



TTW Public Company Limited



**WATER FLOWS  
LIFE GROWS**

Annual Report 2017









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# WATER

Our business operations are water management under high quality international standard; cleanliness, sufficiency and continuity; and waste water treatment.









# 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



A handwritten signature in blue ink, located to the right of the portrait.

Dr. Thanong Bidaya  
Chairman of the Board of Directors



The success that our company has achieved in 2017 came from several internal factors, ranging from the implementation of project to increase the efficiency in production management, production cost control and distribution of tap water. These factors enabled the company to achieve the highest tap water sale statistics for the first time in 13 years ever since we started tap water distribution service.

TTW Public Company Limited (TTW) has engaged in the business of tap water production for the Provincial Electricity Authority in the areas of Samut Sakhon, Nakhon Pathom and Pathum Thani-Rangsit for more than 13 years. Throughout this period, our company has operated the business professionally with a strong realization on the importance of social responsibility and an obligation to be a part in economic development and the promotion of quality of life of the people. Such determination resulted in a satisfactory business performance in 2017.

Moreover, in the past period, the company has also made necessary preparation for a long-term domestic economic growth, beginning with a project to construct the 2nd tap water production plant in Krathumban District in 2015 which completed this year. This plant will be designated as a secondary tap water production plant of the company. The project reflects that the company is readying ourselves in order to further build a trust among our service users in the areas that the company will be able to continuously provide tap water services without any interruption in case of any emergency and in case that our service area is expanded. The new plant installed a modern membrane technology and is Asia's second largest tap water production plant. This efforts are in line with the company's vision to provide quality tap water service under the concept of "Quality of Water, Quality of Life".

The past business performance has led our company to be widely accepted by all sectors and to be bestowed with many prestigious awards. Our company has been ranked 1 in 100 registered companies in Thailand with outstanding performance in environmental social governance or ESG in resource group. We received full score of 100 from an assessment on the quality of general meeting of shareholders (AGM) organization, conducted by the Thai Investors Association. We were also rated very good in corporate governance by the Institute of Directors for 4 consecutive years. Our stocks was listed among "Thailand Sustainability Investment or THSI. Other awards we have received include Thailand's Top Corporate Brand 2016

for energy and utilities sector and our corporate and debenture rating have been rated by Tris as AA- (Double A minus). All of these achievements are the prides of our company and are responsive to our company's goals on sustainable development and maximum satisfaction of our customers. The efforts to response the needs and expectations of stakeholders in all sectors are the most important driving force that led our organization to a steady and sustainable growth throughout all of these years.

The success that our company has achieved in 2017 came from several internal factors, ranging from the implementation of project to increase the efficiency in production management, production cost control and distribution of tap water. These factors enabled the company to achieve the highest tap water sale statistics for the first time in 13 years ever since we started tap water distribution service. Major external factors that have driven our growth include economic recovery and expansion of production capacity by industrial factories which, we expects, to continue the trend well into the year 2018, especially in exports and large-scale state investment projects such as the Eastern Economic Corridor or EEC in which we were commissioned to manage and to set up tap water production and distribution and the ISO 9001-2008 waste water treatment system within the Amata Nakhon Industrial Estate, Chonburi Province.

I would like to take this opportunity to pay my gratitude to the Board of Directors, the management team, and all employees who have performed their duties with dedicated efforts. I also would like to thank the shareholders, business counterparts, customers and communities for continuous supports to the company. On behalf of TTW Public Company Limited (TTW), I would like all of you to feel confident that we will operate our business in accordance with the principles of good governance and take responsibility for all stakeholders inclusively, in order to ensure a steady growth of the company, a good return of investment for shareholders, establishment of confidence among communities and society, and sustainable conservation of environment.



# VISION & MISSION

## Vision

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

## Mission

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





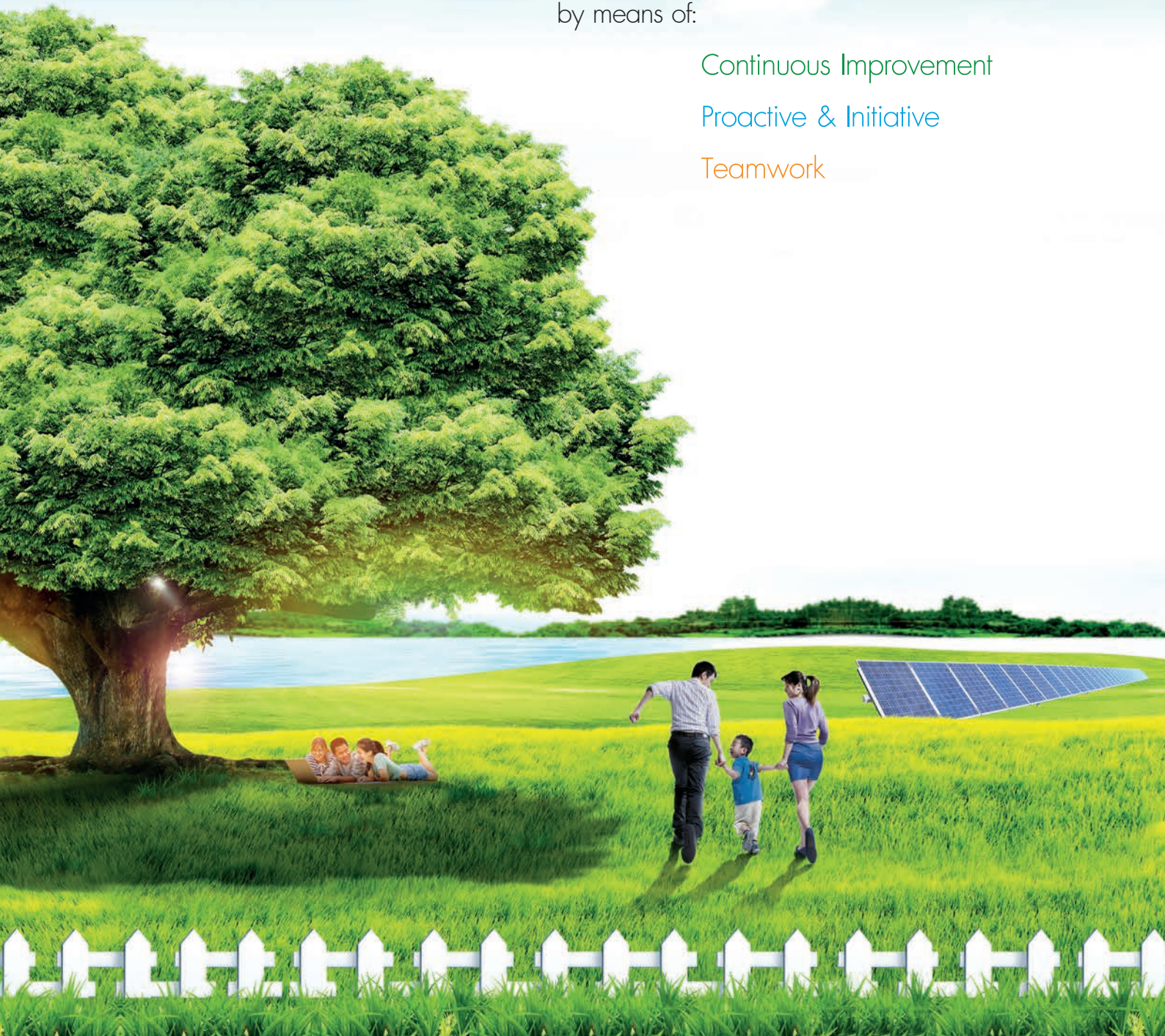
## Corporate Values

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

Continuous Improvement

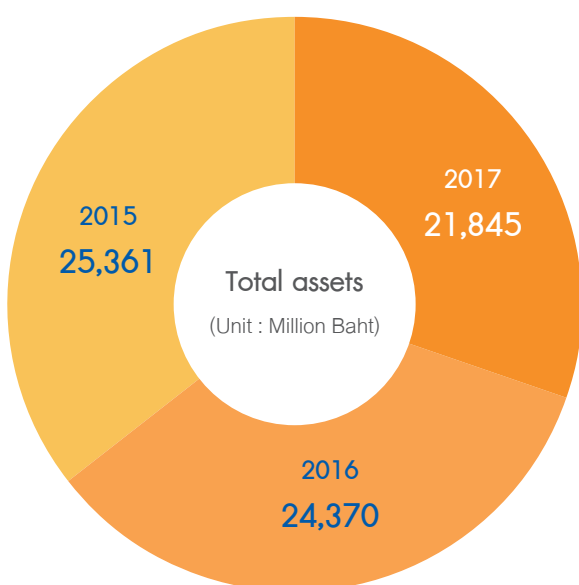
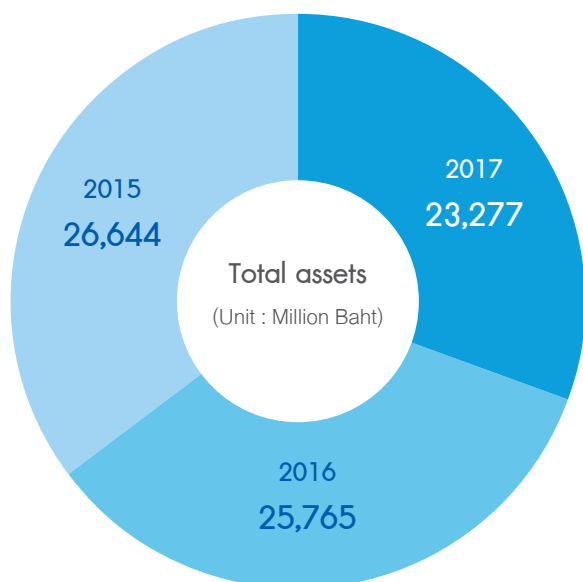
Proactive & Initiative

Teamwork



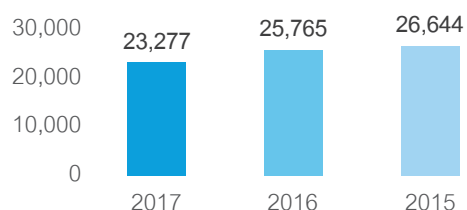


# Significant Financial Information

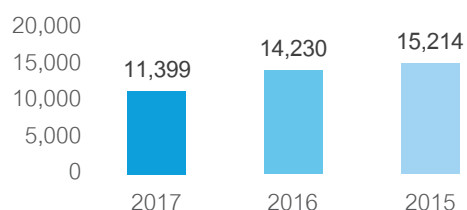


## Consolidated financial statements

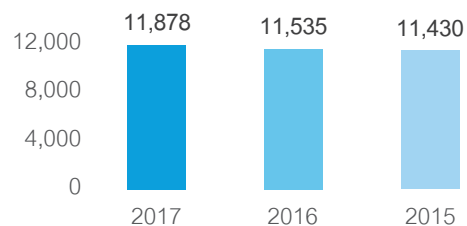
### Total assets (Unit : Million Baht)



### Total liabilities (Unit : Million Baht)

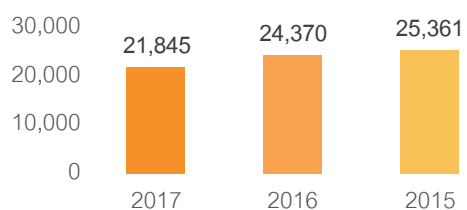


### Shareholders' equity (Unit : Million Baht)

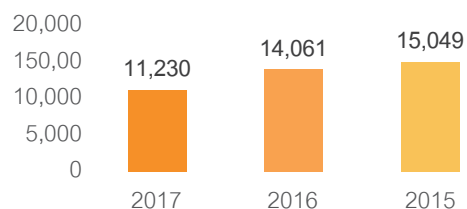


## Separate financial statements

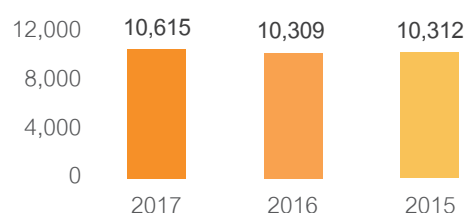
### Total assets (Unit : Million Baht)



### Total liabilities (Unit : Million Baht)



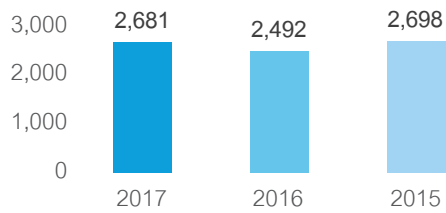
### Shareholders' equity (Unit : Million Baht)



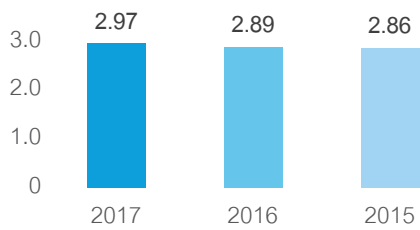


## Consolidated financial statements

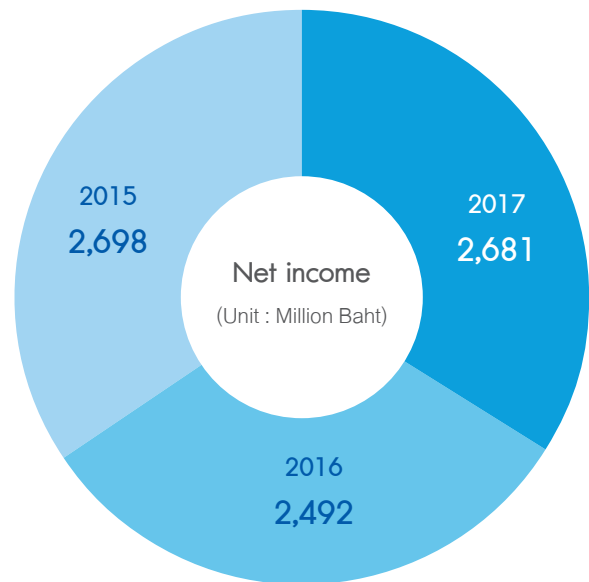
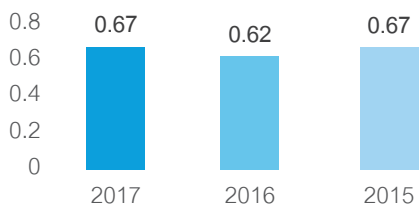
Net income (Unit : Million Baht)



Book value per share (Bt./share)

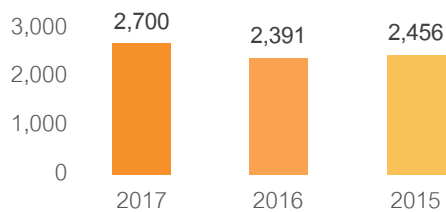


Basic earnings per share (Bt./share)

