19,579	19,945	10,803	10,606
Total	25,044	26,185	14,520	14,680

**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 4.10% per annum (the Company only: between 0.20% and 0.625% per annum) (2020: between 0.625% and 4.50% per annum (the Company only: between 0.625% and 0.75% 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 financial statements.

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
<u>Debt instruments at amortised cost</u>				
Fixed deposits over 3 months but less than 1 year	884,309	565,296	744,309	425,296
Current portion of debentures	9,000	5,000	-	-
Total debt instruments at amortised cost	<u>893,309</u>	<u>570,296</u>	<u>744,309</u>	<u>425,296</u>
<u>Financial assets state FVTPL</u>				
Investment in open-ended fund - Government debt securities	<u>2,703,629</u>	<u>2,741,629</u>	<u>1,900,974</u>	<u>1,920,744</u>
Total financial assets at FVTPL	<u>2,703,629</u>	<u>2,741,629</u>	<u>1,900,974</u>	<u>1,920,744</u>
Total other current financial assets	<u>3,596,938</u>	<u>3,311,925</u>	<u>2,645,283</u>	<u>2,346,040</u>

**11. Other non-current financial assets**

	(Unit: Thousand Baht)	
	Consolidated	
	financial statements	
	2021	2020
<u>Debt instruments at amortised cost</u>		
Debentures - net of current portion	-	9,000
Total debt instruments at amortised cost	-	9,000
<u>Financial assets at FVTPL</u>		
Real estate investment trust	5,000	5,000
Less: Unrealised loss on changes in value of investments	(650)	(1,225)
Real estate investment trust - net	<u>4,350</u>	<u>3,775</u>
Total financial assets at FVTPL	<u>4,350</u>	<u>3,775</u>
Total other non-current financial assets	<u>4,350</u>	<u>12,775</u>

## 12. Investments in subsidiaries

Details of investments in subsidiaries as presented in separate financial statements are as follows:

Company's name	Paid-up capital		Shareholding percentage		Cost		(Unit: Thousand Baht) Dividend received during the years	
	2021	2020	2021	2020	2021	2020	2021	2020
			(%)	(%)				
Pathum Thani Water Company Limited	1,200,000	1,200,000	98.0	98.0	3,998,310	3,998,310	938,386	963,534
Thai Water Operations Company Limited	60,000	60,000	68.5	68.5	700,000	700,000	-	-
					4,698,310	4,698,310	938,386	963,534
Less: Accumulated amortisation of investments in subsidiaries					(3,206,218)	(2,984,724)	-	-
Less: Dividend received from income before purchase of shares					(20,000)	(20,000)	-	-
Total					1,472,092	1,693,586	938,386	963,534

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

Company's name	Nature of business	Country of incorporation	Consolidated financial statements				(Unit: Thousand Baht)	
			Shareholding percentage		Cost		Carrying amounts based on equity method	
			2021 (%)	2020 (%)	2021	2020	2021	2020
CK Power Public Company Limited	Making investment in other companies	Thailand	24.98	24.98	5,218,706	5,218,706	6,219,582	5,954,961
Total					5,218,706	5,218,706	6,219,582	5,954,961

Company's name	Nature of business	Country of incorporation	Separate financial statements				(Unit: Thousand Baht)	
			Shareholding percentage		Cost		Carrying amounts based on cost method	
			2021 (%)	2020 (%)	2021	2020	2021	2020
CK Power Public Company Limited	Making investment in other companies	Thailand	24.98	24.98	5,218,706	5,218,706	5,218,706	5,218,706
Total					5,218,706	5,218,706	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:

Associate	Consolidated financial statements				(Unit: Thousand Baht) Separate financial statements	
	Share of profit from investment in associate during the years		Share of profit (loss) from investment in associate as presented in other comprehensive income during the years		Dividend received during the years	
	2021	2020	2021	2020	2021	2020
CK Power Public Company Limited	544,317	101,098	(208,620)	16,211	71,076	60,923
Total	544,317	101,098	(208,620)	16,211	71,076	60,923

### 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:

Associate	(Unit: Thousand Baht) Fair values as at 31 December	
	2021	2020
CK Power Public Company Limited	10,153,800	9,057,189
Total	10,153,800	9,057,189

### 13.3 Summarised financial information about material associate

Summarised information about financial position

	(Unit: Thousand Baht) CK Power Public Company Limited	
	2021	2020
Current assets	9,711,841	10,566,394
Non-current assets	59,265,506	56,472,057
Current liabilities	(3,393,985)	(6,275,216)
Non-current liabilities	(29,453,296)	(25,725,247)
Net assets	36,130,066	35,037,988
Equity attributable to non-controlling interest of the associate	(11,296,310)	(11,263,573)
Net assets of the Company	24,833,756	23,774,415
Shareholding percentage	24.98%	24.98%
Share of net assets	6,203,472	5,938,849
Goodwill	16,110	16,112
Carrying amounts of associate based on equity method	6,219,582	5,954,961

Summarised information about comprehensive income

	(Unit: Thousand Baht)	
	CK Power Public Company Limited	
	For the years ended 31 December	
	2021	2020
Revenue	9,369,493	7,188,318
Profit from continuing operations	2,751,253	197,706
Other comprehensive income	(835,146)	67,490
Total comprehensive income	1,916,107	265,196

**14. Property, plant and equipment**

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Net book value:				
Property, plant and equipment	911,753	797,594	730,626	727,618
Right-of-use assets (Note 23)	61,456	72,942	54,697	63,901
Total	973,209	870,536	785,323	791,519

Movements of property, plant and equipment for the years ended 31 December 2021 and 2020 are summarised below.

(Unit: Thousand Baht)

		Consolidated financial statements							
		Construction in progress	Building and building improvement	Furniture and office equipment	Motor vehicles	Tools	Total		
<b>Cost:</b>									
1 January 2020		737,631	75,636	156,029	33,053	28,693	1,035,191		
Additions		-	3,412	7,064	46,350	968	66,682		
Disposals/write-offs		-	-	(1,352)	(10,061)	(82)	(11,495)		
Transfer in (out)		-	2,900	8,782	-	-	-		
31 December 2020		737,631	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		
31 December 2021		846,145	82,922	198,653	62,649	30,565	1,220,934		
<b>Accumulated depreciation:</b>									
1 January 2020		-	34,687	118,127	19,976	25,724	198,514		
Depreciation for the year		1,677	6,671	13,051	10,206	1,185	32,790		
Depreciation on disposals/write-offs		-	-	(1,319)	(10,061)	(82)	(11,462)		
31 December 2020		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)		
31 December 2021		3,354	48,710	144,149	23,613	27,899	247,725		
<b>Net book value:</b>									
31 December 2020		735,954	40,590	40,664	49,221	2,752	870,536		
31 December 2021		842,791	34,212	54,504	39,036	2,666	973,209		
<b>Depreciation for the year</b>									
2020 (Baht 13 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							32,790		
2021 (Baht 19 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							38,801		

(Unit: Thousand Baht)

	Separate financial statements						Total
	Land	Construction in progress	Building and building improvement	Furniture and office equipment	Motor vehicles	Tools	
<b>Cost:</b>							
1 January 2020	682,899	4,149	75,636	107,330	22,436	12,498	904,948
Additions	-	8,888	3,412	4,312	33,863	56	50,531
Disposals/write-offs	-	-	-	(702)	(5,333)	(81)	(6,116)
Transfer in (out)	-	(11,682)	2,900	8,782	-	-	-
31 December 2020	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
31 December 2021	682,899	-	82,922	142,051	45,733	12,717	966,322
<b>Accumulated depreciation:</b>							
1 January 2020	-	-	34,687	77,716	11,453	11,615	135,471
Depreciation for the year	1,677	-	6,671	10,993	8,747	371	28,459
Depreciation on disposals/write-offs	-	-	-	(672)	(5,333)	(81)	(6,086)
31 December 2020	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)
31 December 2021	3,354	-	48,710	100,034	16,771	12,130	180,999
<b>Net book value:</b>							
31 December 2020	681,222	1,355	40,590	31,685	36,099	568	791,519
31 December 2021	679,545	-	34,212	42,017	28,962	587	785,323
<b>Depreciation for the year</b>							
2020 (Baht 9 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							28,459
2021 (Baht 12 million included in cost of sales of treated water and service, and the remaining balance in administrative expenses)							31,914