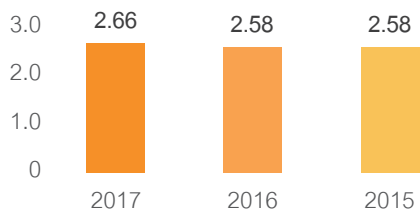


## Separate financial statements

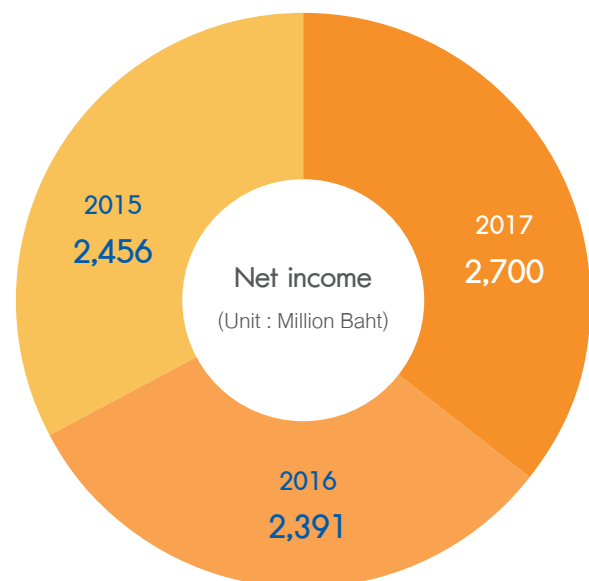
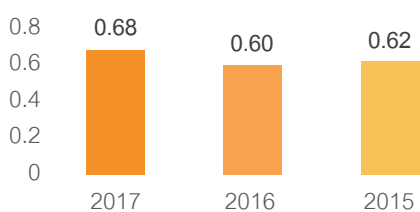
Net income (Unit : Million Baht)



Book value per share (Bt./share)



Basic earnings per share (Bt./share)





## Significant Financial Information

(Unit : Million Baht)

Description	Consolidated financial statements			Separate financial statements		
	For the year ended December 31			For the year ended December 31		
	2017	2016	2015	2017	2016	2015
Total assets	23,277	25,765	26,644	21,845	24,370	25,361
Total liabilities	11,399	14,230	15,214	11,230	14,061	15,049
Shareholders' equity	11,878	11,535	11,430	10,615	10,309	10,312
Sales of treated water	5,474	5,270	5,324	3,772	3,624	3,647
Services income	121	109	106	43	37	36
Total revenues	5,747	5,499	5,574	4,973	4,625	4,631
Cost of sales and services	1,564	1,497	1,510	925	904	889
Administrative expenses and management expenses	257	244	305	199	196	257
Financial expenses	407	433	549	407	433	549
Income tax expenses	632	607	378	470	435	215
Gross margin	4,031	3,882	3,920	2,890	2,757	2,794
Net income	2,681	2,492	2,698	2,700	2,391	2,456
Book value per share (Bt./share)	2.97	2.89	2.86	2.66	2.58	2.58
Basic earnings per share (Bt./share)	0.67	0.62	0.67	0.68	0.60	0.62

## Financial Ratio

Description	Consolidated financial statements			Separate financial statements		
	For the year ended December 31			For the year ended December 31		
	2017	2016	2015	2017	2016	2015
<b>Profitability ratios</b>						
Gross profit margin (%)	72.04	72.16	72.19	75.74	75.29	75.85
Net profit margin (%)	46.64	45.33	48.39	54.28	51.70	53.04
Return on equity (%)	22.57	21.61	23.60	25.43	23.20	23.82
<b>Efficiency Ratios</b>						
Return on assets (%)	11.52	9.67	10.12	12.36	9.81	9.68
Return on fixed assets (%)	17.40	15.67	18.62	22.60	20.01	24.15
<b>Debt service coverage Ratio</b>						
Debt / Equity (times)	0.96	1.23	1.33	1.06	1.36	1.46
Dividend Yield (%)	89.29	96.04	96.15	88.67	100.10	105.60



# Achievements



Thailand Sustainability Investment (THSI)  
Awards for the year 2016-2017 from  
The Stock Exchange of Thailand



Thailand Top Company Awards 2017,  
organized by Business+ and University of  
the Thai Chamber of Commerce



The Assessment of the quality of Annual  
General Meeting (AGM) of shareholder  
by Thai Investor Association 100 scores  
4 years in a row.



The Governance Assessment of Listed  
Companies in the “very Good” 4 years  
in a row.



TRIS Rating was organized the  
Credit Rating and Debt Securities  
in the level of AA-



Being business sustainability in  
Environmental, Social and  
Governance (ESG) 3 years in a row,  
organized by Thaipat Institute.



A plaque commemorated by Air Chief Marshal  
Prachin Chantong Deputy Prime Minister Under  
the project of enhancing the quality of life of students  
in disadvantaged schools in Surin province.



# General Information

## General Information

### TTW Public Company Limited

Company Profile	TTW Public Company Limited
Registration Number	0107549000114 (Former No. 1325/2543)
Business Category	The largest private tap water producer and distributor in Thailand
SET Symbol	TTW
Registered Capital	3,990,000,000 Baht
Divided into Common Stock	3,990,000,000 Shares
Par Value	1 Baht per share
Paid-up Capital	3,990,000,000 Baht
First Trading day in SET	22 May, 2008

### Contact

**Head Office Address** 30/130 Moo 12, Buddha Monthon 5 Road, Rai Khing, Sampran, Nakhon Pathom 73210

**Website** <http://www.ttwplc.com>

**Telephone** (+662) 019-9490 - 3, (+662) 019-9484 - 9

**Facsimile** (+662) 420-6064

### Corporate Affairs Division

#### - Corporate Governance and Company Secretary

Tel (+662) 019-9484 - 9 Ext. 1106

e-mail : [cg@ttwplc.com](mailto:cg@ttwplc.com)

#### - Investor Relation

Tel (+662) 019-9484 - 9 Ext. 1108

e-mail : [ir@ttwplc.com](mailto:ir@ttwplc.com)

## Reference Person

### Auditor

: **EY Office Limited**

33<sup>rd</sup> Floor, Lake Rajada Office Complex

193/136-137, Rajadapisek Road, Klongtoey, Bangkok 10110

Tel (+662) 264-9090

Fax (+662) 264-0789

### Legal Advisor

: **Offices of N&K Ltd.**

990 Abdulrahim Place, 9th Floor, Room No. 901-1, Rama IV Road, Silom, Bangrak, Bangkok 10500

Tel (+662) 636-1111

Fax (+662) 636-0000



## Nature of Business

TTW Public Company Limited (TTW) is a producer and distributor tap water to The Provincial Waterworks Authority (PWA) in the West Bangkok areas which cover 2 provinces: Nakhon Pathom province in 3 districts which are Nakhon Chaisri, Sampran and Putthamonthon districts; and Samut Sakhon province in 2 districts which are Muang Samut Sakhon and Krathumban districts. The company has a Water Treatment Plant at Banglen district, Nakhon Pathom province with the maximum production capacity of 440,000 cubic meters per day and a Water Treatment Plant in Krathumban district, Samut Sakhon province with the production capacity of 100,000 cubic meters per day. This 2nd Water Treatment Plant in Krathumban can handle the expansion of production capacity to the maximum of 400,000 cubic meters per day due to the fact that there has already been a construction of structural work for a support.

In 2017, TTW had a total amount of tap water distributed to PWA for 145.8 million cubic meters with the accumulatively distributed quantity, starting from the first day of operations to the end of 2017 for 1,570.5 million cubic meters. Moreover, TTW also has subsidiaries and associated companies, including acquisition of rights in Industrial Estate in order to conduct business related to tap water production and wastewater treatment together with getting involved in investing in energy business with the natures of each business as follows:

### Pathum Thani Water Company Limited

Pathum Thani Water Company Limited (PTW) is the subsidiary of TTW. TTW holds shares in PTW for 98% of 1200 mil.Bt. registered capital and 2 % is owned by PWA. PTW conducts the business of producing tap water and has distributed it to PWA in the North Bangkok areas: Pathum Thani and Rangsit provinces since 1998. Currently, it has a production capacity of 488,000 cubic meters per day.

In 2017 PTW had a total amount of tap water distributed to PWA for 135.8 million cubic meters with the accumulatively distributed quantity, starting from the first day of operations to the end of 2017 was for 1,981.3 million cubic meters.

### Thai Water Operations Co., Ltd.

Thai Water Operations Co., Ltd. (TWO) is another subsidiary of the company. The shareholders of the company are TTW, holding shares for 68% and PTW, holding shares for 32%. It conducts the business of managing the system of tap water production and distribution, and wastewater treatment for TTW, PTW, Bang Pa-in Industrial Estate, Amata Nakorn Industrial Estate and Amata City Industrial Estate. TWO is certified to ISO 9001:2008 for quality standard in providing maintenance system service and managing the project of tap water production in the areas of Pathum Thani and Rangsit provinces, and to ISO 9001:2008 for quality standard in organizing work management system in order to guarantee for the quality of monitoring control and the efficiency of carrying out tasks.



### Bang Pa-in Industrial Estate

Bang Pa-in Industrial Estate. TTW has acquired the rights for tap water production and wastewater treatment in Bang Pa-in Industrial Estate (BIE), Phra Nakhon Si Ayutthaya province from Bang Pa-in Land Co., Ltd. for the period of 30 years since August 2009 with the tap water production capacity of 48,000 cubic meters per day

In 2017, BIE had a total amount of tap water distributed for 8.3 million cubic meters with the accumulatively distributed quantity, starting from the first day of operations to the end of 2017, accounting for 57.7 million cubic meters. The purposes of proceeding to acquire the rights in BIE were to increase revenues for the organization as well as to increase skills, knowledge and experiences for the staff of the company in providing services to customers directly in order to pave the way for achieving the vision of **“being a leading company of the country in conducting the business of water, energy and the environment”**

The company and its affiliated companies are the largest private tap water manufacturers for PWA. They produce tap water and distribute it to PWA with the total amount of 282 million cubic meters, which amounts to 15 percent of the total amount of tap water distribution of PWA all over the country or amounts to 65 percent of total tap water production of all tap water manufacturers from private sectors which distribute tap water to PWA.

## Investment in other companies

TTW invested in common stocks of CK Power Public Company Limited (CKP) in 2011. Investing domestically and internationally in companies which operate their businesses in producing and distributing electricity, CKP, a Holding Company, invests in subsidiary companies and affiliated companies conducting businesses aforementioned that are classified into 3 groups as follows:

### Business of Hydroelectricity Project

- South East Asia Energy Limited (SEAN)  
has 56%
- Xayaburi Power Co., Ltd. (XPCL)  
has 30%

### Business of Electricity project with Cogeneration System

- Bangpa-in Cogeneration Co., Ltd. (BIC)  
has 65%

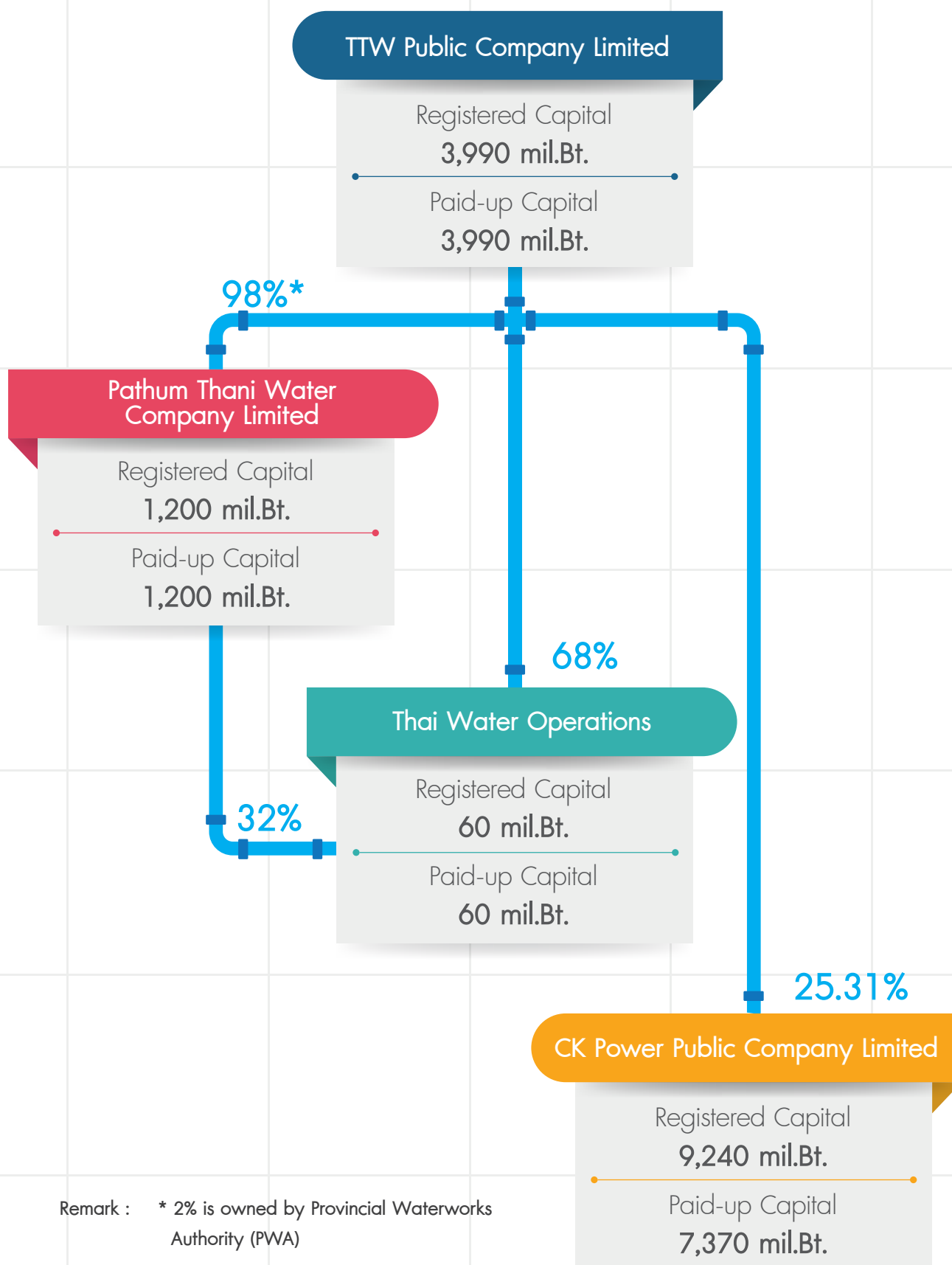
### Business of Solar Photovoltaic Energy Project

- Bangkhenchai Co., Ltd. (BKC)  
has 100%
- Chiang Rai Solar Co., Ltd. (CRS)  
has 30%
- Nakhon Ratchasima Solar Co., Ltd. (NRS)  
has 30%

Currently, the company has 25.31% of 9,240-million-Baht registered capital with the total investment of 4,228 million Baht.