As at 31 December 2021, 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 154 million (the Company only: Baht 99 million) (2020: Baht 146 million (the Company only: Baht 90 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		
	treated water system	Construction in progress	Total
<b>Cost:</b>			
1 January 2020	14,422,251	117,466	14,539,717
Additions	-	236,372	236,372
Transfer in (out)	353,838	(353,838)	-
31 December 2020	14,776,089	-	14,776,089
Additions	13,450	88,716	102,166
31 December 2021	14,789,539	88,716	14,878,255
<b>Accumulated amortisation:</b>			
1 January 2020	5,329,795	-	5,329,795
Amortisation for the year	480,940	-	480,940
31 December 2020	5,810,735	-	5,810,735
Amortisation for the year	477,676	-	477,676
31 December 2021	6,288,411	-	6,288,411
<b>Net book value:</b>			
31 December 2020	8,965,354	-	8,965,354
31 December 2021	8,501,128	88,716	8,589,844
<b>Amortisation for the year</b>			
2020			480,940
2021			477,676

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
<b>Cost:</b>				
1 January 2020	413,401	6,548,349	-	6,961,750
Additions	-	4,824	184,848	189,672
31 December 2020	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)
31 December 2021	413,401	6,895,349	-	7,308,750
<b>Accumulated amortisation:</b>				
1 January 2020	348,736	5,052,057	-	5,400,793
Amortisation for the year	17,114	386,994	-	404,108
31 December 2020	365,850	5,439,051	-	5,804,901
Amortisation for the year	17,054	447,958	-	465,012
Amortisation on write-offs	-	(186)	-	(186)
31 December 2021	382,904	5,886,823	-	6,269,727
<b>Net book value:</b>				
31 December 2020	47,551	1,114,122	184,848	1,346,521
31 December 2021	30,497	1,008,526	-	1,039,023
<b>Amortisation for the year</b>				
2020				404,108
2021				465,012

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 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 2021 and 2020 are presented below.

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Construction in progress	Total
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	<u>904,718</u>	<u>124,353</u>	<u>-</u>	<u>1,029,071</u>
As at 31 December 2020:				
Cost	1,410,075	154,350	671	1,565,096
Less: Accumulated amortisation/depreciation	(459,864)	(23,614)	-	(483,478)
Net book value	<u>950,211</u>	<u>130,736</u>	<u>671</u>	<u>1,081,618</u>

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 2021 and 2020 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 2020	995,286	137,076	-	1,132,362
Acquisition at cost	-	-	671	671
Amortisation/depreciation for the year	(45,075)	(6,340)	-	(51,415)
Net book value as at 31 December 2020	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	<u>904,718</u>	<u>124,353</u>	<u>-</u>	<u>1,029,071</u>

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	
	2021	2020
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	(2,820,876)	(2,626,416)
Rights to produce and sell treated water from business acquisition, net	<u>348,233</u>	<u>542,693</u>

### 19. Intangible assets

The net book value of intangible assets as at 31 December 2021 and 2020 is presented below.

(Unit: Thousand Baht)

	Waste water treatment system	Sludge management system	Total
	<b>As at 31 December 2021</b>		
Cost	14,104	12,000	26,104
Less: Accumulated amortisation	(14,104)	(1,200)	(15,304)
<b>Net book value</b>	<u>-</u>	<u>10,800</u>	<u>10,800</u>
<b>As at 31 December 2020</b>			
Cost	14,104	12,000	26,104
Less: Accumulated amortisation	(13,544)	(601)	(14,145)
<b>Net book value</b>	<u>560</u>	<u>11,399</u>	<u>11,959</u>

A reconciliation of the net book value of intangible assets for the years 2021 and 2020 is presented below.

(Unit: Thousand Baht)

	Consolidated financial statements			Total
	Waste water treatment system	Sludge management system	Sludge management system under installation	
<b>Net book value as at 1 January 2020</b>	1,724	-	12,000	13,724
Transfer in (out)	-	12,000	(12,000)	-
Amortisation	(1,164)	(601)	-	(1,765)
<b>Net book value as at 31 December 2020</b>	560	11,399	-	11,959
Amortisation	(560)	(599)	-	(1,159)
<b>Net book value as at 31 December 2021</b>	<u>-</u>	<u>10,800</u>	<u>-</u>	<u>10,800</u>

**20. Trade and other payables**

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Trade payables - related party	1,432	2,028	4,790	5,240
Trade payables - unrelated parties	28,401	35,513	14,679	13,443
Amounts due to related parties	751	705	740	705
Amounts due to unrelated parties	12,185	25,589	9,421	22,083
Retention payable for contract work - related party	8,858	53,454	8,858	34,969
Retention payable for contract work - unrelated parties	3,708	5,438	3,192	4,050
Accrued expenses - related party	1,203	1,128	1,203	1,128
Accrued expenses - unrelated parties	73,175	81,136	46,027	52,963
Total trade and other payables	129,713	204,991	88,910	134,581

**21. Long-term loans**

(Unit: Thousand Baht)

Loan	Interest rate (% per annum)	Repayment schedule	Consolidated / Separate	
			financial statements	
			2021	2020
1	Fixed rate at 2.95%	Quarterly installments as from March 2017 to December 2021	-	300,000
2	The 12-month fixed deposit rate + a stipulated margin	Quarterly installments as from June 2020 to June 2026	2,100,000	2,560,000
Total			2,100,000	2,860,000
Less: Current portion			(460,000)	(760,000)
Long-term loans, net of current portion			1,640,000	2,100,000

Movement of long-term loans account during the years ended 31 December 2021 and 2020 is summarised below:

	(Unit: Thousand Baht)	
	Consolidated / Separate financial statements	
	2021	2020
Beginning balance	2,860,000	3,360,000
Add: Reclassify current portion of long-term loans to long-term loans, net of current portion*	-	2,760,000
Less: Repayment	(760,000)	(500,000)
Return loan from refinance*	-	(2,760,000)
Ending balance	<u>2,100,000</u>	<u>2,860,000</u>

\* During the year 2020, the Company has signed a loan agreement with a commercial bank to refinance long-term loans from the other bank, totaling Baht 2,760 million.