## TTW and its Subsidiaries Structure



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



## List of Subsidiaries

Pathum Thani Water Company Limited	Thai Water Operations Company Limited	CK Power Public Company Limited
<b>Business Category</b> Produce and Distribute tap water to the Provincial Waterworks Authority (PWA) in Pathumthani - Rangsit area	<b>Business Category</b> Operate and Maintain tap water production, distribution system and Wastewater treatment system	<b>Business Category</b> Holding Company of various power generation firms
<b>Registered Capital</b> 1,200,000,000 Baht	<b>Registered Capital</b> 60,000,000 Baht	<b>Registered Capital</b> 9,240,000,000 Baht
<b>Divided into Common Stock</b> 12,000,000 Shares	<b>Divided into Common Stock</b> 600,000 Shares	<b>Divided into Common Stock</b> 9,240,000,000 Shares
<b>Par Value</b> 100 Baht per share	<b>Par Value</b> 100 Baht per share	<b>Par Value</b> 1 Baht per share
<b>Paid-up Capital</b> 1,200,000,000 Baht	<b>Paid-up Capital</b> 60,000,000 Baht	<b>Paid-up Capital</b> 7,370,000,000 Baht
<b>Address</b> 43 Moo 3 Chiangrak Noi - Bang Sai Road, Baan Pathum, Samkhok, Pathumthani 12160 Tel (+662) 979-5335 Fax (+662) 420-6064 Website www.ptw.co.th	<b>Address</b> 30/10 Moo12 Buddha Monthon 5 Road, Rai Khing, Sampran, Nakhon Pathom 73210 Tel (+662) 019-9480 Fax (+662) 420-6064 Website www.two.co.th	<b>Address</b> 587 Viriyathavorn Building, 20 <sup>th</sup> floor, Sutthisarn Vinijchai Road, Din Daeng, Bangkok 10400. Tel (+662) 691-9720-34 Fax (+662) 691-9723 Website www.ckpower.co.th





## Risk Management

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 to become practical and successful. This can be accomplished by having each operational sector propose operational plans and report the performances quarterly to the Risk Management Officer (RMO), and make a summary of risk management meetings in each quarter to report to Risk Management Committee (RMC). In case of political, economical and social changes, the company always makes a self-review in order to keep up with current situations and to make itself updated. Therefore, if the company is always prepared, it can adjust strategies or operational plans for many issues, resulting in good outcomes in the future. With good risk management, if any incident affecting the organization occurs, the impact in many aspects can be rectified or lessened and also crises can be turned into opportunities for the company.

In 2017 the company reviewed the register of the organizational risks and revised a list of risks resulting from both internal and external factors. However, the company still implements organizational risk management in accordance with Enterprise Risk Management Framework which is divided into 4 parts in terms of Strategy, Operation, Performance, and Finance by arranging for a register of risks consisting of risk items, risk control measures and monitoring operating results of risk management designated plans continuously with the following details:

## 1. Strategic Risk

Due to the awareness and the emphasis on quantity of water distribution of the company, in 2017 the company set an objective of increasing water distribution according to the tap water purchase-sale contract. Risks from both external and internal factors have an impact on quantity of water distribution. But all these economical situations and conditions put the company at risk, which caused water distribution not to meet the requirements if the tap water purchase-sale contract of the company.

The company operated according to risk management measures so that the risk would be reduced to acceptable level. Operating by increasing the amount of water in the same area where there were 4 risk factors.

- A. The company handled the pressure in the piping (LDN) of the company by increasing the number of water supply station from 2 to 4 water supply stations for being appropriate for the pipe ends area.
- B. The company improved water supply transmission to areas with high water requirements and/or other measures.
- C. The company coordinated with users in the area and local authorities in service area in order to increase the quantity of tap water use.
- D. The company managed in looking after the machinery, main equipment, and electrical systems as well as determined the methods of prevention.

## 2. Operating Risk

Quality of tap water was not according to the sales-purchase tap water contract. There were 2 risk factors.

1. To plan surveillance and proper monitoring.
2. To adjust the plan of tap water production which catches up with raw water quality changes and communicate with relevant persons according to the plan of handling situations.

## 3. Performance Risk

The performance management system that was the standard for personnel development and continuity in the management of the human resources to support the expansion of enterprise. There were 2 risk factors.

1. To create the management systems of succession plan replacement in positions that are key critical to a company.
2. To create the guidelines and/or procedures as well as standard performance evaluation system to operate correctly.

## 4. Financial Risk

Operating results did not meet goals. There was 1 risk factor.

- To follow up operating results of joint venture companies continually.

The proficiency to increase the number of tap water business as well as expansion of the tap water business and related water business in the future. There were 2 risk factors.

1. To follow up news and information, including seek opportunities for investment about water business of government sector.
2. To study for searching areas in both domestic and foreign countries.





## Internal Control

Currently, private organizations and government sectors emphasize internal control and regard it as a factor which can make business conduction successful. Executive officers of the company show interest and make a drive for internal control to be included in every step, in every work unit of operations in order to promote the organization to achieve the objectives with transparency after the implementation. This has to do with having a good system of internal control of the company, which will make the company operate the business efficiently as well as benefit the company in terms of ethics and be a part of anti-corruption as well.

TTW sets up a structure of work management by having the Internal Audit Unit report directly to the Audit Committee and 3 Independent Directors supervise the Internal Audit Unit of the company whereby the Internal Audit Unit and the External Audit Unit work collaboratively, emphasizing on carrying out tasks with transparency. Also, the existing system of internal control will be revised in order to be made suitable for current business and will not be operated inconsistently with the law and other regulations related to the company.

The company assigns the Internal Audit Unit to designate a plan for internal audit each year and after that requires it to ask the Audit Committee for approval so that the approved plan for internal audit can cover and be suitable for risks at the organizational levels of the company as having been assessed for risks. Moreover, the company assesses risks and monitors management results every quarter so that the company can be informed of the results of management in reducing risks to be at the acceptable levels. For financial budget, it is analyzed to designate and plan for audit by emphasizing on correctness, sufficiency and appropriateness. Therefore, in order to create effectiveness, the company has set up a process, designating monitoring suggestions from auditors to see how management sectors comply with the suggestions as mentioned and a process monitoring the system of managing quality and the system of managing the environment within the company according to the designated international standards "ISO 9001: 2008" and "ISO 14001: 2004" continually.



## Related Party Transactions

TTW complies with requirements and rules and regulations of the Securities and Exchange Commission (SEC). In a case that TTW is to engage in a related party transaction that may lead to a conflict of interest, an approval from the Board of Directors must be sought. 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 director 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 a 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 in compliance with the requirements, stipulated in the Securities and Exchange Act.

For the accounting period, ended on 31 December 2017, the company has disclosed related party transactions in the note to financial statement that had already been audited by the auditor of the company in compliance with generally acceptable accounting standards and information disclosure form 2017, which contained the following details.

(Unit : Thousand Baht)

Related Parties	Nature of Relationship	Nature of the Transaction	Amount and Value of the transaction as of 31 December 2017		Description
			Consolidated statement	Company statement	
1. Ch. Karnchang Public Company Limited (CK) Operates construction business	<ul style="list-style-type: none"> <li>Being a major shareholder (holding 19.40% of company shares)</li> <li>Having 1 co-director, i.e., Mr. Plew Trivisvavet Providing services to each other</li> </ul>	• Other debtors - Related entity	31	31	• Tap water cost and wastewater treatment service cost are paid according to the contract
		• Revenue from sale of tap water	234	234	• Construction cost for the 2 <sup>nd</sup> tap water manufacturing plant and Bang Pa-In raw water pumping station
		• Revenue from providing services.	61	61	



Related Parties	Nature of Relationship	Nature of the Transaction	Amount and Value of the transaction as of 31 December 2017		Description
			Consolidated statement	Company statement	
2. Pathum Thani Water Company Limited (PTW) is the concessionaire that produces and distributes tap water in Pathum Thani province to Provincial Waterworks Authority (PWA)	<ul style="list-style-type: none"> <li>Being a subsidiary company (the company holds 98% of shares)</li> <li>Having 3 co-directors:               <ol style="list-style-type: none"> <li>1. Mr. Phairuch Mekarporn</li> <li>2. Mr. Techapit Sangsingkeo</li> <li>3. Mr. Tomoaki Matsumoto</li> </ol> </li> <li>Having 2 executive directors in PTW:               <ol style="list-style-type: none"> <li>1. Mr. Chaiwat Utaiwan</li> <li>2. Miss Walainut Trivisavavet</li> </ol> </li> <li>Providing services to each other</li> </ul>	<ul style="list-style-type: none"> <li>Dividend-Income</li> <li>Earned interest</li> <li>Long term loan - Related entity</li> <li>Accrued interest receivable</li> <li>Administration cost</li> </ul>		850,170  45,479  828,220  293  6,000	<ul style="list-style-type: none"> <li>Dividend earned is payment made according to dividend announcement</li> <li>Earned interest is payment made at a rate calculated as (MLR minus a defined amount of difference) per year</li> <li>Long term loan with an interest rate calculated as MLR minus an amount of difference as defined in contract</li> <li>Administration cost is a payment made according to contract</li> </ul>
3. Thai Water Operations Co., Ltd. (TWO) is provider of maintenance service for production and wastewater treatment systems	<ul style="list-style-type: none"> <li>Being a subsidiary company (the company holds 68.50% of shares)</li> <li>Having 3 executive directors in TWO:               <ol style="list-style-type: none"> <li>1. Mr. Chaiwat Utaiwan</li> <li>2. Miss Walainut Trivisavavet</li> <li>3. Mr. Tanat Siricharoen</li> </ol> </li> <li>Providing service to each other</li> </ul>	<ul style="list-style-type: none"> <li>Sale and service cost</li> <li>Administration cost - Income</li> <li>Security bond - Creditor</li> </ul>		35,569  9,600  5,000	<ul style="list-style-type: none"> <li>Service cost and maintenance cost for tap water production system are the payment made according to the contract</li> <li>Administration cost is the payment made according to the contract</li> <li>Security bond is the payment made according to the contract</li> </ul>

(Unit : Thousand Baht)

Related Parties	Nature of Relationship	Nature of the Transaction	Amount and Value of the transaction as of 31 December 2017		Description
			Consolidated statement	Company statement	
4. CK Power Pulic Company Limited Is a holding company that invests in electricity generation and distribution business.	<ul style="list-style-type: none"> <li>Being an affiliated company (the company holds 25.31% of shares)</li> <li>4 executives serve as directors in CKP:               <ol style="list-style-type: none"> <li>1. Dr. Thanong Bidaya</li> <li>2. Mr. Plew Trivisvavet</li> <li>3. Mr. Techapit Sangsingkeo</li> <li>4. Mr. Chaiwat Utaiwan</li> </ol> </li> </ul>	<ul style="list-style-type: none"> <li>Dividend-Income</li> </ul>		111,939	<ul style="list-style-type: none"> <li>Dividend earned is payment made according to dividend announcement</li> <li>Dividend earned is payment made according to dividend announcement</li> </ul>
5. Bang Pa-In Co-Generation Co., Ltd. Operates electricity generation for distributing to EGAT	<ul style="list-style-type: none"> <li>None</li> </ul>	<ul style="list-style-type: none"> <li>Other debtor - Related entity</li> <li>Tap water sale - Income</li> <li>Provision of service-income</li> </ul>	8,161 37,541 2,451	8,161 37,541 2,451	<ul style="list-style-type: none"> <li>Tap water cost and wastewater treatment service cost are payments according to contract</li> </ul>
6. Export Transport Co., Ltd. Operates large lorry transportation	<ul style="list-style-type: none"> <li>Having 1 co-director, which is Mr. Plew Trivisvavet</li> <li>Providing service to each other</li> </ul>	<ul style="list-style-type: none"> <li>Business and other debtor-Related entity</li> <li>Tap water sale - Income</li> <li>Provision of service-income</li> </ul>	2 17 4	2 17 4	<ul style="list-style-type: none"> <li>Tap water cost and wastewater treatment service cost are payments according to contract</li> </ul>
7. Bang-Pa-In Land Development Co., Ltd., engages in the business of buying and selling immovable properties under its ownership not for residence	<ul style="list-style-type: none"> <li>Having 1 co-director, which is Mr. Plew Trivisvavet</li> <li>Providing service to each other</li> </ul>	<ul style="list-style-type: none"> <li>Business and other debtor-Related entity</li> <li>Tap water sale - Income</li> <li>Provision of service-income</li> </ul>	241 721 189	241 721 189	<ul style="list-style-type: none"> <li>The cost of pumping treated wastewater to public aqueduct is payment according to contract</li> <li>Tap water cost and wastewater treatment service cost are payments according to contract</li> </ul>



# Shareholding Structure



List of sharholders	Number of shares	Shareholding (%)
1. Mitsui Water Holdings (Thailand) Company Limited	1,036,500,000	25.977
2. Bangkok Expressway and Metro Public Company Limited	776,096,900	19.451
3. CH. Karnchang Public Company Limited	774,077,400	19.400
4. Thai NVDR Company Limited	171,077,932	4.288
5. Bangkok Life Assurance Public Company Limited	146,036,600	3.660
6. Mr. Min Tienworn	72,000,000	1.805
7. AIA Company Limited-AIA TH-EQ3-P	65,742,100	1.648
8. STATE STREET EUROPE LIMITED	60,946,854	1.527
9. Mr. Paisarn Chartpitak	28,100,000	0.704
10. Thanachart Prime Low Beta Fund	28,000,300	0.702





## Dividend Policy

To maintain a consistent dividend payment and the benefit of the shareholders, the company has set dividend payment policy as follow:

The company will prioritize the financial needs for the next five years and maintain appropriate level of the debt-equity ratio. 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.

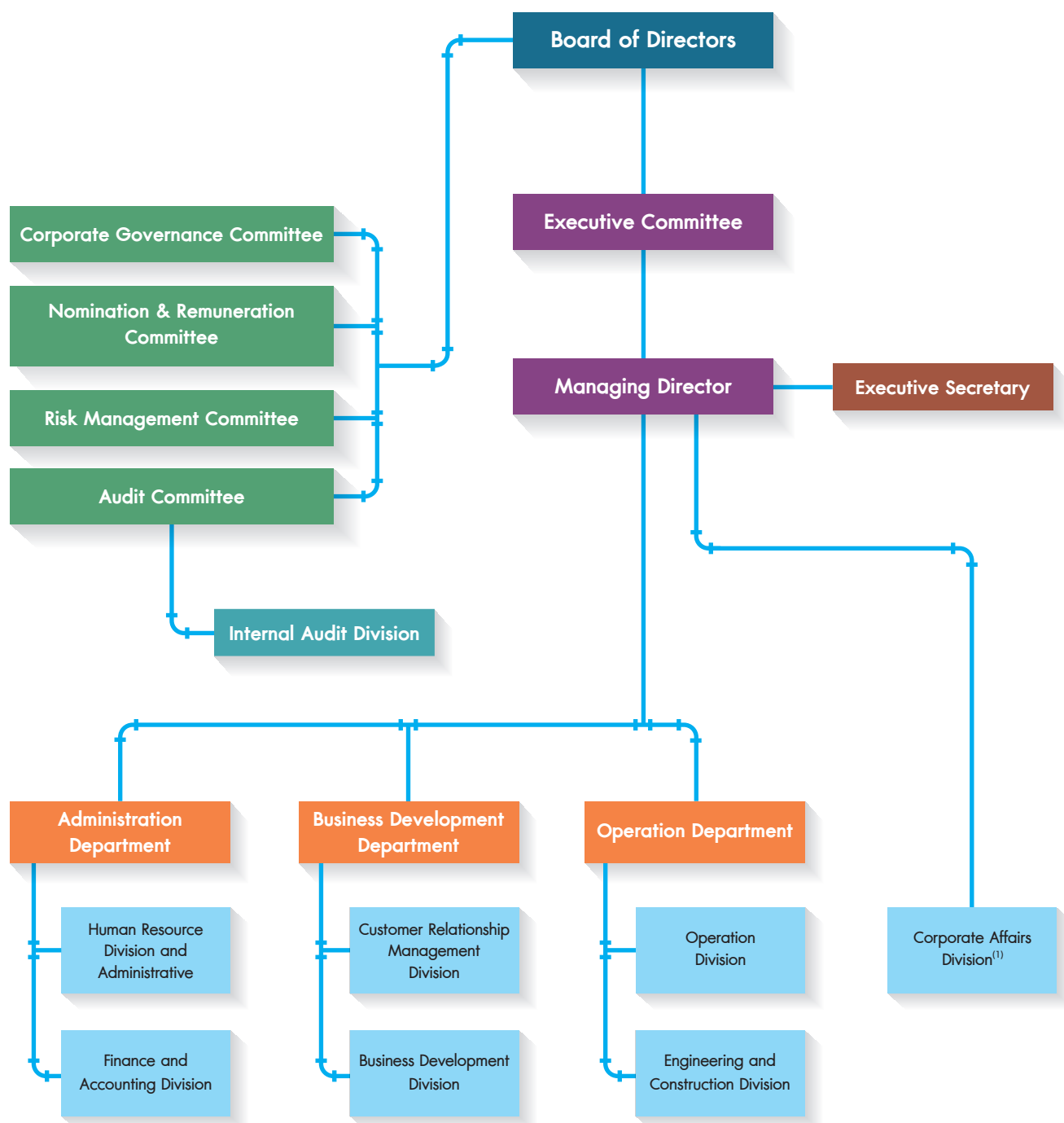
(Unit : Baht/Share)

2017 First half	2016	2015	2014	2013
0.30	0.60	0.60	0.65	0.60



# Management Structure

As of December 31<sup>st</sup>, 2017, the company's management structure was as follows:



<sup>(1)</sup> Legal and Compliance Department under the Corporate Affairs Division

## The Board of Directors

The Board of Directors of TTW Public Company Limited consists of 12 members. The Board of Directors consists of 4 Independent Directors who are qualified and not prohibited under the Public Company Limited Act. Each will be in position for a 3-year-term. The designation of the Board of Directors is transparent and in accordance with the regulations of the company in order to submit for approval from the shareholders' meetings. There is also a Sub-Committee, which is responsible for screening and supervising specific issues for the Board of Directors and consists of 5 groups as follows:

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

The company has a structure of committees and management which can check and balance one another under management framework as follows:

- a) There are at least one-third of independent directors of total members of Board of Directors which is not less than 3 persons and there are 4 independent directors in Board of Directors of the company.
- b) Audit Committee is independent with performing duties as defined by the regulations of SET and has sufficient knowledge and experiences to verify the reliability of financial statement as well as performing other duties of the Audit Committee. The Audit Committee comprises at least 3 independent directors but not more than 5, which are appointed by Board of Directors and among this number, there must be at least 2 expert directors from Board of Directors and at least 1 director who has knowledge and experiences in accounting in order to support operations of the Corporate Governance Committee, to verify administration, internal control, internal audit and risk management as well as to prepare financial reports for company's operations and disclosure to carry out with transparency and reliability.
- c) Authorization between the committee and the management department is assigned clearly under the topic of Corporate Governance.

Board of Directors consists of 12 members as follows:

- |                                     |   |
|-------------------------------------|---|
| 1. Dr. Thanong Bidaya               | Independent Director and Chairman of the Board of Directors   |
| 2. Mr. Plew Trivisvavet             | Director and Vice Chairman of Board of Directors  |
| 3. Mr. Phongsarit Tantisuvanitchkul | Director and Chairman of Executive Committee  |
| 4. Mr. Techapit Sangsingkeo         | Independent Director, Chairman of Audit Committee, Chairman of Risk Management Committee and Corporate Governance Committee |
| 5. Mr. Phairuch Mekarporn           | Independent Director, Chairman of Nomination and Remuneration Committee, Corporate Governance Committee and Audit Committee |
| 6. Mr. Somnuk Chaidejsuriya         | Independent Director, Chairman of Corporate Governance Committee, Nomination and Remuneration Committee and Audit Committee |
| 7. Dr. Sombat Kitjalaksana          | Director and Executive Committee  |
| 8. Mr. Suvich Pungcharoen           | Director and Executive Committee  |
| 9. Mrs. Payao Marittanaporn         | Director, Risk Management Committee and Nomination and Remuneration Committee   |
| 10. Mr. Yasutaka Suzuki             | Director and Nomination and Remuneration Committee  |
| 11. Mr. Hideo Matsumoto             | Director, Executive Committee and Risk Management Committee   |
| 12. Mr. Chaiwat Utaiwan             | Director, Executive Committee, Risk Management Committee, Corporate Governance Committee and Managing Director              |

Corporate Affairs Director is the Secretary

## The Company's Authorized Signatory Directors

The Company's authorized signatory directors shall be:

- 1) Any two of these six directors, Mr. Plew Trivisvavet, Mr. Phongsarit Tantisuvanitchkul, Dr. Sombat Kitjalaksana, Mrs. Payao Marittanaporn, Mr. Chaiwat Utaiwan and Mr. Suvich Pungcharoen, 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. Chaiwat Utaiwan or Mr. Suvich Pungcharoen, and either Mr. Yasutaka Suzuki or Mr. Hideo Matsumoto, totaling two directors, jointly sign and affix the company's seal.

## Terms of duty

A director shall be in a board seat for a duration of 3 years. At an AGM, one-third of the Board of Directors shall be resigned by rotation. The Board of Directors shall have an ordinary meeting every 3 months and may call a special meeting as required with designated agenda in advance together with agenda to consider follow-up actions regularly. There was a total of 22 meetings of Board of Directors, of Sub-Committee as well as Annual General Meetings in 2017 as follows:

Board of Directors Meeting with normal agenda	totally 4 times
The Executive Committee with normal agenda	totally 4 times
The Audit Committee Meeting with normal agenda	totally 4 times
The Risk Management Committee Meeting with normal agenda	totally 4 times
The Corporate Governance Committee Meeting with normal agenda	totally 2 times
The Nomination and Remuneration Committee Meeting with normal agenda	totally 3 times
Annual General Meeting of Shareholders	totally 1 time

Moreover, in the fourth quarter of the Board of Directors meetings, the company makes a schedule for Board of Directors meetings throughout the year in advance.

## Authorized and Duties of Board of Directors

The Board of Directors shall take responsibilities towards the shareholders in respect of the Company's business operations, and supervision of the Company's operations to be in line with the guidelines and goals, which would give rise to the maximum benefits to the shareholders, subject to the code of ethics and taking into account the benefits of all interested parties.

- (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 backup plan for nominating personnel to hold 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

The Chairman of the Board, as a leader and independent director, will strictly conform his duty to ethical and CG principles. The Chairman sets and conducts effective board meetings, encourages the constructive discussion among the board members, and concludes the meeting resolution. The Chairman governs the shareholder meetings, providing equitable rights to all

shareholders with compliance to rules, regulations and best practices advised by regulators. Board of Directors is the one who assigns the Chief Executive Officer to take responsibilities for conducting the businesses of the company and the supervision of the company.

## Authorized and Duties of Chairman of Board of Directors

Chairman of the Board, as a leader of the organization, shall supervise the benefits of the company, shareholders as well as of other interested parties in order to achieve maximum benefits in long term, by acting as a leader in thinking, creativity, combining capabilities of directors with the management together, resulting in the achievement of strategic plans of company's business conduction both in short term and long term, monitoring operations of the management operations of the management, arranging for preparation of financial status reports and significant financial information presented to Board of Directors quarterly as well as encouraging the corporate governance policy regarding social and environmental responsibilities of the company.

### 1. 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 with the resolutions of shareholders' meetings

### 2. Board of Directors' Meetings

Presiding over as Chairman of the meeting and attending every meeting to constitute 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 Board of Directors to consult and express opinions widely in related issues during the important agenda. Chairman of the Board utilizes the policy of enhancing good relations between Executive Directors and Non-executive Directors.

### 3. 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 directors' 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, 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

### 4. 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

### 5. Shareholders Meeting

Presiding over as Chairman of every Shareholders meeting and a responsible is assigned to supervise 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 Financial Statements, approving 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.

### 6. 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.



## Sub-Committee

### Executive Committee

As of December 31<sup>st</sup>, 2017, Executive Committee consisted of 5 members as follows:

Names	Positions
1. Mr. Phongsarit Tantisuvanitchkul	Chairman of the Executive Committee
2. Dr. Sombat Kitjalaksana	Committee
3. Mr. Suvich Pungcharoen	Committee
4. Mr. Hideo Matsumoto	Committee
5. Mr. Chaiwat Utaiwan	Committee and Secretary

### 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 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 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

However, 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, 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.

### Audit Committee

As of December 31<sup>st</sup>, 2017, Audit Committee consisted of 3 directors as follows:

Names	Positions
1. Mr. Techapit Sangsingkeo	Chairman of the Audit Committee
2. Mr. Somnuk Chaidejsuriya	Committee
3. Mr. Phairuch Mekarporn	Committee

Internal Audit Manager is the Secretary

Every director in the committee is knowledgeable about and experienced in finance, accounting and management. The Manager of the Internal Audit Unit acts 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 to the resolution of the 2/2009 Board of Directors' Meeting on February 25<sup>th</sup>, 2009 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 independency of 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 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 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 independency 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 be disclosed 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 Department 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

### Nomination and Remuneration Committee

As of December 31<sup>st</sup>, 2017, Nomination and Remuneration Committee consisted of 4 directors as follows:

Names	Positions
1. Mr. Phairuch Mekarporn	Chairman of the Nomination and Remuneration Committee
2. Mr. Somnuk Chaidejsuriya	Committee
3. Mrs. Payao Marittanaporn	Committee
4. Mr. Yasutaka Suzuki	Committee

With Assistant Managing Director Administration Group acting as the Secretary of Nomination and Remuneration

### 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 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 for 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
- (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

### Corporate Governance Committee

As of December 31<sup>st</sup>, 2017, Corporate Governance Committee consisted of 4 directors as follows:

Names	Positions
1. Mr. Somnuk Chaidejsuriya	Chairman of the Corporate Governance Committee
2. Mr. Techapit Sangsingkeo	Committee
3. Mr. Phairuch Mekarporn	Committee
4. Mr. Chaiwat Utaiwan	Committee and Secretary

### Scope of authorized and duties of the Corporate Governance Committee

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

- (1) Proposing practical guidelines for good corporate governance to Board of Directors
- (2) Supervising the operations of the Board of Directors, the Executive Committee, various subcommittees and the management to ensure compliance with the good corporate governance principles.
- (3) Reviewing the practical guidelines for good corporate governance, by comparing with the good corporate governance principles based on international standards and of the Stock Exchange of Thailand, for submission to the Board of Directors for consideration and regular update.
- (4) Delegating policies on good corporate governance to the Company's good corporate governance workgroup and reporting the results to the good corporate governance to the Board of Directors
- (5) Having authority to invite/employ any external persons having knowledge and expertise to act as advisors and attend meetings at the Company's expenses.
- (6) Performing other duties as designated by the Board of Directors

### Risk Management Committee

As of December 31<sup>st</sup>, 2017, Risk Management Committee consisted of 4 directors as follows:

Names	Positions
1. Mr. Techapit Sangsingkeo	Chairman of the Risk Management Committee
2. Mrs. Payao Marittanaporn	Committee
3. Mr. Hideo Matsumoto	Committee
4. Mr. Chaiwat Utaiwan	Committee and Secretary

### Scope of authorized and duties of the Risk Management Committee

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

- (1) Setting out the Risk Management Policy for the Company as a whole, and assigning the management to perform in compliance with such Policy, including reporting the performance results to the Risk Management Committee
- (2) Developing and reviewing the Company's Risk Management System to ensure its continual efficiency and effectiveness by means of regular evaluation and follow-up of the risk management procedures to be consistent with the specified policy
- (3) Supporting and encouraging the mutual cooperation in risk management at every level of the Company
- (4) Preparing reports on risks and suggestions to the Board of Directors
- (5) Performing other duties as delegated by the Board of Directors

### Corporate Secretary

Board of Directors has appointed Ms.Sudarat Chiamchan, Director of Corporate Affairs Division, as Corporate Secretary with duties and authority in compliance with the Securities and Exchange Act B.E. 2551 (No.4) to take care of the activities of Board of Directors and coordinate for practices in accordance with the resolutions of Board of Directors as follows:

- (1) Giving advice primarily to 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 Board of Directors' meetings as well as making a follow-up with practices in compliance with the resolutions of AGM of shareholders and 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 Board of Directors, including the orientation of directors
- (7) Keeping the Company's important documents, such as register of directors, invitational letters of Board of Directors' meetings, reports of Board of Directors' meetings, Annual Report, invitational letters of shareholders' meetings, reports of shareholders' meetings and reports of interests of directors or executives

### Executive Management

As of December 31<sup>st</sup>, 2017, there were 8 Executives in the Company as follows:

Names	Positions
1. Mr. Chaiwat Utaiwan	Managing Director and Acting Assistant Managing Director, Business Development Group
2. Mr. Tanat Siricharoen	Assistant Managing Director, Operation Group and Acting Director, Engineering and construction
3. Ms. Walainat Trivisvavet	Assistant Managing Director, Administration Group and Acting Human Resource and Administrative Director
4. Ms. Sudarat Chiamchan	Corporate Affairs Director and Company Secretary
5. Mr. Somkiat Pattamamongkolchai	Account and Finance Director
6. Mr. Hongthong Artit	Business Development Director
7. Mr. Pipat Katikul	Operation Director
8. Mr. Chatchawan Tienprasertkij	Acting Customer Relationship Management Director



## Scope of authorized and duties 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 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 and the total number of staff not exceeding 315 persons
- (6) Having authorized to determine salary rates and other remuneration, including expenses and facilities of Division Director or equivalent and higher to seek approval of the 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 of 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.