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	2021	2020
					(% per annum)	
1	10 years	22 February 2012	22 February 2022	4.60	2,000,000	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					5,400,000	5,400,000
Less: Current portion of debentures					(2,000,000)	-
Less: Deferred debenture issuing costs					(2,193)	(3,477)
Debentures, net of current portion					<u>3,397,807</u>	<u>5,396,523</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 2021 and 2020 are summarised below:

(Unit: Thousand Baht)

	Consolidated financial statements			Separate financial statements		
	Land	Motor		Land	Motor	
		vehicles	Total		vehicles	Total
As at 1 January 2020	30,370	11,575	41,945	30,370	9,664	40,034
Additions	-	42,021	42,021	-	33,863	33,863
Depreciation for the year	(1,677)	(9,347)	(11,024)	(1,677)	(8,319)	(9,996)
As at 31 December 2020	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

#### b) Lease liabilities

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Lease payments	72,585	84,869	64,854	74,562
Less: Deferred interest expenses	(10,478)	(13,125)	(9,728)	(11,929)
Total	62,107	71,744	55,126	62,633
Less: Portion due within one year	(11,060)	(11,166)	(9,282)	(9,035)
Lease liabilities - net of current portion	51,047	60,578	45,844	53,598

**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			
	2021	2020	2021	2020
Depreciation expense of right-of-use assets	13,165	11,024	10,883	9,996
Interest expense on lease liabilities	2,863	1,957	2,417	1,783
Expense relating to short-term leases	35,370	35,180	35,076	34,907
Expense relating to leases of low-value assets	210	227	-	-

**d) Others**

The Group had total cash outflows for leases for the year ended 31 December 2021 of Baht 50 million, (2020: Baht 50 million) (the Company only: Baht 47 million (2020: Baht 48 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	
	2021	2020	2021	2020
<b>Provision for long-term employee benefits</b>				
<b>at beginning of year</b>	62,271	58,692	35,698	32,018
Included in profit or loss:				
Current service cost	7,301	7,280	4,533	4,273
Interest cost	1,285	987	786	535
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	(1,390)	(4,688)	(1,183)	(1,128)
<b>Provision for long-term employee benefits</b>				
<b>at end of year</b>	<u>73,379</u>	<u>62,271</u>	<u>47,816</u>	<u>35,698</u>

The Group expect to pay Baht 1 million of long-term employee benefits during the next year (the Company only: None).

As at 31 December 2021, the weighted average duration of the liabilities for long-term employee benefits is 10.54 - 15.76 years (2020: 13.19 - 14.60 years) (the Company only: 10.54 years (2020: 13.19 years)).

Significant actuarial assumptions are summarised below:

(Unit: % per annum)

	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Discount rate	1.80 - 2.29	1.67 - 1.74	1.80	1.67
Salary increase rate	5.0	5.0	5.0	5.0
Turnover rate	0 - 9.0	0 - 13.0	0 - 8.0	0 - 12.0

The result of sensitivity analysis for significant assumptions that affect the present value of the long-term employee benefit obligation as at 31 December 2021 and 2020 are summarised below:

(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

(Unit: Thousand Baht)

As at 31 December 2020

	Consolidated		Separate	
	financial statements		financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(4,757)	5,480	(2,467)	2,812
Salary increase rate	5,830	(5,163)	3,009	(2,691)
Turnover rate	(5,011)	3,306	(2,588)	1,596

**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	
	2021	2020	2021	2020
Salaries, wages and other employee benefits	195,529	191,036	105,143	98,151
Depreciation and amortisation	517,637	515,495	509,590	509,399
Amortisation of assets for production of treated water that must be transferred at end of concession	465,012	404,108	-	-
Amortisation of investments in subsidiaries	-	-	221,494	222,101
Operating and maintenance expenses	-	-	37,301	36,732
Production and maintenance cost	702,130	783,122	423,863	461,416

**28. Income tax**

Income tax expenses for the years ended 31 December 2021 and 2020 are made up as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
<b>Current income tax:</b>				
Current income tax charge	642,313	682,103	476,244	501,227
<b>Deferred tax:</b>				
Relating to origination and reversal of temporary differences	8,647	3,284	14,191	7,767
<b>Income tax expenses reported in profit or loss</b>	<b>650,960</b>	<b>685,387</b>	<b>490,435</b>	<b>508,994</b>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2021 and 2020 are as follows:

	(Unit: Thousand Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2021	2020	2021	2020
Deferred tax on share of other comprehensive income from associate	(52,155)	4,053	-	-
Deferred tax on actuarial loss	(782)	-	(1,596)	-
	<b>(52,937)</b>	<b>4,053</b>	<b>(1,596)</b>	<b>-</b>

The reconciliation between accounting profit and income tax expenses is shown below.

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	2021	2020	2021	2020
Accounting profit before tax	3,770,934	3,657,199	3,239,762	3,359,295
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	754,187	731,440	647,952	671,859
Effects of:				
Promotional privileges (Note 29)	(41,428)	(72,556)	-	-
Non-deductible expenses	48,718	48,203	45,296	45,138
Additional expense deductions allowed	(2,070)	(3,719)	(1,986)	(3,521)
Exemption of income	-	-	(201,892)	(204,891)
Effect of elimination entry on the consolidated financial statements	(117,124)	(28,399)	-	-
Others	8,677	10,418	1,065	409
Total	(103,227)	(46,053)	(157,517)	(162,865)
Income tax expenses reported in profit or loss	650,960	685,387	490,435	508,994

The components of deferred tax assets and deferred tax liabilities are as follows:

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements	financial statements	financial statements	financial statements
	Statements of financial position as at 31 December			
	2021	2020	2021	2020
<b>Deferred tax assets</b>				
Allowance for expected credit losses	3,910	3,936	2,244	2,244
Provision for long-term employee benefits	14,675	12,455	9,563	7,140
Unrealised fair value loss on investment	121	235	-	-
Accrued expense	-	500	-	500
Leases	130	14	86	-
Total	18,836	17,140	11,893	9,884

(Unit: Thousand Baht)

	Consolidated		Separate	
	financial statements		financial statements	
Statements of financial position as at 31 December				
	2021	2020	2021	2020
<b>Deferred tax liabilities</b>				
Accumulated depreciation - assets for production of treated water	(102,967)	(89,176)	(102,967)	(89,176)
Accumulated amortisation - rights to produce and sell treated water and treat waste water	(15,862)	(15,443)	(15,862)	(15,443)
Accumulated depreciation - assets for production of treated water that must be transferred at end of concession of subsidiary	(17,000)	(21,311)	-	-
Unrealised fair value gain on investments	(1,029)	-	(904)	-
Deferred debenture issuing costs	(439)	(695)	(439)	(695)
Fair value adjustment of assets for production of treated water that must be transferred at end of concession regarding business combination	(1,531)	(2,388)	-	-
Leases	-	(254)	-	(254)
<b>Total</b>	<b>(138,828)</b>	<b>(129,267)</b>	<b>(120,172)</b>	<b>(105,568)</b>
<b>Net</b>	<b>(119,992)</b>	<b>(112,127)</b>	<b>(108,279)</b>	<b>(95,684)</b>

## 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).

The Group's operating revenues for the years ended 31 December 2021 and 2020, divided between promoted and non-promoted operations, are summarised below.

(Unit: Thousand Baht)

	Consolidated financial statements					
	Promoted operations		Non-promoted operations		Total	
	2021	2020	2021	2020	2021	2020
Sales of treated water	419,554	672,758	5,262,846	5,386,659	5,682,400	6,059,417

(Unit: Thousand Baht)

	Separate financial statements					
	Promoted operations		Non-promoted operations		Total	
	2021	2020	2021	2020	2021	2020
Sales of treated water	630	59,123	3,924,668	4,031,112	3,925,298	4,090,235

### 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 2021, the Group has revenue from a major customer in amount of Baht 5,480 million (2020: Baht 5,857 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% (2020: 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 2021 amounting to approximately Baht 10 million (the Company only: Baht 5 million) (2020: Baht 9 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)
Interim dividends from the earnings of the non-promoted operations for July to December 2019	Board of Directors' meeting on 1 April 2020	1,196,996	0.30
Interim dividends from the earnings of the non-promoted operations for January to June 2020	Board of Directors' meeting on 20 August 2020	1,196,568	0.30
Total dividends for 2020		2,393,564	0.60
Interim 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
Interim 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		2,393,523	0.60

### 34. Commitments and contingent liabilities

#### 34.1 Capital commitments

As at 31 December 2021, the Company had capital commitments of Baht 209 million relating to the improvement project on water supply and distribution systems at Bang Len water supply plant with a related company (2020: Baht 11 million relating to the improvement project on assets for production of treated water and host computer system).