# Board of Directors and Management

## Board of Directors



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 Executive Committee

④ **Mr. Techapit Sangsingkeo**

- Independent Director
- Chairman of Audit Committee
- Chairman of Risk Management Committee
- Corporate Governance Committee

⑤ **Mr. Phairuch Mekarporn**

- Independent Director
- Chairman of Nomination and Remuneration Committee
- Audit Committee
- Corporate Governance Committee

⑥ **Mr. Somnuk Chaidejsuriya**

- Independent Director
- Chairman of Corporate Governance Committee
- Audit Committee
- Nomination and Remuneration Committee



⑦ **Dr. Sombat Kitjalaksana**

- Director
- Executive Committee

⑧ **Mr. Suvich Pungchareon**

- Director
- Executive Committee

⑨ **Mrs. Payao Marittanaporn**

- Director
- Risk Management Committee
- Nomination and Remuneration Committee

⑩ **Mr. Yasutaka Suzuki**

- Director
- Nomination and Remuneration Committee

⑪ **Mr. Hideo Matsumoto**

- Director
- Executive Committee
- Risk Management Committee

⑫ **Mr. Chaiwat Utaiwan**

- Director
- Executive Committee
- Risk Management Committee
- Corporate Governance Committee
- Managing Director





**Dr. Thanong Bidaya**

**Age:** 70 years  
**Position in the Company:** Independent Director  
 Chairman of the Board of Directors

**Date of Appointment:** 17 December 2008

**Educational Background / Training Profiles:**

- Ph.D. in Management,  
Northwestern University, U.S.A.
- M.A. in Economics,  
Northwestern University, U.S.A.
- B.A. in Economics,  
Yokohama National University, Japan
- Director Accreditation Program (DAP) Class 25/2004,  
Thai Institute of Directors Association

**Shareholding (%)** 0.0085

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

2012 - Present	Independent Director and Chairman of the Board of Directors CK Power Public Company Limited
2012 - Present	Independent Director and Chairman of the Board of Directors Scan Inter Public Company Limited
2012 - 2015	Chairman of the Board of Directors Srisawad Power 1979 Public Company Limited

**Other Non-listed Companies:**

2010 - Present	Chairman of the Board of Directors Xayaburi Power Company Limited
2005 - 2006	Minister of Finance
2005	Minister of Commerce
2001 - 2005	Chairman of National Economics and Social Development Board (NESDB)



**Mr. Plew Trivisvavet**

**Age:** 72 years  
**Position in the Company:** Director  
 Vice Chairman of the Board of Directors

**Date of Appointment:** 26 September 2006

**Educational Background / Training Profiles:**

- Honorary Doctor of Civil Engineering,  
Rajamangala University of Technology Isan
- Honorary Doctor of Civil Engineering,  
Nakhon Phanom University
- Honorary Doctor of Civil Engineering,  
Kasetsart University
- Honorary Doctor of Science,  
Thai-Nichi Institute of Technology
- Master of Electrical Engineer,  
Osaka University, Japan
- Bachelor of Electrical Engineer,  
Osaka University, Japan
- Thailand Energy Academy (TEA) Energy Literacy Leadership Program, Class10/2017
- Director Accreditation Program (DAP), Class 18/2004,  
Thai Institute of Directors Association
- Director Certification Program (DCP), Class 50/2004,  
Thai Institute of Directors Association
- Finance for Non-Finance Directors (FND), Class 13/2004,  
Thai Institute of Directors Association
- Capital Market Academy Executive Program (CMA), Class 4/2007,  
Capital Market Academy
- National Defense Course for the Joint State-Private Sectors,  
(Thai NCD), Class 366,  
Thai National Defense College

**Shareholding (%)** 0.0275

**Family Relationship between Director and**

**Executive Management:**

Younger brother of Ms.Walainut Trivisvavet's father.

## Work Experience:

### Listed Company:

- 2016 - Present Vice Chairman of the Board Directors and  
Chairman of Executive Committee  
**Bangkok Expressway and Metro Public  
Company Limited**
- 2015 - Present Chairman of Executive Board  
**CH. Karnchang Public Company Limited**
- 2011 - Present Director and Chairman of Executive Committee  
**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**
- 1998 - 2015 Chairman of the Board of Directors / Chairman of  
Executive Committee  
**Bangkok Metro Public Company Limited**
- 1994 - 2015 Chairman of Executive Committee and President  
**CH. Karnchang Public Company Limited**

### Other Non-listed Companies:

- 2010 - Present Chairman of Executive Committee  
**Xayaburi Power Company Limited**
- 2006 - Present Chairmen of Executive Committee  
**Nam Ngum 2 Power Company Limited**
- 2004 - Present Chairman of Executive Committee  
**Southeast Asia Energy Company Limited**
- 1999 - Present Chairman of Executive Committee  
**Construction Material Supply Company Limited**
- 1996 - Present Chairman of the Board of Directors and Chairman  
of Executive Committee  
**Northern Bangkok Expressway Company Limited  
(NECL)**
- 1991 - Present Director  
**CH. Karnchang Real Estate Company Limited**



**Mr. Phongsarit Tantisuvanitchkul**

**Age:** 45 years

**Position in the Company:** Director  
Chairman of Executive Committee

**Date of Appointment:** 25 February 2016

### Educational Background / Training Profiles:

- Master of Engineering,  
University of Michigan Ann Arbor
- Bachelor of Engineering,  
Kasetsart University
- Understanding the Fundamental of Financial Statement Program  
(UFS), Class 9/2007,  
Thai Institute of Directors Association
- Finance for Non-Finance Director (FND) Program, Class 35/2007,  
Thai Institute of Directors Association
- Director Certification Program (DPC), Class 155/ 2012,  
Thai Institute of Directors Association

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

### Work Experience:

#### Listed Company:

- 2016 - Present Director and Executive Committee  
**Bangkok Expressway and Metro Public Company  
Limited**
- 2016 - Present Senior Vice President - Operation Group  
**CH. Karnchang Public Company Limited**
- 2011 - 2017 Executive Vice President - Business Development  
**CH. Karnchang Public Company Limited**
- 2014 - 2015 Director  
**Bangkok Metro Public Company Limited**

#### Other Non-listed Companies:

- 2017 - Present Chairman of the Board  
**Bangkok Metro Networks Company Limited**



**Mr. Techapit Sangsingkeo**

**Age:** 73 years  
**Position in the Company:** Independent Director  
 Chairman of Audit Committee  
 Chairman of Risk Management Committee  
 Corporate Governance Committee

**Date of Appointment:** 26 September 2006

**Educational Background / Training Profiles:**

- Master of Economics, Keio University, Japan (under a scholarship from Bank of Thailand)
- Bachelor of Economics, Hitotsubashi University, Japan
- Audit Committee Program (ACP) Program, Class 22/2008, Thai Institute of Directors Association
- Directors Accreditation Program (DAP), Class 34/2005, Thai Institute of Directors Association
- Executive Development Program, Harvard University, U.S.A.
- Senior Executive Development Program, Class 3, King Prajadhipok's Institute
- Capital Market Academy Executive Program (CMA), Class 5, Capital Market Academy

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

2012 - Present Independent Director and Chairman of Audit Committee  
 CK Power Public Company Limited

2007 - 2015 Independent Director and Chairman of Audit Committee  
 Star Sanitary Ware Public Company Limited

**Other Non-listed Companies:**

2007 - Present Director  
 Pathum Thani Water Company Limited  
 2003 - 2004 Director and Chairman of Audit Committee  
 Import-Export Bank of Thailand  
 2002 - 2004 Deputy Governor  
 Bank of Thailand  
 2001 - 2004 Director  
 Thailand Securities Depository Company Limited



**Mr. Phairuch Mekarporn**

**Age:** 72 years  
**Position in the Company:** Independent Director  
 Chairman of Nomination and Remuneration Committee  
 Audit Committee  
 Corporate Governance Committee

**Date of Appointment:** 26 September 2006

**Educational Background / Training Profiles:**

- Master of Mechanical Engineering, California State University, Long beach, U.S.A.
- Bachelor of Mechanical Engineering, Chulalongkorn University
- Audit Committee Program (ACP), Class 17/ 2007, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 81/2006, Thai Institute of Directors Association
- Advanced Management Program: The International Senior Managers' Program, Harvard University, Graduate School of Business Administration, U.S.A.
- Seminar Business in An age of uncertainty 2017, EY office Limited
- Directing in the Year of the Rooster: Hot Issue and Outlook for 2017, Thai Institute of Directors Association
- Electricity Generation from Solar Panels on Rooftop of Residential Buildings, Electric Supply Industry Association of Thailand (TESIA)

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

2004 - Present Independent Director  
 Thai Optical Group Public Company Limited

**Other Non-listed Companies:**

2007 - Present 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





## Mr. Somnuk Chaidejsuriya

**Age:** 67 years

**Position in the Company:** Independent Director  
Chairman of Corporate Governance Committee  
Audit Committee  
Nomination and Remuneration Committee

**Date of Appointment:** 26 September 2006

### Educational Background / Training Profiles:

- Master of Law, Chulalongkorn University
- Bachelor of Law, Chulalongkorn University
- Thai Barrister-at-Law, Institute of Legal Education, Thai Bar Association
- Audit Committee Program (ACP), Class 9/2005, Thai Institute of Directors Association
- Directors Accreditation Program (DAP), Class 9/2004, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 46/2004, Thai Institute of Directors Association
- Diploma, National Defense Course for the Joint State-Private Sectors, Class 11, Thai National Defense College

**Shareholding (%)** -None-

### Family Relationship between Director and

**Executive Management:** -None-

### Work Experience:

**Listed Company:**

-None-

**Other Non-listed Companies:**

2016 - Present Chairman of Nomination and Remuneration Committee  
Advance Finance Public Company Limited

2015 - Present Chairman of Audit Committee  
Loxley Wireless Public Company Limited

2004 - Present Director / Audit Committee / Chairman of Risk Management Committee  
Don Muang Tollway 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  
Deputy Governor for Operation  
Deputy Governor for Legal Affairs and Land Ownership  
Expressway Authority of Thailand (EXAT)



**Dr. Sombat Kitjalaksana**

**Age:** 61 years

**Position in the Company:** Director  
Executive Committee

**Date of Appointment:** 11 September 2000

**Educational Background / Training Profiles:**

- Doctor of Soil Mechanic Engineering,  
University of Innsbruck, Austria
- Master of Soil Mechanic Engineering,  
Chulalongkorn University
- Director Certification Program (DCP), Class 81/2006,  
Thai Institute of Directors Association
- Directors Accreditation Program (DAP), Class 36/2005,  
Thai Institute of Directors Association

**Shareholding (%)** 0.0250

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

2015 - Present	Director, Managing Director, Executive Committee Bangkok Expressway and Metro Public Company Limited
2014 - 2015	Managing Director and Executive Committee Bangkok Metro Public Company Limited
2005 - 2015	Director CH. Karnchang Public Company Limited
2001 - 2010	Vice President for Business Development CH. Karnchang Public Company Limited
2000 - 2011	Managing Director Bangkok Metro Public Company Limited

**Other Non-listed Companies:**

2009 - Present	Director Bangkok Metro Networks Company Limited
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**Mr. Suvich Pungchareon**

**Age:** 71 years

**Position in the Company:** Director  
Executive Committee

**Date of Appointment:** 26 September 2006

**Educational Background / Training Profiles:**

- Master of Political Science,  
Sukhothai Thammathirat Open University
- Bachelor of Electrical Engineering,  
Tohoku University, Japan
- Diploma Program on Politics and Governance in Democratic  
Systems, Class 8/2004,  
King Prajadhipok's Institute
- Diploma Program on Public Economy Management, Class 1/2003,  
King Prajadhipok's Institute
- Director Certification Program (DCP), Class 37/2003,  
Thai Institute of Directors Association
- Mini MBA, Berkeley University, U.S.A.

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

Present	Advisor Bangkok Expressway and Metro Public Company Limited
2003 - 2006	Managing Director Bangkok Expressway Public Company Limited

**Other Non-listed Companies:**

1996 - 2003	Managing Director Northern Bangkok Expressway Company Limited
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## Mrs. Payao Marittanaporn

**Age:** 61 years

**Position in the Company:** Risk Management Committee Member  
Nomination and Remuneration  
Committee Member

**Date of Appointment:** 17 February 2015

### Educational Background / Training Profiles:

- Master of Business Administration,  
Chulalongkorn University
- Higher Diploma in Auditing,  
Thammasat University
- Bachelor of Accountancy,  
Chulalongkorn University
- Director Certification Program (DCP), Class 48/2004,  
Thai Institute of Directors Association
- Role of the Compensation Committee (RCC), Class 9/2009,  
Thai Institute of Directors Association
- Capital Market Academy Leader Program, Class 11/2010,  
Capital Market Academy(CMA)

**Shareholding (%)** -None-

### Family Relationship between Director and

**Executive Management:** -None-

### Work Experience:

#### Listed Company:

2015 - Present Director / Corporate Governance and Risk  
Management Committee Member / Executive  
Director / Managing Director  
Bangkok Expressway and Metro 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

#### Other Non-listed Companies:

2004 - Present Director and Executive Director  
Northern Bangkok Expressway Company Limited

2007 - Present Acting Managing Director  
Northern Bangkok Expressway Company Limited

2011 - 2014 Director  
Xayaburi Power Company Limited





**Mr. Yasutaka Suzuki**

**Age:** 54 years  
**Position in the Company:** Director  
 Nomination and Remuneration Committee

**Date of Appointment:** 7 April 2015

**Educational Background / Training Profiles:**

- Master of Mechanical Engineering, Tohoku University, Japan
- Bachelor of Mechanical Engineer, Tohoku University, Japan
- Advanced Management Program, Wharton School, University of Pennsylvania, USA

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

-None-

**Other Non-listed Companies:**

2015 - Present Senior Vice President, Director General - Infrastructure Business Development  
**Mitsui & Co. (Asia Pacific) PTE Limited, Singapore**

2012 - 2015 Senior Vice President - Business Development  
 Unit 1 Infrastructure Business Development  
**Mitsui & Co. Limited, Japan**

2009 - 2012 Director General and Senior President  
 Infrastructure and Machinery Development  
**Mitsui & Co. (Korea) Limited**



**Mr. Hideo Matsumoto**

**Age:** 45 years  
**Position in the Company:** Director  
 Executive Committee  
 Risk Management Committee

**Date of Appointment:** 21 December 2017

**Educational Background / Training Profiles:**

- Bachelor of Arts in Policy Management  
 Keio University

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

**Work Experience:**

**Listed Company:**

-None-

**Other Non-listed Companies:**

2017 - Present Director  
**Mitsui Water Holdings (Thailand) Co., Ltd.**

2016-2017 Deputy General Manager  
 Fourth Department, First Projects Development Division  
**Mitsui & Co., Ltd. Tokyo Headquarters**

2011 - 2016 Deputy General Manager  
 Third Department, First Projects Development Division  
**Mitsui & Co., Ltd. Tokyo Headquarters**

2005 - 2011 Deputy Project Director  
**Mitsui & Co., Ltd. Thailand**



## Mr. Chaiwat Utaiwan

**Age:** 64 years

**Position in the Company:** Director  
Executive Committee  
Risk Management Committee  
Corporate Governance Committee  
Managing Director

**Date of Appointment:** 15 March 2014

### Educational Background / Training Profiles:

- Master of Business Administration (Executive Program), Sasin Graduate Institute of Business Administration, Chulalongkorn University
- Master of Science (Mathematics and Computer Science), University of Louisville, Kentucky, U.S.A.
- Bachelor of Science (Statistics), Faculty of Commerce and Accountancy, Chulalongkorn University
- National Defense Course for the Joint State-Private Sectors, Class 20, Thai College of Defense, National Defense Studies Institute
- Role of Chairman Program (RCP), Class 29/2012, Thai Institute of Directors Association (IOD)
- Capital Market Academy Leadership Program (CMA), Class 3/2006, Capital Market Academy, The Stock Exchange of Thailand
- Director Certification Program (DCP), Class 18/2002, Thai Institute of Directors Association (IOD)

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

### Work Experience:

**Listed Company:**

2016 - Present Director, Audit Committee and Remuneration and Nominating Committee  
Thai British Security Printing Public Company Limited

2015 - Present Director and Executive Committee  
CK Power Public Company Limited

2011 - 2014 Director / Executive Committee/ Risk Management Committee / Managing Director  
Bangkok Metro Public Company Limited

2007 - 2011 President and Chief Executive Officer  
Siam City Bank Public Company Limited

2001 - 2007 Chairman of the Executive Committee and President  
AIG Retail Bank Public Company Limited

2001 - 2007 President and Chief Executive Officer  
AIG Finance (Thailand) Public Company Limited

### Other Non-listed Companies:

2016 - Present Director  
The Institute of Directors Association (IOD)

2014 - Present Chairman of the Board of Directors  
Islamic Bank of Thailand

2014 - Present Director and Managing Director  
Pathum Thani Water Company Limited

2014 - Present Director  
Thai Water Operations Company Limited

2011 - Present Chairman of the Board of Director  
Suvarnabhumi Airport Hotel Company Limited

2015 - 2017 Vice President  
Thai Listed Companies Association

2011 - 2012 Director and Executive Committee  
Government Savings Bank

2011 - 2012 Vice Chairman of Board of Directors  
Bangkok Metro Networks Company Limited

## Management



- ① **Mr. Chaiwat Utaiwan**
- Managing Director
  - Acting Assistant Managing Director, Business Development Group

- ② **Mr. Tanat Siricharoen**
- Assistant Managing Director - Operation Department
  - Acting Engineering and Construction Director

- ③ **Ms. Walainut Trivisvavet**
- Assistant Managing Director - Administration Department
  - Acting Human Resource and Administrative Director

- ④ **Ms. Sudarat Chiamchan**
- Corporate Affairs Director
  - Company Secretary





⑤ **Mr. Somkiat Pattamamongkolchai**  
- Account and Finance Director

⑥ **Mr. Hongthong Artit**  
- Business Development Director

⑦ **Mr. Pipat Katikul**  
- Operation Director

⑧ **Mr. Chatchawan Tianprasertkit**  
- Acting Customer Relationship  
Management Director



## Mr. Chaiwat Utaiwan

**Age:** 64 years

**Position in the Company:** Director  
Executive Committee  
Risk Management Committee  
Corporate Governance Committee  
Managing Director

**Date of Appointment:** 15 March 2014

### Educational Background / Training Profiles:

- Master's degree
  - Master of Business Administration (Executive Program), Sasin Graduate Institute of Business Administration, Chulalongkorn University
  - Master of Science (Mathematics and Computer Science) University of Louisville, Kentucky, U.S.A.
- Bachelor's degree
  - Bachelor of Science (Statistics), Faculty of Commerce and Accountancy Chulalongkorn University
- National Defense Course for the Joint State-Private Sectors, Class 20, Thai College of Defense
- Role of Chairman Program (RCP), Class 29/2012, Thai Institute of Directors Association (IOD)
- Capital Market Academy Executive Program (CMA), Class 3/2006, Capital Market Academy
- Director Certification Program (DCP), Class 18/2002, Thai Institute of Directors Association (IOD)

**Shareholding (%)** -None-

**Family Relationship between Director and**

**Executive Management:** -None-

### Work Experience:

**Listed Company:**

2016 - Present Director, Audit Committee and Remuneration and Nominating Committee  
**Thai British Security Printing Public Company Limited**

2015 - Present Director and Executive Committee  
**CK Power Public Company Limited**

2011 - 2014 Director / Executive Committee/ Risk Management Committee / Managing Director  
**Bangkok Metro Public Company Limited**

2007 - 2011 President and Chief Executive Officer  
**Siam City Bank Public Company Limited**

2001 - 2007 Chairman of the Executive Committee and President  
**AIG Retail Bank Public Company Limited**

2001 - 2007 President and Chief Executive Officer  
**AIG Finance (Thailand) Public Company Limited**

**Other Non-listed Companies:**

2016 - Present Director  
**The Institute of Directors (IOD)**

2014 - Present Chairman of the Board of Directors  
**Islamic Bank of Thailand**

2014 - Present Director and Managing Director  
**Pathum Thani Water Company Limited**

2014 - Present Director  
**Thai Water Operations Company Limited**

2011 - Present Chairman of the Board of Director  
**Suvarnabhumi Airport Hotel Company Limited**

2015 - 2017 Vice President  
**Thai Listed Companies Association**

2011 - 2012 Director and Executive Committee  
**Government Savings Bank**

2011 - 2012 Vice Chairman of Board of Directors  
**Bangkok Metro Networks Company Limited**



## Mr. Tanat Siricharoen

**Age:** 58 years

**Position in the Company:** Assistant Managing Director -  
Operation Department,  
Acting Engineering and Construction  
Director

### Educational Background / Training Profiles:

- Bachelor's degree:
  - Bachelor of Industrial Electrical Technology King's Mongkut's University of Technology North Bangkok
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Professional Presentation Skills, Class 1/2015
- Build up Risk Awareness Program, PwC Company, 2015
- Executive Coaching Course, 2015
- Lean Six Sigma, Executive Level, 2015
- Monitoring and Controlling Business Performance, Thailand Management Association (TMA), 2015
- Introduction and Awareness to OHSAS18001:2007, SGS Institute, 2015
- Myanmar Opportunities Day, The Federation of Thai Industries, 2015

- Director Accreditation Program (DAP), Class 99/2012, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 170/2013, Thai Institute of Directors Association
- Integrated Water Management for Executives, Class 3, Thai Waterworks Association (TWWA)

**Shareholding (%)** -None-

**Work Experience:**

- Operation Director  
TTW Public Company Limited
- Operation Manager  
Thai Water Operations Company Limited
- Operation Director  
BJT Water Company Limited
- Maintenance Manager  
BJT Water Company Limited

**Other current positions:**

- Director / Managing Director  
Thai Water Operations Company Limited



**Ms. Walainut Trivisvavet**

**Age:** 47 years

**Position in the Company:** Assistant Managing Director -  
Administration Department  
Acting Human Resource and  
Administrative Director

**Educational Background / Training Profiles:**

- Master's degree
  - Master of Science in Administrative Studies,  
Sub-concentration: Financial Economics  
**Boston University**
- Bachelor's degree
  - Business Administration  
**Assumption University**
- Capital Market Academy Executive Program (CMA),  
Class 24/2017, Capital Market Academy
- Driving Company Success with IT Governance,  
Thai Institute of Director
- Mini-M.A. in Human Resource Management, Class 26/2016,  
Academic Service and Continuing Education Center, Faculty of  
Economics, Chulalongkorn University

- Certification Program in Investor Relations, 2016, Thai Listed  
Companies Association
- Chief Financial Officer Certification Program (CFO), Class 19,  
The Federation of Accounting Professions under Royal Patronage  
of HM the King
- Advance Audit Committee Program (AACP), Class 20/2015,  
Thai Institute of Directors Association
- Beyond Treasury Management, The Federation of Accounting  
Professions under Royal Patronage of HM the King, 2015
- Executive Coaching Course, 2015
- Lean Six Sigma Program, Executive Level, 2015
- Myanmar Opportunities Day, The Federation of Thai Industries,  
2015
- Company Reporting Program (CRP), Class 13/2015, Thai Institute  
of Directors Association
- Director Certification Program (DCP), class 201/2015, Thai Institute  
of Directors Association
- Advance Certificate Course in Public Economics Management  
for Executives, King Prajadhipok's Institute

**Shareholding (%)** -None-

**Work Experience:**

- Assistant Managing Director - Finance Department  
**Bangkok Expressway Public Company Limited**
- General Director  
**Rung Phonchai Company Limited**
- Managing Director  
**Fahamorn Equipment Company Limited**
- Managing Director  
**R.S.B. Construction Company Limited**
- General Manager  
**Sa-nga Construction Company Limited**
- Managing Director  
**Rung Phonchai Company Limited**

**Other current positions:**

- Director  
**PathumThani Water Company Limited**
- Director  
**Thai Water Operations Company Limited**





**Ms. Sudarat Chiamchan**

**Age:** 53 years

**Position in the Company:** Corporate Affairs Director  
and Company Secretary

**Educational Background / Training Profiles:**

- Master's degree
  - Master of Management  
Mahidol University
- Bachelor's degree
  - Bachelor of Business Administration (Accounting)  
Ramkhamhaeng University
- Board Nomination & Compensation Program (BNCP 1/2017), Thai Institute of Directors Association
- Corporate Governance for Executives (CGE), Class 6/2016, Thai Institute of Directors Association
- How to Report the Remuneration of Directors, 2016, Thai Institute of Directors Association
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Responsible Supply Chain Management, the Stock Exchange of Thailand, 2015
- Build up Risk Awareness, PWC Company, 2015
- Executive Coaching, 2558
- Lean Six Sigma Program, Executive Level, 2015
- Advance Audit Committee Program (AACP), Class 20/2015, Thai Institute of Directors Association
- Director Certification Program (DCP), Class 186/2014, Thai Institute of Directors Association
- Change Management and the Management System of Significant Information, 2014
- TMA Management Development Program, Class 18, Thailand Management Association (TMA), 2013
- Effective Minutes Taking (EMT), Class 24/2012
- Company Secretary Program (CSP), Class 43/2011, Thai Institute of Directors Association
- Company Reporting Program (CRP), Class 2/2011, Thai Institute of Directors Association

**Shareholding (%)** -None-

**Work Experience:**

- Accounting and Finance Manager  
Pathum Thani Water Company Limited
- Accounting and Finance Manager  
Index International Group Company Limited

**Other current positions:**

-None-



**Mr. Somkiat Pattamamongkolchai**

**Age:** 45 years

**Position in the Company:** Account and Finance Director

**Educational Background / Training Profiles:**

- Master's degree
  - Master of Accounting  
Thammasart University
- Bachelor's degree
  - Bachelor of Commerce and Accountancy  
Chulalongkorn University
- IP Commercialization-form Laboratory to Global Marketplace, Licensing Executives Society (Thailand)
- Director Certification Program (DCP), Class 121/2009, Thai Institute of Directors Association
- Director Accreditation Program (DAP), Class 79/2009, Thai Institute of Directors Association
- TLCA Executive Development Program, Thai Listed Companies Association, 2015
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Build up Risk Awareness, PWC Company, 2015
- Beyond Treasury Management, The Federation of Accounting Professions, 2015
- Lean Six Sigma Program, Executive Level, 2015

**Shareholding (%)** -None-

**Work Experience:**

- Director  
CK Power Public Company Limited
- Director  
Bangkhenchai Company Limited
- Assistant Audit Manager  
EY Office Limited (Formerly Ernst & Young Limited)

**Other current positions:**

-None-



**Mr. Hongthong Artit**

**Age:**

51 years

**Position in the Company:** Business Development Director

**Educational Background / Training Profiles:**

- Master's degree:
  - Master of Engineering (Infrastructure and Management)  
Kasetsart University
- Bachelor's degree:
  - Bachelor of Engineer (Mechanical Engineering)  
King Mongkut's University of Technology North Bangkok
- Laws and Guidelines for Investment in Myanmar, The Federation of Thai Industries
- Investment Opportunities and Development Partnerships in Myanmar, The Federation of Thai Industries
- Renewable energy For Small Power Producers The Electricity Industry Association of Thailand
- International Field Trip: CLMV, Thai Listed Companies Association, 2016
- Energy Symposium 2016, The Federation of Thai Industries
- Burmese Language for Basic Communication, Course #1, Easy Burmese Language Center, 2015
- Seminar on Myanmar insight 2017  
Thai Business Association of Myanmar
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Professional Presentation Skill, Class 1/2015
- Build up Risk Awareness, PWC Company, 2015
- Executive Coaching Course, 2015
- Beyond Treasury Management, The Federation of Accounting Professions, 2015
- Lean Six Sigma Program, Executive Level, 2015
- Myanmar Opportunities Day, The Federation of Thai Industries, 2015
- Joint Venture Investment & Business Contract Risk Management in Myanmar, Ideal Forum Co., Ltd., 2014
- Management Development Program, Thailand Management Association (TMA), 2014
- The Greater Mekhong Investment Forum, Euro money Conference, 2014
- Change Management and the Management System of Significant Information, 2014
- TMA Management Development Program, Class18/2013, Thailand Management Association (TMA)

**Shareholding (%)** 400 shares or 0.00001%

**Work Experience:**

- Operation Manager  
PathumThani Water Company Limited
- Chief of Engineering and Construction Division  
TTW Public Company Limited
- Pipeline Site Manager  
JWTWCK Joint Venture
- Engineering Manager  
Thai Crane International Company Limited  
SVS Consultant Company Limited

**Other current positions:**

-None-



**Mr. Pipat Katikul**

**Age:**

50 years

**Position in the Company:** Operation Director

**Educational Background / Training Profiles:**

- Master's degree:
  - Business Administration  
National Institute of Development Administration (NIDA)
  - Computer and Engineering Management  
Assumption University
- Bachelor's degree:
  - Bachelor of Science (Microbiology)  
King Mongkut's University of Technology Thonburi
- Computer program for design and wastewater management, Dhurakij Pundit University
- Integrate Management ISO 9001/14001:2015, SGS Institute
- Monitoring and Control of Business Performance, Thailand Management Association, 2015
- Introduction and Awareness to OHSAS18001:2007, SGS Institute, 2015
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Build up Risk Awareness Program, PwC Company, 2015
- Burmese Language for Basic Communication, Course #1, 2015
- Lean Six Sigma, Executive Level, 2015
- Monitoring and Controlling Business Performance, Thailand Management Association (TMA), 2015
- How to Develop a Risk Management Plan, Thai Institute of Directors Association, 2014

- Business Capability Enhancement Program (BCEP), Thai Institute of Directors Association, 2014

**Shareholding (%)** -None-

#### Work Experience:

- Manager - Quality and Efficiency  
Thai Water Operations Company Limited
- Operation Manager - PathumThani Tap Water Manufacturing Plant  
Thai Water Operations Company Limited
- Business Development Manager  
TTW Public Company Limited
- Business Development Manager  
Thai Water Operations Company Limited
- Operation Manager  
BJT Water Company Limited
- Production Manager  
Ajinomoto (Thailand) Company Limited

#### Other current positions:

-None-



**Mr. Chatchawan Tianprasertkit**

**Age:** 52 years

**Position in the Company:** Acting Customer Relationship Management Director

#### Educational Background / Training Profiles:

- Master's degree:
  - Master of Business Administration (Management)  
Sripatum University
- Bachelor's degree:
  - Faculty of Commerce and Accountancy, Department of Statistics, Computer Program  
Chulalongkorn University
- Computer program for design and wastewater management, Dhurakij Pundit University
- Global Business Dialogue 2017, Personnel Management Association of Thailand.
- Singapore International Water Week 2016  
The Federation of Thai Industries
- Business Reporting Program (BRP), Thai Institute of Directors Association, 2015
- Build up Risk Awareness, PWC Company, 2015

- Beyond Treasury Management, The Federation of Accounting Professions, 2015
- Lean Six Sigma Program, Executive Level, 2015
- Governance, Risk and Compliance; TRIS Academy of Management, 2014
- Internal Audit Certification Program, The Federation of Accounting Professions, 2013
- Marketing Certificate Program (MCP) : Excellence Series, Class 27/2012, Thammasart University
- Risk Management Program, Thai Institute of Directors Association, 2011
- Integrated Management System for Sustainability (IMS) Program, Thailand Productivity Institute, 2011