As at 31 December 2021, the subsidiary had capital commitments of Baht 2 million relating to the installation of booster pump at Pathumthani water supply plant (2020: Baht 132 million relating to the improvement project on water supply and distribution systems at Pathumthani water supply plant).

#### 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 2021, the Group had commitments totaling Baht 28 million (the Company only: Baht 22 million) (2020: Baht 29 million (the Company only: Baht 23 million)) under other service agreements.

#### 34.3 Bank guarantees

As at 31 December 2021, there were outstanding bank guarantees of Baht 300 million (the Company only: Baht 110 million) (2020: Baht 303 million (the Company only: Baht 113 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	financial statements	financial statements
	2021	2020	2021	2020
Guarantee under the Water Purchase Agreement				
with the Provincial Waterworks Authority	230,650	230,650	63,000	63,000
Guarantee electricity use	69,097	68,976	46,894	46,836
Guarantee for others	101	3,101	101	3,101
<b>Total</b>	<b>299,848</b>	<b>302,727</b>	<b>109,995</b>	<b>112,937</b>

## 35. Fair value hierarchy

As at 31 December 2021 and 2020, 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 2021				
	Level 1	Level 2	Level 3	Total
<b>Assets measured at fair value</b>				
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
<b>Asset for which fair value are disclosed</b>				
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
<b>Liability for which fair value are disclosed</b>				
Debentures	-	5,550,559	-	5,550,559

(Unit: Thousand Baht)

Consolidated financial statements				
As at 31 December 2020				
	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Financial assets measured at FVTPL				
Investments in open-ended fund - debt securities	-	2,741,629	-	2,741,629
Real estate investment trust	3,775	-	-	3,775
<b>Asset for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Investment in associate	9,057,189	-	-	9,057,189
Current portion of debt investments - debentures	-	5,022	-	5,022
Debt investments - debentures	-	9,099	-	9,099
<b>Liability for which fair value are disclosed</b>				
Debentures	-	5,605,694	-	5,605,694

	(Unit: Thousand Baht)			
	Separate financial statements			
	As at 31 December 2021			
	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Financial assets measured at FVTPL				
Investments in open-ended fund	-	1,900,974	-	1,900,974
<b>Asset for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Investment in associate	10,153,800	-	-	10,153,800
<b>Liability for which fair value are disclosed</b>				
Debentures	-	5,550,559	-	5,550,559

	(Unit: Thousand Baht)			
	Separate financial statements			
	As at 31 December 2020			
	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Financial assets measured at FVTPL				
Investments in open-ended fund	-	1,920,744	-	1,920,744
<b>Asset for which fair value are disclosed</b>				
Financial assets measured at amortised cost				
Investment in associate	9,057,189	-	-	9,057,189
<b>Liability for which fair value are disclosed</b>				
Debentures	-	5,605,694	-	5,605,694

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 2021 and 2020, 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)

	2021						
	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		
<b>Financial assets</b>							
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>	
<b>Financial liabilities</b>							
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)

	2020						
	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		
<b>Financial assets</b>							
Cash and cash equivalents	2	-	-	60,486	31,481	91,969	0.125 - 0.250
Trade and other receivables	-	-	-	-	557,911	557,911	-
Other current financial assets	570,296	-	-	-	2,741,629	3,311,925	0.625 - 4.500
Other non-current financial assets	-	9,000	-	-	3,775	12,775	4.10
	<u>570,298</u>	<u>9,000</u>	<u>-</u>	<u>60,486</u>	<u>3,334,796</u>	<u>3,974,580</u>	
<b>Financial liabilities</b>							
Trade and other payables	-	-	-	-	204,911	204,911	-
Long-term loans	-	-	-	2,860,000	-	2,860,000	1.875 - 2.950
Debentures	-	4,397,594	998,929	-	-	5,396,523	2.33 - 4.60
	<u>-</u>	<u>4,397,594</u>	<u>998,929</u>	<u>2,860,000</u>	<u>204,911</u>	<u>8,461,514</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			
<b>Financial assets</b>							
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
Other non-current financial assets	-	-	-	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>	
<b>Financial liabilities</b>							
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>	

(Unit: Thousand Baht)

2020							
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			
<b>Financial assets</b>							
Cash and cash equivalents	2	-	-	55,213	31,025	86,240	0.125 - 0.250
Trade and other receivables	-	-	-	-	377,588	377,588	-
Other current financial assets	425,296	-	-	-	1,920,744	2,346,040	0.650 - 0.750
Other non-current financial assets	-	-	-	114,320	-	114,320	3.25
	<u>425,298</u>	<u>-</u>	<u>-</u>	<u>169,533</u>	<u>2,329,357</u>	<u>2,924,188</u>	
<b>Financial liabilities</b>							
Trade and other payables	-	-	-	-	134,581	134,581	-
Long-term loans	-	-	-	2,860,000	-	2,860,000	1.875 - 2.950
Debentures	-	4,397,594	998,929	-	-	5,396,523	2.33 - 4.60
	<u>-</u>	<u>4,397,594</u>	<u>998,929</u>	<u>2,860,000</u>	<u>134,581</u>	<u>8,391,104</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.

The estimated fair value of financial instruments, in comparison with the related amounts carried in the statement of financial position, is as follows:

	(Unit: Million Baht)			
	Consolidated / Separate financial statements			
	As at 31 December 2021		As at 31 December 2020	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial liabilities</b>				
Debentures	5,398	5,551	5,397	5,606

The methods and assumptions used by the Company in estimating the fair value of financial instruments are as follows:

- For fixed rate debentures, their fair value is estimated by discounting expected future cash flow by the current market interest rate of the loans with similar terms and conditions.

During the current year, there were no transfers within the fair value hierarchy.

### 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 2021, the Group's debt-to-equity ratio was 0.59:1 (2020: 0.67:1) and the Company's was 0.67:1 (2020: 0.76:1).

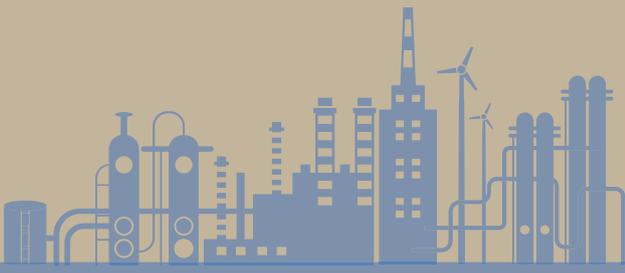
### 38. Events after the reporting period

On 22 February 2022, a meeting of the Company's Board of Directors passed a resolutions to propose a dividend payment for the year 2021 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 financial statements were authorised for issue by the Company's Board of Directors on 22 February 2022.

# 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

1. Dr. Thanong Bidaya			
Position	Independent Director and Chairman of the Board of Directors		
Date of Appointment	17 December 2008		
Age	74 Years		
Education / Training	<ul style="list-style-type: none"> <li>▪ Ph.D. in Management, Northwestern University, U.S.A.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ M.A. in Economics, Northwestern University, U.S.A.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ B.A. in Economics, Yokohama National University, Japan</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Directors Accreditation Program (DAP) 25/2004, Thai Institute of Directors Association</li> </ul>		
Shareholding in the Company		Direct - 0.0085% (342,500 Shares) Indirect - None	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
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 – August 2020	Independent Director and Chairman of the Board of Directors	Scan Inter Public Company Limited
Company Limited	December 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

2. Mr. Plew Trivisvavet				
Position	Director, Vice Chairman of the Board of Directors, and Authorized Director			
Date of Appointment	22 May 2008			
Age	76 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Honorary Doctor of Science (Industrial Management Technology), Southeast Bangkok College</li> <li>▪ Honorary Doctor of Civil Engineering, Rajamangala University of Technology Isan</li> <li>▪ Honorary Doctor of Civil Engineering, Nakhon Phanom University</li> <li>▪ Honorary Doctor of Civil Engineering, Kasetsart University</li> <li>▪ Honorary Doctor of Science (Engineering), Thai-Nichi Institute of Technology</li> <li>▪ Master of Electrical Engineer, Osaka University, Japan</li> <li>▪ Bachelor of Electrical Engineer, Osaka University, Japan</li> <li>▪ Energy Literacy Leadership Program, class10/2017, Thailand Energy Academy (TEA)</li> <li>▪ Capital Market Academy Executive Program (CMA), Class 4/2007, Capital Market Academy</li> <li>▪ Director Accreditation Program (DAP), Class 18/2004, Thai Institute of Directors Association</li> <li>▪ Director Certification Program (DCP), Class 50/2004, Thai Institute of Directors Association</li> <li>▪ Finance for Non-Finance Directors (FND), Class 13/2004, Thai Institute of Directors Association</li> <li>▪ National Defense Course for the Joint State-Private Sectors, (Thai NCD), Class 366, Thai National Defense College</li> </ul>			
	Shareholding in the Company		Direct - 0.0050% (200,000 Shares) Indirect - 0.0025% (100,000 Shares)	
	Family Relationship between Director and Executive Management		Walainut Trivisvavet's Aunt	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	April 2020 – Present	Acting Chairman of the Board of Directors	Bangkok Expressway and Metro Public Company Limited
		December 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	December 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

3. Mr. Phongsarit Tantisuwanitchkul				
Position	Director, Chairman of the Executive Committee, Nomination and Remuneration Committee Member, and Authorized Director			
Date of Appointment	25 February 2016			
Age	49 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Engineering (Construction &amp; Management) University of Michigan Ann Arbor U.S.A.</li> <li>▪ Bachelor of Engineering, Kasetsart University</li> <li>▪ Understanding the Fundamental of Financial Statement (UFS), Class 9/2007</li> <li>▪ Finance for Non-Finance Director (FND), Class 35/2007, Thai Institute of Directors Association</li> <li>▪ Director Certification Program (DPC), Class 155/2012, Thai Institute of Directors Association</li> </ul>			
	Shareholding in the Company		Direct - None Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	October 2020 - Present	Director	CH. Karnchang Public Company Limited
December 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	Eastern High-Speed Rail Linking Three Airports Company Limited	
	October 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	

4. Mr. Phairuch Mekarporn			
Position	Independent Director, Chairman of the Audit Committee, and Risk Management and Corporate Governance Committee Member		
Date of Appointment	22 May 2008		
Age	76 Years		
Education / Training	<ul style="list-style-type: none"> <li>▪ M.S.M.E California State University, Long beach, U.S.A.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ B.S.M.E Chulalongkorn University</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Advanced Management Program: The International Senior Manager's Program (1995) Harvard University, Graduate School of Business Administration, U.S.A.</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Advanced Audit Committee Program (AACP), Class 17/ 2007, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Director Certification Program (DCP), Class 81/2006, Thai Institute of Directors Association</li> </ul>		
Shareholding in the Company		Direct - None Indirect - None	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
Listed Company	2004 – Present	Independent Director, Chairman of Nomination and Remuneration Committee, and Audit Committee	Thai Optical Group Public Company Limited
	2008 – July 2020	Chairman of Nomination and Remuneration Committee and Corporate Governance Committee	TTW Public Company Limited
Company Limited	2007 – July 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

5. Mr. Somnuk Chaidejsuriya				
Position	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	71 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Law, Chulalongkorn University</li> <li>▪ Bachelor of Law, Chulalongkorn University</li> <li>▪ Thai Barrister-at-Law, Institute of Legal Education, Thai Bar Association</li> <li>▪ Director Certification Program (DCP), Class 46/2004, Thai Institute of Directors Association</li> <li>▪ Advanced Audit Committee Program (AACP), Class 9/2005, Thai Institute of Directors Association</li> <li>▪ Diploma, National Defense Course for the Joint State Private Sectors, Class 11, Thai National Defense College</li> </ul>			
	Shareholding in the Company		Direct - None Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	2004 - Present	Independent Director Chairman of Risk Management Committee Audit Committee Nomination and Remuneration Committee	Don Muang Tollway Public Company Limited
		2008 – July 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)	

6. Mr. Yuttana Yimgarund				
Position	Independent Director, Chairman of the Nomination and Remuneration Committee, Audit Committee Member			
Date of Appointment	7 December 2021			
Age	60 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Public Administration, National Institute of Development Administration (NIDA)</li> <li>▪ Bachelor of Laws, Ramkhamhaeng University</li> <li>▪ Public Law Certificate Program, Thammasat University</li> <li>▪ Director Certificate Program (DCP) Class 208/2015, Thai Institute of Directors Association</li> <li>▪ Capital Market Leader Program, Class 18, Capital Market Academy (CMA)</li> <li>▪ The Joint State-Private Sectors, Class 25, Thai National Defense College</li> <li>▪ The Civil Service Executive Development Program: Visionary and Moral Leadership. Class 71, Office of the Civil Service</li> </ul>			
	Shareholding in the Company		Direct - None Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	2021 – Present	Advisory of the Board of Directors	Preecha Group Public Company Limited
		2017 – 2019	Board of Directors	Bangkok Expressway and Metro Public Company Limited
	Company Limited	2019 – September 2021	Director-General	The Treasury Department
2019 – September 2021		The Chairman of the Board of Directors	Dhanarak Asset Development Company Limited	
2019 – September 2021		Director	Government Housing Bank	
2015 – September 2021		Director	Mass Rapid Transit Authority of Thailand	
2019 – 2019		Deputy Permanent Secretary	Ministry of Finance	
2015 – 2018		Inspector General	Ministry of Finance	

7. Dr. Sombat Kitjalaksana				
Position	Director, Executive Committee Member, and Authorized Director			
Date of Appointment	22 May 2008			
Age	64 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Dr. Techn. (Soil Mechanic), University of Innsbruck, Austria</li> <li>▪ Bachelor of Engineering (Civil), Chulalongkorn University</li> <li>▪ Master of Engineering (Civil), Chulalongkorn University</li> <li>▪ Director Certification Program (DCP), Class 81/2006, Thai Institute of Directors Association</li> <li>▪ Directors Accreditation Program (DAP), Class 36/2005, Thai Institute of Directors Association</li> </ul>			
	Shareholding in the Company		Direct - 0.0250% (1,000,100 Shares) Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	December 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	January 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	Pathum Thani Water Company Limited	

8. Mr. Suvich Pungchareon				
Position	Director, Executive Committee Member, and Authorized Director			
Date of Appointment	22 May 2008			
Age	75 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Political Science, Sukhothai Thammathirat University</li> <li>▪ Bachelor of Electrical Engineering, Tohoku University, Japan</li> <li>▪ Diploma Program on Politics and Governance in Democratic Systems, Class 8/2004, King Prajadhipok's Institute</li> <li>▪ Diploma Program on Public Economy Management, Class 1/2003, King Prajadhipok's Institute</li> <li>▪ Director Certification Program (DCP), Class 37/2003, Thai Institute of Directors Association</li> <li>▪ Mini MBA, Berkeley University, U.S.A.</li> </ul>			
	Shareholding in the Company		Direct - None	
			Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	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	