**Shareholding (%)** -None-

#### Work Experience:

- Manager - Internal Audit Division  
TTW Public Company Limited
- Information Technology Director  
TTW Public Company Limited
- Marketing Director  
TTW Public Company Limited
- Senior Manager - Business Development Division  
Bangkok Metro Public Company Limited
- Operation Support Manager - Operation Division  
Bangkok Metro Public Company Limited
- Manager - Software Applications for Business Administration  
Business Application Co., Ltd.
- Manager - Computer Division  
Siam Kayaba Company Limited

#### Other current positions:

-None-



## Shareholding by Directors and Executives in 2017

Director/Executive		Brought Forward as at January 1, 2017	Balance as at December 31, 2017	Changing	Shareholders (%)
1. Dr. Thanong Bidaya	Chairman of the Board of Directors	342,500	342,500	-	0.0085
2. Mr. Plew Trivisvavet	Director and Vice Chairman of the Board of Directors	1,100,000	1,100,000	-	0.0275
3. Mrs. Saikasem Trivisvavet	Mr. Plew Trivisvavet's spouse	100,000	100,000	-	0.0025
4. Mr. Phongsarit Tantisuvanitchkul	Director	-	-	-	-
5. Mr. Techapit Sangsingkeo	Independent Director	1,000,000	-	(1,000,000)	-
6. Mrs. Pimpimol Sangsingkeo	Mr. Techapit Sangsingkeo's spouse	-	1,000,000	1,000,000	0.0250
7. Mr. Phairuch Mekarporn	Independent Director	-	-	-	-
8. Mr. Somnuk Chaidejsuriya	Independent Director	-	-	-	-
9. Mr. Suvich Pungchareon	Director	-	-	-	-
10. Mrs. Wanna Pungchareon	Mr. Suvich Pungchareon's spouse	300,000	-	(300,000)	-
11. Dr. Sombat Kitjalaksana	Director	1,000,100	-	-	0.0250
12. Mr. Hideo Matsumoto	Director	-	-	-	-
13. Mr. Yasutaka Suzuki	Director	-	-	-	-
14. Mr. Chaiwat Utaiwan	Director and Managing Director	-	-	-	-
15. Mr. Tanat Siricharoen	Assistant Managing Director, Operations Group and Acting Engineering and Construction Director	-	-	-	-
16. Ms. Walainut Trivisvavet	Assistant Managing Director, Administration Group and Acting Human Resource and Administrative Director	-	-	-	-
17. Ms. Sudarat Chiamchan	Corporate Affairs Director	-	-	-	-
18. Mr. Somkiat Pattamamongkolchai	Account and Finance Director	-	-	-	-
19. Mr. Hongthong Artit	Business Development Director	400	400	-	0.00001
20. Mr. Pipat Katikul	Operation Director	-	-	-	-
21. Mr. Chatchawan Tienprasertkit	Acting Customer Relationship Management Director	-	-	-	-

# Activities for Society, Quality of Life, and Environment

The company always realizes that the company is one of society and go forward together. Sustainable growth of the company is also based on sustainable social basis. Therefore, the company intently creates lots of social responsibility projects, including sustainable business operations based on the balance of interested persons regarding the concept **“Water Quality, Quality of Life”**. Lots of projects make people have good quality of life, and lead the society to be strengthened from learning process as well as self-sufficient.

Furthermore, the company also sees environmental responsibility as important by operation without environmental impact, energy conservation, entire water management, and creation of environmental conservation projects as the heritages for next generation.



## Social Support Leading to Sustainability Projects

### Youth Educational Support and Opportunity Expansion

Supporting and encouraging the opportunities in youth education is one of company's social responsibility. The company do educational support projects, such as scholarships education buildings, libraries, desktop computers, toilets, educational aids, drinking water systems, etc. for being a part of inequality reduction, building up educational opportunities as well as solving poverty problems.

● Granting scholarships to students in Samut Sakhon - Nakhon Pathom area and Pathum Thani - Rangsit area. The company has initially granted scholarships to students from 130 schools since 2006 to 2017 approximately 4,000,000 baht. In 2017, the company granted scholarships to students from 17 schools approximately 510,000 baht. Air Chief Marshal Prajin Juntong, Deputy Prime Minister honored to preside over scholarship award ceremony.



- Supporting disadvantaged schools in Surin under the project of students' life quality promotion in disadvantaged schools, held by Office of Deputy Prime Minister, Air Chief Marshal Prajin Juntong. The company chose Ban Sam Rong School in Sanom district as an attendant as well as considered to give priority to construct toilets and waterworks, due to deficiency of toilets and water from water purifier had high saltiness as well as could not be used in plant watering. After that, the company supported further projects, such as landscape in toilet area, drinking water dispensers, and teachers' desks approximately 625,170 baht. Air Chief Marshal Prajin Juntong, Deputy Prime Minister honored to preside over toilet and waterworks delivery ceremony on 24 November 2017.





- Supporting disadvantaged schools in Pathum Thani under the project of students' life quality promotion in disadvantaged schools, held by Office of Deputy Prime Minister, Air Chief Marshal Prajin Juntong. The company chose 3 disadvantaged schools as attendants, such as Wat Ban Prao Nai School, Bueng Khao Yon School, and Wat Chula Jindaram School. The company considered to give them support by urgency and problems which had an affect on students' life quality directly, such as multi-functional meeting rooms, toilets, lawns, playgrounds, desktop computers, air conditioners, drinking water dispensers, agricultural equipment, etc. Supporting budget was 1,088,132 baht.







## Strengthening Good Quality of Life by Using Business Proficiency

“Water is Life”, therefore the company intently operates the business in the way of sustainable progress as well as continually focuses on social and environmental responsibilities according with company’s mission that hopes for stable, consistent, and sustainable growth, also achieves the vision by being the leader of water, energy, and environmental business. The company applies knowledge and proficiency of tap water production to enhance communal life quality level, produces and distributes clean and standard bottled drinking water, as well as supports deficient people by making tap water more approachable.

- Producing and distributing Reverse Osmosis bottled drinking water to support public charities and be useful for all parties. In 2017, there were production and distribution of 200,000 bottles of drinking water to use in important activities, such as bottled drinking water service for people who paid a final tribute to H.M. King Bhumibol Adulyadej at Grand Palace, Sanam Luang, Bangkok, or help for relieving flood victims, etc.



- Tap water service for community by giving people opportunities to receive tap water at tap water manufacturing plant of the company for relieving drought crisis or the period of water deficiency.



## Creating Shared Value

Creating social value of the company for leading to have advantage over competitions makes the activities that the company operate truly benefit society, also indicates the concept of creating shared value applied to the operation of a business, this can result in long-term sustainable growth of the company and society at the same time.

- The research of water supply sludge to develop as a product of the tap water manufacturing plant, Pathum Thani The company collaborated with Center of Excellence on Hazardous Substance Management, Chulalongkorn University. The objective is to increase the value of the damage caused by water can be reused in the type of construction and promote the company's image. Corporate social responsibility, which will experiment with bringing water supply sludge mixed with other materials to develop a new product for a fee in the amount of baht 985,000 research resulted in the removal of the burden resulting from the production process, waste water supply and new products from research to create value added to the company and the community.



- Engaging in the community solution in case of flood drainage on Sedtakid Road, Samut Sakhon The company built the sewers (Box Culvert) on the Sedtakid Road 1,500 meters, including the construction of wells and automatic drainage systems to solve problems about water on the surface of Sedtakid Road would accelerate into the public canal more quickly during heavy rain. The amount of operating expenses was 37,503,870 baht, resulting in flooding problems on Sedtakid Road reduced and increase convenience and safety for passers-by on Sedtakid Road.



## The Project of Environmental Sustainability

### Environmentally Friendly Business Operations

The company is aware of the business operation, it will have to be accountable for the quality of life. Sustainable use of resources and environmental management in parallel assembling business profit is the main concept. Therefore, the use of natural resources is taken as raw material in the production, including energy-saving manufacturing process is environmentally friendly, as well as the control of waste to zero so that no waste released into the public. Therefore it is an important factor to operate the business and it is the cause of good company's image in environmental responsibility in the eyes of the community, reducing production costs, including making the country go forward without destroying the environment.

- Conservation of energy use from business operations. The company has initiated a project to study Solar Rooftop installation on tank water at water supply plants, Banglen, Nakhon Pathom In 2017. Currently under operation. It is anticipated that the costs of electricity from electric energy of water supply plants will be reduced.



- Reducing greenhouse gas emissions from business operations (Greenhouse Gas), by constructing energy-saving office buildings with green architectural style (Green Architecture) of the water supply plants, Krathum Baen, Samut Sakhon.



- The reforestation in degenerated forest areas, which is the source of water used in the water supply producing process, the company is aware of the importance of watershed forest as a source of river helping sustain the lives of the creatures. It is visible from a concept in business, "Water Quality, Quality of Life". The company collaborated with the Department of National Parks, Wildlife and Plant Conservation to hold watershed reforestation projects under the project of 1 million young plants building up watershed forest areas since 2011-2017, 8,000,000 square meters in Thong Pha Phum National Park, Kanchanaburi for rehabilitating degenerated watershed forest. The project operation has ended completely In 2017. The company intently creates value for this project by providing check dam projects in the areas of watershed forest as plant watering and preventing damage from wildfire. The duration of operation is 5 years continuously since 2018-2022.





# Occupational Health and Safety

## Implementation of Activities Related to Occupational Safety, Health and Environment

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 staffs, including senior executives and operational-level staff.

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 standard in their works.

## Environmental Quality, Occupational Safety and Health Policies

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

- Producing running water with quality that is responsive to the needs of customers.
- Ensuring maximum satisfaction from direct and indirect customers.
- 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.
- Complying with the laws and requirements on the nature and problems relating to environment and work safety of the company.
- Preventing pollution from the company's business activities that may affect natural environment, including the efficient use of energy and resources.
- 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.
- 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.

## Occupational Safety and Health Goals

- To become an organization with injury & illness-free operation

## Occupational Safety and Health Strategies

- Building a standard on occupational safety and health for all levels of employee under the leadership of the management
- Increasing potential and realization on occupational safety
- Creating a sense of participation among employees and business partners in order to improve and correct working process to ensure occupational safety.

## 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 standard 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.

## Occupational Safety, Health and Environment Committee

Name-Last Name	Position	Position in OSHEC
1. Ms. Achara Sangkhato	Quality Division Manager	Chairman
2. Mr. Pisit Dithanin	Acting Manager of Engineering and Maintenance Department	Member
3. Mr. Anurak Sunthornamphai	Operational staff	Member
4. Mr. Vilai Chansu	Operational staff	Member
5. Mr. Pinit Wutthiwongkarn	Safety officer	Secretary

## Maintenance of Health and Safety Condition in Working Environment of Employees

The maintenance of health and safety condition in working environment of employees included the maintenance of health and safety as the company's KPI under the responsibility of the Safety Division in order to promote and develop personnel in the organization to have good life quality that covers the following 4 areas.

### 1. Physical environment

- Measuring physical working environment such as lighting, heat, noise, chemicals such as chemical vapor in the office and environment including exhaust from power generator and waste water from toilet room to ensure that the value is not higher than the standard, prescribed by the Ministry of Industry.
- Provide annual health examination for staffs.



### 2. Psychosocial environment

- Promote organizational culture, attitude, belief and working value that are clear and help eliminate working stress. All of the company's staffs are therefore working happily because our company promote the policy and has a clear core competency.
- Assign each of every operational-leveled staff to be the "Safety Man" for a week. The safety man's responsibilities are to discover and identify the unsafety situation and behavior and to take part in the assessment of risks, development of risk preventive and controlling methods before submitting them to the Occupational Safety, Health and Environment Committee. The resolution of the OCSHEC to improve or correct the situation must be strictly complied.
- Establish the "Line App Group" to ensure close interaction, communications and sharing of information and care.
- Organize a sport day to promote health and unity among the employees annually.
- Organize other activities such as "TTW Family Day", etc.

### 3. Resource and opportunity

- Provide necessary resources to support the business operation including computer system, internet, edutainment room, information service and a platform for all employees to show their ability to improve the business operation through the what so-called "Kaizen" activity whose goal is to provide opportunity and to promote professional advancement.

#### 4. Community Participation

- In realizing the importance of good relationship with communities, surrounding the running water plant and service areas, TTW has implemented many activities to promote and develop life quality of the people living in these communities such as providing assistance to the less-opportune students in Surin and Pathum Thani provinces, scholarships to students in service areas of Samut Sakhon and Nakhon Pathom provinces and Rangsit-Pathum Thani areas. Other activities included the promotion of better health and living, religious preservation and environment protection, etc., which were designed to ensure healthy social coexistence between TTW employees, their family members and the people who live in those communities.

### Management to Prevent Pollution at Any Stage of Production/Service

#### 1. Chlorine Leak Emergency Drill

- A pollution preventive plan has been put in place to reduce chlorine concentration in the atmosphere by measuring the value of concentration continuously. The result was at a very good level.
- Have an emergency plan in place to address the chlorine leak. Emergency response and evacuation drill is implemented annually.



#### 2. Fire and Evacuation Drill

- Fire extinguishing and evacuation drill is implemented annually by experts from disaster prevention and mitigation agency.







## Report on the Compliance to Good Governance Principles

### Compliance with Good Governance Principles

Business administration and management with good corporate governance is a key factor indicating the company has employed efficient, equitable, transparent and verifiable systems for its administration and management in a way that is responsible for society and environment. Also building up the confidence and trust among shareholders, investors, stakeholders and all parties. Good corporate governance would also lead to have a sustainable growth in financial and investment resources of the company, as well as its competitiveness.

The Board of Directors has directed the company to operate its business in compliance with good corporate governance criteria defined by the Stock Exchange of Thailand (SET) and the relevant regulations set by Securities and Exchange Commission (SEC) and Capital Market Supervisory Board. The direction of the Board is also consistent with the principles of good corporate governance for listed companies, in accordance with ASEAN Corporate Governance Scorecard (ASEAN CG Scorecard). The company has the Corporate Governance Committee to supervise the operation to maintain its standards comparable to international level at all time, adopt an efficient management system, ensure a sustainable growth, and encourage the enhancement of the operation to achieve TTW Vision "To Be Thailand's Leading Company in Water, Energy and Eco-Friendly Businesses."

For assuring of efficient and fair corporate governance, TTW committee has to provide the annual operating assessment regarding the principles of TTW good corporate governance. The assessment consists of whole committee assessment, individual or self assessment, and the assessment on specific issues, for being tools to revise the operating results, problems, and troubles in the past year as well as using the results of assessment to develop and improve some operations, especially the operations of TTW committee. There are the results of assessment in annual statement form (form 56-1), besides, there is the nomination and remuneration committee that revise the compensation policy by considering the suitability and accordance with the responsibility of committee, financial status of the company, overall operation, including comparing to other companies in the same-level business.