9. Mrs. Payao Marittanaporn			
Position	Director, Risk Management and Corporate Governance Committee Member, and Authorized Director		
Date of Appointment	17 February 2015		
Age	64 Years		
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Business Administration, Chulalongkorn University</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Bachelor of Accountancy, Chulalongkorn University</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Higher Diploma in Auditing, Thammasat University</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Director Certification Program (DCP), Class 48/2004, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Role of the Compensation Committee (RCC), Class 9/2009, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Capital Market Academy Leader Program, Class 11/2010, Capital Market Academy(CMA)</li> </ul>		
Shareholding in the Company		Direct : -None- Indirect : 0.000003 (100 Shares)	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
Listed Company	2015 – Present	Director and Executive Director	Bangkok Expressway and Metro Public Company Limited
	2015 – 14 December 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 – July 2020	Chairman of Risk Management Committee	TTW Public Company Limited
	2015 – July 2020	Nomination and Remuneration Committee Member	TTW Public Company Limited
	2007 – 2015	Director / Executive Director / Managing Director	Bangkok Expressway Public Company Limited
	2013 – 2014	Director / Nomination and Remuneration Committee Member / Risk Management Committee Member	TTW Public Company Limited
Company Limited	2004 – 22 June 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

10. Mr. Kaoru Umehara			
Position	Director, Nomination and Remuneration Committee Member, and Authorized Director		
Date of Appointment	20 August 2020		
Age	54 Years		
Education / Training	■ Bachelor's degree (Faculty of Law), Keio University, Japan		
Shareholding in the Company	Direct - None		Indirect - None
Family Relationship between Director and Executive Management	None		
Work Experience in the Past 5 Years	Period	Position	Company
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. Europe PLC (@London, UK)
	2016	General Manager Business Innovation Department, Corporate Planning & Strategy Division	Mitsui & Co. Europe PLC (@London, UK)
	2014	General Manager Strategic Planning Department, Energy Business Unit I & II	Mitsui & Co. Europe PLC (@London, UK)
	2013	General Manager, US Gas Marketing & Shipping Department, Natural Gas Division I, Energy Business Unit II	Mitsui & Co. Europe PLC (@London, UK)
	2012	General Manager, Global Natural Gas Development Department, Natural Gas Division I, Energy Business Unit II	Mitsui & Co. Europe PLC (@London, UK)

11. Mr. Hideo Matsumoto			
Position	Director, Executive Committee Member, Risk Management and Corporate Governance Committee Member, and Authorized Director		
Date of Appointment	21 December 2017		
Age	49 Years		
Education / Training	<ul style="list-style-type: none"> <li>▪ Bachelor of Arts in Policy Management , Keio University</li> <li>▪ Director Certification Program (DCP), Class 256/2018, Thai Institute of Directors Association</li> </ul>		
Shareholding in the Company		Direct - None Indirect - None	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
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., Ltd (Thailand)
	2017 – 2020	Director	Pathum Thani Water Company Limited
	2016 – 2017	Deputy General Manager Fourth Department, First Projects Development Division	Mitsui & Co., Ltd (Tokyo)
	2011 – 2016	Deputy General Manager Third Department, First Projects Development Division	Mitsui & Co., Ltd. (Tokyo Headquarters)
	2005 – 2011	Deputy Project Director	Mitsui & Co., Ltd. (Thailand)

12. Ms. Walainut Trivisvavet				
Position	Director, Executive Committee Member, Risk Management and Corporate Governance Committee Member Managing Director, and Authorized Director			
Date of Appointment	1 March 2018			
Age	51 Years			
Education / Training	<ul style="list-style-type: none"> <li>■ Master of Science in Administrative Studies, Sub-concentration : Financial Economics, Boston University, USA</li> <li>■ Bachelor of Business Administration, Assumption University</li> <li>■ Advanced Audit Committee Program (AAP), Class 20/2015, Thai Institute of Directors Association</li> <li>■ Company Reporting Program (CRP), Class 13/2015, Thai Institute of Directors Association</li> <li>■ Director Certification Program (DCP), class 201/2015, Thai Institute of Directors Association</li> <li>■ Capital Market Academy Executive Program (CMA), Class 24/2017, Capital Market Academy</li> <li>■ Top Executive Program in Commerce and Trade (TEPCoT) 11/2018, Commerce Academy, University of the Thai Chamber of Commerce</li> <li>■ Certification Program in Investor Relations, 2016, Thai Listed Companies Association</li> <li>■ Chief Financial Officer Certification Program (CFO), Class 19, The Federation of Accounting</li> <li>■ Advance Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute</li> </ul>			
	Shareholding in the Company		Direct - None Indirect - None	
	Family Relationship between Director and Executive Management		Grandchild of Mr. Plew Trivisvavet	
	Work Experience in the Past 5 Years	Period	Position	Company
	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	January 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	Fahamorn Machinery Company Limited		

13. Mr. Tanat Siricharoen			
Position	Deputy Managing Director, Operations Group		
Age	62 Years		
Education / Training	<ul style="list-style-type: none"> <li>■ Bachelor's degree: Bachelor of Industrial Electrical Technology, King's Mongkut's Institute of Technology North Bangkok</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Director Certification Program (DCP), Class 170/2013, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Director Accreditation Program (DAP), Class 99/2012, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>■ How to Develop a Risk Management Plan (HRP), Class 1/2012, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Board Reporting Program (BRP), 2015, Thai Institute of Directors Association</li> </ul>		
Shareholding in the Company		Direct - None	Indirect - None
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
Listed Company	October – December 2021	Deputy Managing Director, Operations Group	TTW Public Company Limited
	2015 – October 2021	Assistant Managing Director Operations, Acting Director of Engineering	TTW Public Company Limited
	2014	Operations Director	TTW Public Company Limited
	2011 - 2013	Operations Director	Thai Tap Water Supply Public Company Limited
Company Limited	2021	Director	Thai Water Operations Company Limited
	2020 - Present	Director	Pathum Thani Water Company Limited
	2011 - 2020	Managing Director	Thai Water Operations Company Limited
	2006 - 2010	Operations Manager	Thai Water Operations Company Limited
	2011 - 2016	Operations Director	BJT Water Company Limited

14. Mr. Phakpoom Thaweewittayarut				
Position	Deputy Managing Director, Administration Group			
Age	55 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master's degree : Master of Business Administration, Thammasat University</li> <li>▪ Bachelor of Laws with second - class honors, Chulalongkorn University</li> <li>▪ Bachelor of Accountancy, Chulalongkorn University</li> <li>▪ Certified Public Accountant (CPA)</li> <li>▪ Certified Internal Auditor (CIA)</li> <li>▪ Director Accreditation Program (DAP), Class 102/2008, Thai Institute of Directors Association</li> <li>▪ Company Secretary Program (CSP), Class 9/2005, Thai Institute of Directors Association</li> <li>▪ Director Refreshment Program, Thai Institute of Directors Association</li> <li>▪ ADVANCES FOR CORPORATE SECRETARIES, Thai Listed Companies Association</li> </ul>			
	Shareholding in the Company		Direct - None	
			Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	2015 – October 2021	Deputy Managing Director, Administration, Company Secretary	Bangkok Expressway and Metro Public Company Limited
		October 2014 – December 2015	Deputy Managing Director, Administration, Company Secretary	Bangkok Expressway Public Company Limited
		2012 - September 2014	Assistant Managing Director, Administration	Bangkok Expressway Public Company Limited

15. Mr. Somkiat Pattamamongkolchai				
Position	Deputy Managing Director, Finance Group			
Age	49 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master's degree: Master of Accounting, Thammasart University</li> <li>▪ Bachelor's degree: Bachelor of Commerce and Accountancy, Chulalongkorn University</li> <li>▪ Director Certification Program (DCP), Class 121/2009, Thai Institute of Directors Association</li> <li>▪ Director Accreditation Program (DAP), Class 79/2009, Thai Institute of Directors Association</li> <li>▪ Business Reporting Program (BRP), Thai Institute of Directors Association, 2015</li> <li>▪ TLCA Executive Development Program, Thai Listed Companies Association, 2015</li> <li>▪ Strategy Management Program, Fiscal policy research institute foundation, 2018</li> <li>▪ TLCA CFO Professional Development Program, The Securities and Exchange Commission, Thailand 2019</li> </ul>			
	Shareholding in the Company		Direct - None Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	October 2021 – Present	Deputy Managing Director, Finance Group	TTW Public Company Limited
		2020 – October 2021	Assistant Managing Director, Administration Group, Acting Account and Finance Director	TTW Public Company Limited
		2018 - 2019	Acting Assistant Managing Director, Administration Group	TTW Public Company Limited
		2005 - 2019	Acting Director of Accounting and Finance and Account Manager	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)	

16. Ms. Sudarat Chiamchan				
Position	Assistant Managing Director, Office of Managing Director and Company Secretary			
Age	57 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master of Management, Mahidol University</li> <li>▪ Bachelor of Business Administration (Accounting), Ramkhamhaeng University</li> <li>▪ Director Certification Program (DCP), Class 186/2014, Thai Institute of Directors Association</li> <li>▪ Company Secretary Program (CSP), Class 43/2011, Thai Institute of Directors Association</li> <li>▪ Company Reporting Program (CRP), Class 2/2011, Thai Institute of Directors Association</li> <li>▪ Effective Minutes Taking (EMT), Class 24/2012, Thai Institute of Directors Association</li> <li>▪ Advance Audit Committee Program (AACP), Class 20/2015, Thai Institute of Directors Association</li> <li>▪ Board Reporting Program (BRP), Thai Institute of Directors Association</li> <li>▪ Board Nomination &amp; Compensation Program (BNCP 1/2017), The Thai Institute of Directors Association, 2017</li> <li>▪ Corporate Governance for Executives (CGE), Class 6/2016), Thai Institute of Directors Association</li> <li>▪ Orientation Course - CFO FOCUS ON FINANCIAL REPORTING, Federation of Accounting</li> </ul>			
	Shareholding in the Company		Direct - None	Indirect - None
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	October 2021 – 2022	Assistant Managing Director, Office of Managing Director	TTW Public Company Limited
		2011 – Present	Company Secretary	TTW Public Company Limited
		2015 – October 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

17. Mr. Hongthong Artit			
Position	Business Development Director		
Age	54 Years		
Education / Training	<ul style="list-style-type: none"> <li>▪ Master's degree: Master of Engineering (Infrastructure and Management), Kasetsart University</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Bachelor's degree: Bachelor of Engineer (Mechanical Engineering), King Mongkut's Institute of Technology North Bangkok</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ TMA Thailand Management Day 2018, Thailand Management Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Business Reporting Program (BRP), 2015, Thai Institute of Directors Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ TLCA Exclusive Development Program, EDP 2016, Thai Listed Companies Association</li> </ul>		
	<ul style="list-style-type: none"> <li>▪ Energy Symposium, 2016, The Federation of Thai Industries</li> </ul>		
Shareholding in the Company		Direct - 0.00001 (400 Shares) Indirect - None	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
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

18. Mr. Pipat Katikul				
Position	Operations Director			
Age	54 Years			
Education / Training	<ul style="list-style-type: none"> <li>■ Master's degree: Business Administration, National Institute of Development Administration (NIDA)</li> <li>■ Master's degree: Computer and Engineering Management, Assumption University</li> <li>■ Bachelor's degree: Bachelor of Science (Microbiology), King Mongkut's University of Technology Thonburi</li> <li>■ Executive Development Program : Building Regional Leaders, EDP 2018, Thai Limited Companies Association</li> <li>■ Monitoring and Controlling Business Performance, 2015, Thailand Management Association (TMA)</li> <li>■ Business Reporting Program (BRP), 2015, Thai Institute of Directors Association</li> <li>■ Business Capability Enhancement Program (BCEP), 2014, Thailand Management Association</li> </ul>			
	Shareholding in the Company		Direct - None	
			Indirect - None	
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	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 Manager	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	

19. Mr. Chatchawan Tienprasertkij				
Position	Customer Relationship Management Director			
Age	56 Years			
Education / Training	<ul style="list-style-type: none"> <li>▪ Master's degree Master of Business Administration (Management), Sripatum University</li> <li>▪ Bachelor's degree Faculty of Commerce and Accountancy, Department of Statistics, Computer Program, Chulalongkorn University</li> <li>▪ Business Reporting Program (BRP), Thai Institute of Directors Association, 2015</li> <li>▪ Governance, Risk and Compliance, TRIS Academy of Management, 2014</li> <li>▪ Internal Audit Certification Program, The Federation of Accounting Professions, 2013</li> <li>▪ Water loss management, Dhurakij Pundit University, 2017</li> <li>▪ Strategic Risk Management, Holistic Development Center Company Limited</li> <li>▪ Leadership for QMS and EMS, SGS (Thailand) Limited, 2018</li> <li>▪ Water Leadership Program, 2019, Water Institute for Sustainability, The Federation of Thai Industries</li> </ul>			
	Shareholding in the Company		Direct - None	Indirect - None
	Family Relationship between Director and Executive Management		None	
	Work Experience in the Past 5 Years	Period	Position	Company
	Listed Company	2015 – October 2021	Acting Customer Relationship Management Director	TTW Public Company Limited
		2015 – October 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	

20. Mrs. Busawan Pholprasert			
Position	Acting Human Resources and Administrative Director, Human Resources Development Manager		
Age	49 Years		
Education / Training	<ul style="list-style-type: none"> <li>■ Master's degree: Master of Art - Public Administration, Kasetsart University</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Bachelor's degree: Bachelor of Political Science, Thammasart University</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Strategic Risk Management, 2017, Holistic Development Center Company Limited</li> </ul>		
Shareholding in the Company		Direct - None Indirect - None	
Family Relationship between Director and Executive Management		None	
Work Experience in the Past 5 Years	Period	Position	Company
Listed Company	2018 – Present	Acting Human Resources and Administrative 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.

21. Mr. Prem Liemsakul			
Position	Account Manager		
Age	46 Years		
Education / Training	<ul style="list-style-type: none"> <li>■ Master of Public and Private Management Graduate School of Public Administration, National Institute of Development Administration</li> </ul>		
	<ul style="list-style-type: none"> <li>■ Bachelor of Accountancy University of the Thai Chamber of Commerce</li> </ul>		
Shareholding in the Company			Direct - None Indirect - None
Family Relationship between Director and Executive Management			None
Work Experience in the Past 5 Years	Period	Position	Company
Listed Company	2022 – Present	Acting Director of Accounting	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	March 2013 - December 2013	Executive Manager	Pathum Thani Water Company Limited

## 2. Duties and Responsibilities of Company Secretary

### Duties and Responsibilities :

- (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 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 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.

## 3. Record of the Punishment of Directors, Executives and Controlling Person

In the 5 preceding years, have no Directors, Executives and Controlling Person be punished due to the violation of the Securities and Exchange Act B.E. 2535 or the Derivatives Acts B.E. 2546.



## 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. 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	● ■	● ■	-

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 quarter acknowledgment, and then the Chairman of the Audit Committee will report the results to the Board of Directors of the Company.

For details of the Company's internal audit head are as follows:

#### 1. Internal Audit Head

Name	:	Miss Nisaraluck Sichapakornraat
Position	:	Internal Audit Section Manager
Education	:	<ul style="list-style-type: none"> <li>● Master of Business Administration, Graduate School of Commerce, Burapha University</li> <li>● Bachelor of Business Administration, majoring in Accounting, Ramkhamhaeng University</li> </ul>

#### Experience

- 2015 – 2021 : Internal Audit Section Manager, TTW Public Company Limited
- 2014 – 2015 : Finance Section Manager, TTW Public Company Limited
- 2013 – 2014 : Business Development Section Manager, TTW Public Company Limited

- 2011 – 2012 : Account and Finance Section Manager, Pathum Thani Water Company Limited
- 2004 – 2011 : Account Division Head, TTW Public Company Limited

### **Training Courses Related to Internal Audit Performance**

- 1) IT Risk and IT Governance Course, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 2) Risk Management Program for Corporate Leaders Course (RCL) , Thai Institute of Directors Association
- 3) Director Accreditation Program Course (DAP), Thai Institute of Directors Association
- 4) Advance Risk Management Course, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 5) Internal Audit's Challenge in Value Adding Course, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 6) Raising Awareness of the Safe Use of Information Technology Course, EY Corporate Advisory Services Company Limited
- 7) Advanced Audit Committee Program Course (AACP) 26/2017, Thai Institute of Directors Association
- 8) Fraud Risk Management Procedure Workshop, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 9) Fraud Audit Course, the Institute of Internal Auditors of Thailand (IIAT)
- 10) IT Governance and IT Risk Management 4.0 Course, Federation of Accounting Professions under the Royal Patronage of His Majesty the King
- 11) Sustainable Risk Management with Workshops and Implementations, ISET (Thailand) Limited

### **Duties and Responsibilities**

1. Prepare an annual internal audit plan which is conducted by the internal audit division in order to propose to the Audit Committee for approval of the implementation of the said plan.
2. Coordinate with authorized external audit company in order to prepare a proposal for the review of the financial report and propose to the Audit Committee for consideration, and propose to the shareholders for consideration and approval to hire an auditing company at the annual general meeting of shareholders.
3. Conduct internal audit activities according to the internal audit performance plan to be in accordance with the specified plan.
4. Support performance as well as provide necessary information for the performance of the Audit Committee and the management that relates to audit performance.

5. Prepare or follow up the internal audit report with suggestions for improving the efficiency and effectiveness of the internal control process, including following up the status of the implementation in accordance with the recommendations of the agency that is audited, and propose to the management and the Audit Committee for acknowledgement..
6. Prepare the meeting documents and prepare the Audit Committee meeting according to the scheduled meeting circle for acknowledgement and recommendation on the results of the review of financial reports, as well as prepare the minutes of the Audit Committee meeting.
7. Develop personnel in the internal audit division to have sufficient professional knowledge as well as educate the personnel in the company on internal control and risk management matters.
8. Perform other activities as assigned

## 2. Corporate Compliance Head

Name	:	Mr. Natarat Intharat
Position	:	Corporate Governance Officer
Education	:	<ul style="list-style-type: none"> <li>● Thai Barrister</li> <li>● Bachelor of Laws, Siam University</li> </ul>

### 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

### 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



Information of Operating Assets and Asset Assessment

- None -

# Attachment 5



## Corporate Governance Policy and Business Code of Conduct and Employee Ethics

The Company has established business code of conduct and ethics, public on the Company's website at <https://www.ttwplc.com/storage/cg/cg/files/20210817-ttw-cg-code-of-ethics-th.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 Ms. Nisaraluck Sichapakornrat, the Internal Audit Manager of the Company is the Audit Committee Secretary.

In 2021, 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 four 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. Reviewed all connected transactions to ensure they were normal business operations and did not provide special benefits to those involved.

4. 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.

5. 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 2022, the Audit Committee has proposed to the Board of Directors the appointment of Ms. Manee Rattanabunnakit, Certified Public Accountant No. 5313, and/or Ms. Poonnart Paochareon, Certified Public Accountant No. 5238, and/or Ms. Kunlapee Piyawannasuth, Certified Public Accountant No. 6137, of EY Office as the Company's auditor for another year, with the Audit fees not exceeding 1,420,000 Baht. This shall be proposed for approval at the Annual General Meeting of Shareholders in 2022.



(Phairuch Mekarporn)

Chairman of the Audit Committee

## 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 2021, 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 5 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

## 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 2021, 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

## 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.

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. In 2021, 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.
2. 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

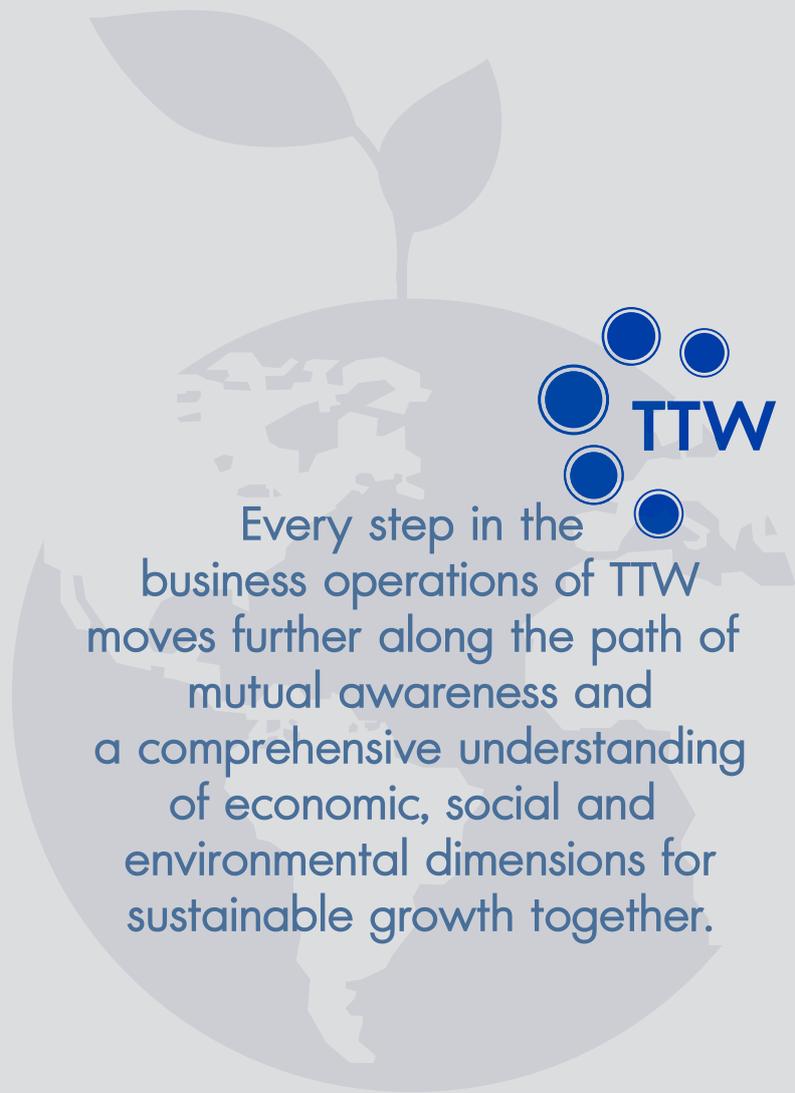
1. Supervising the performance of the Board of Directors, Executive Committee, and Subcommittee and the management of the company to ensure compliance with the Principles of Good Corporate Governance, Code of Conduct and Business ethics. Promoting information disclosure and transparency of quarterly 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.



(Mr.Somnuk Chaidejsuriya)

Chairman of the Risk Management and Corporate Governance Committee





Every step in the business operations of TTW moves further along the path of mutual awareness and a comprehensive understanding of economic, social and environmental dimensions for sustainable growth together.

## TTW Public Company Limited

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