## Management Division

Management Division has to operate and manage works of the company. The chief of the division is Managing Director, who has power and responsibility to administrate and manage to the assignments from the Executive Committee. Managing director has to administrate and manage regarding work plan/budget approved by TTW committee strictly, honestly, as well as protect company's interests at best. Remuneration for management division is in line with the policy and regulation that TTW committee and all-level management division indicate and set goals each year for being business operating roadmap and assessing the operations. The company holds to the principles of good corporate governance as follows:

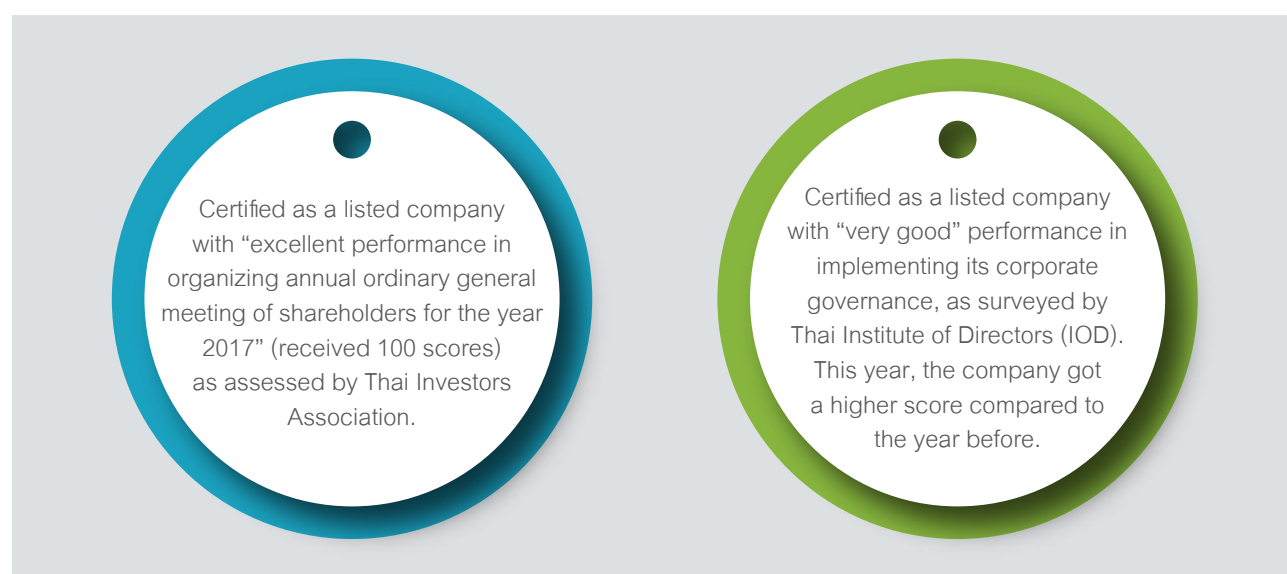
1. Realizing the role and accountability as the leader of organization who sustainably builds up the value for the company.
2. Setting the objectives and main goals of business for being sustainable.
3. Strengthening effective committee.
4. Nominating as well as improving chief executives and human resource management.
5. Supporting the innovation and responsibly business operation.
6. Providing appropriate internal controlling system and risk management.
7. Keeping at financial credit rating and disclosure of information.
8. Supporting the participation and communication with shareholders.

## Preparation of Corporate Governance Policy

Board of Directors has prepared a written Corporate Policy, based on the good corporate governance criteria and best practice criteria set by SET, to serve as operational guidelines for executive directors, the management and employees. The Corporate Government Committee shall review corporate governance policy annually with an emphasis on the consideration about the administration and management; policy formulation that takes all stakeholders into account seriously and inclusively; the retention of public confidence; and the improvement of work efficiency on a regular basis with a consideration about environment conservation, efficient utilization of resources, and the promotion of morale, encouragement, safety and hygiene among employees.

## Monitoring the Compliance with Corporate Governance Policy

Board of Directors, executive management and employees of TTW performed their roles in compliance with corporate governance policy well; and they monitored the implementation results of the operational plan strictly and steadily. In 2017, not even one single situation was reported as having violated this policy. With such dedication, the company was awarded and accredited for its compliance with good corporate governance in 2017 as follows:



In 2017 Thai Institute of Directors conducted Annual Corporate Governance Survey for the year 2017 to monitor the development of corporate governance among Thai listed companies. The company also prepared data presentation form in accordance with the criteria of Corporate Governance Report of Thai Listed Companies (CGR) to use as the checklist for assessing the compliance with these principles in 5 areas. Then, the company internally announced its policy on prevention and actions against corruption and bribery on 21 October 2016 for the employees to acknowledge and abide by very strictly. In 2017, TTW had operated its business in compliance with the principles of good corporate governance in such 5 areas as follows:

## Section 1: Right of Shareholders

As TTW realized the importance of shareholders as the investors in stock exchange market and as the owners of the company; therefore, TTW encouraged the shareholders to exercise their basic legal rights such as eligibility in having a share in company's profit, in trading or transferring shares, receiving news and information of the company adequately, attending shareholders meeting to vote to appoint or remove directors, proposing compensation paid for directors, appointing auditors and proposing audit fee, and taking parts in any matters that may affect the company. Apart from promoting shareholders to exercise their basic rights, TTW supervised and treated shareholders equally, such as providing significant and updated information via website; providing an opportunity for shareholders to propose an agenda of the meeting and nominate a person for be appointed as a director; organizing a company visit for shareholders, providing an opportunity for them to participate in CSR activities, and refraining from committing any actions that would violate or deprive the rights of shareholders.

### Organizing Shareholders Meeting

As Board of Directors realized the importance of shareholders meeting, so the company organized this meeting within 4 months after the end of accounting period in order that the shareholders could participate in the acknowledgement of the company's performance. If there was any urgent requirement to consider a special agenda that might affect the benefits of shareholders, and that required the approval from shareholders, the Board of Directors might call for an extraordinary general meeting of shareholders on a case by case basis. In organizing the annual general meeting of shareholders, the company conducted everything in compliance with AGM Checklist prepared by Thai Investors Association, Thai Listed Companies Association, and Securities and Exchange Commission (SEC) as follows.

### Before the meeting day

The company prepared meeting document containing all significant information required for using in a consideration for voting by the shareholders. These documents were distributed to shareholders in advance and the shareholders were encouraged to attend the general annual meeting of shareholders. The company also provided facilitation for the shareholders to exercise their rights of voting in case that they could not attend the meeting themselves. All of these are detailed below.

- a. Notified meeting schedule and agenda to shareholders for their acknowledgement in advance via information communication system of SET and website of the company before sending the actual documents to shareholders on 19 March 2017, which was not less than 30 days prior to the date of meeting; so that the shareholders could reserve their time to attend the meeting.
- b. Sent meeting invitation letter specifying clear details separately for each agenda. The agenda of 2016 annual general meeting of shareholders consisted of the topics for consideration as defined in Section 4 of Company's bylaws, "Shareholders Meeting," by separating the topic of 'The appointment new directors to replace the directors whose tenures are expired' and the topic of 'The consideration of compensation paid to directors' as two separated agenda. Each agenda consisted of facts and reasons, opinion of the Board, criteria and method for attending the meeting and 3 forms of Proxy (Proxy Form A. Proxy Form B and Proxy Form C) as defined by the Department of Business Development, the Ministry of Commerce. These invitation letters, enclosed with a copy of annual report, were sent to shareholders on 28 March 2017 for their acknowledgement, which was not less than 14 days prior to the date of the meeting. Announcements were also made in newspapers for three consecutive days as to summon shareholders meeting in advance with sufficient time for the shareholders to prepare themselves for the meeting.



All related information and data of the meeting were also displayed on TTW website for the shareholders to review in advance. Some telephone numbers were also provided for inquiry about additional information, and for presenting some significant information to fulfill the essence of the information required for making a proper decision in the agenda of appointing the directors.

- c. Provided opportunity for shareholders to send questions in advance about the issues in proposed agenda that required a clarification, by sending via email to [cg@ttwplc.com](mailto:cg@ttwplc.com) or via fax number 02-420-6064; so that shareholders would obtain utmost benefits from the meeting and that their rights could be protected extensively.

## Shareholders Meeting Day

TTW encouraged shareholders to exercise their rights in attending and voting in shareholders meeting by providing facilitation for those who would attend the meeting; conducting the meeting transparently through a verifiable mechanism; not committing any actions that would violate or deprive the rights of shareholders; and providing opportunity for shareholders to ask questions and share their opinions openly, as described below.

- a. Directors, executive management and auditors had to attend the meeting collectively for giving responses to the questions raised by shareholders and acknowledge their opinions. In 2017, Chairman and directors, totally 11 persons, attended shareholders meeting. This was equal to 91% of the total number of directors, given that Vice Chairman of the Board of Directors was absent due a mission abroad. Chairman of all subsidiary committees also attended. Chairman and the directors who took role as the members in subsidiary committees gave explanation about related details of each agenda and gave responses to the questions raised by shareholders.
- b. Set up exhibition and provided information regarding business operation of the company. In this event, executive management from Investors Relation Unit (under Corporate Affairs Division), Finance and Accounting Division, Business Development Division, Operation Division, and Engineering and Construction Division gave a warm welcome to shareholders and responses to their questions.
- c. Allowed shareholders who arrived after the meeting had started to exercise their rights to vote on the agenda that was being considered during the given moment, of which the final resolutions had not been made.
- d. Conducted the meeting following the sequence of agenda as defined in the invitation letter. The presentation of each agenda began with background, rationale, necessity and proposed suggestions. For the details of all significant data, the shareholders had already been informed through the invitation letter.
- e. Provided opportunity for all shareholders to share opinions and ask questions equally during the discussion of each agenda. The Chairman of the meeting gave importance to all opinions and questions; and gave responses to all the raised issues. The minute of the meeting was also taken comprehensively.
- f. Contracted a legal office under the name 'Offices of N&K Ltd.' as the auditor to inspect the documents of shareholders or their proxies who were eligible to attend the meeting; assess the quorum; check the compliance of voting method and vote counting with related provisions in the by laws of the company, as well as the declaration made by the Chairman for the collection of ballots from shareholders; and inspect the resolution outcomes and voting results. The auditor commented that the shareholders meeting and voting were conducted transparently and in compliance with the by laws of the company, applicable laws, and best practice procedures of SET regarding good governance; and that the company paid good respect to the rights of shareholders in attending the meeting and sharing opinions.
- g. Allowed two shareholders to represent all shareholders who attended the meeting as the witnesses in vote counting. For Annual General Meeting of Shareholders in 2017, the number of attendants at the closing of the meeting was totaled as 448 for the shareholders who attended the meeting themselves and 272 for those who attended by proxies. The number of shares collectively hold by these attendants was 3,175,174,130 (which was equal to 79.58% of the total sold shares). These numbers decreased from the year before. That is, in 2016, the numbers of shareholders who attended the meeting by themselves and those by proxies were 497 and 695 respectively; and the number of shares collectively hold by these attendants was 3,145,604,581 (equivalent to 78.83% of the total sold shares).

## After shareholders Meeting

- a. After the General Meeting of Shareholders, TTW prepared the minute which documented the list of names and positions of the directors and executive management who attended the meeting; voting and vote counting method;

the use of ballots; suggestions of the Board; enquiry and suggestions of shareholders; explanation from executive management; the voting record including both agreement, disagreement and abstention of votes; and the resolutions reached for each agenda. This minute was publicized on TTW website ([www.ttwplc.com](http://www.ttwplc.com)) on 28 April 2017, which was in compliance with SET criteria defining that this needed to be done within 14 days after the meeting date.

- b. Managed to have a video record of the atmosphere in the meeting and publicized this on TTW website; so that the shareholders who could not attend the meeting themselves could view and acknowledge.
- c. After the Shareholders Meeting approved the dividend payout, TTW notified about this resolution and the details of dividend payout for shareholders to acknowledge via electronic media (SET Portal) of SET; coordinated with TSD Registrar; and made an announcement of dividend payout in newspapers to ensure that shareholders would obtain dividend completely and correctly.

## Section 2: Equitable Treatment of Shareholders

The Board of Directors oversaw the structure of corporate government on a regular basis to ensure that all shareholders would be treated equitably and fairly; the process for supervising the shareholders would not be so complicated; shareholders would be eligible to participate in decision making and get informed about the final decision of the company for any significant situation, as provided by applicable laws and the bylaws of the company, as follows.

- a. In organizing shareholders meeting, TTW employed a policy that preserved the rights of all shareholders; and did not add any meeting agenda without notifying the shareholders in advance, so that shareholders would have a chance to review the details of the agenda sufficiently before voting. All shareholders were eligible to vote in accordance to the number of the shares they were currently holding; one share for one vote. There was no privileged share that could deprive the rights of other shareholders.
- b. The Board of Directors provided opportunity for retail investors to propose agenda for the Annual General Meeting of Shareholders and to nominate a qualified person for getting appointed as a director. This was done by making an announcement through the communication channels of SET and on TTW website. The procedural steps for this were transparent and consistent with additional practice guidelines for the rights of retail investors. That is, retail investors could propose the names of qualified persons as the candidates for being appointed as a director during the period from 1 September 2017 to 31 December 2017.

### Preventing the Use of Internal Information

In the code of ethics for directors and employees, TTW provided a written guideline for the storage and protection of internal information in order to prevent the use of internal information for each own or other people's benefits in a wrongful manner, or in a way that would cause damages to general shareholders. The details of the guideline are as below.

#### Directors

- 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.
- Directors shall not disclose to any third party the business confidential information or any information that may affect company's business.
- 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 these information are disclosed to public.
- Directors shall not reveal any unpublicized information to a third party, which may lead to a reservation of purchase or a sale of company's shares.

#### Employees

- 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 public.
- For a 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 himself or assign a responsible person to do so.

- The work units in central administration that take function in providing information to public and investors include Investors Relation and Company Secretary Units (under the Corporate Affairs Division) and so on. The work units that own information have 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 45 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 outside prior to a formal disclosure. These measures and control system 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 been 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.

### Conflict of Interest

The Board of Directors has adopted a policy preventing the confliction between personal interest and TTW interest by providing as the principles in the code of ethics for directors and employees in operating the business, as detailed in Section 5: Responsibilities of Board of Directors.

In 2017, the Board did not received any complaints regarding the disrespect to the basic rights of shareholders or a misconduct of directors and executive management related to the use of internal information. This reflects the efficiency of the Board in overseeing this matter.

## Section 3: Roles of Stakeholders

Apart from giving supervision to and preserving the rights of shareholders, the Board also adopted a policy to protect the rights of all stakeholders which emphasized the issues that might affect business operation directly; as well as the issues considered as necessary duties to be performed for society in general. Therefore, in good corporate governance policy and in the code of ethics for business operation, the Board had clearly provided the guidelines for fulfilling the needs of stakeholders in each group; so that the executive directors and employees could use as the basis for their operation. These guidelines could be summarized as below.

### Employees

TTW treats employees equally and fairly without any exception of domicile, race, religion, gender, marital status, language or position. TTW does not use or support the use of child labor; and does not support human trafficking and all forms of fraud and corruption. TTW organizes knowledge training for employees to learn about the policy and practice guidelines regarding the actions against fraud and corruption. TTW has a policy and guideline in place regarding the remunerations and welfare benefits for employees. The Company pays remunerations to employees at an appropriate and fair rate; and the paying scale of the company is comparable to that of other companies in the same industry. The company also supervises the implementation of welfare benefits policy in subsidiary and affiliated companies to provide benefits and welfares more excessively than legal requirement. For example, the company has established the Provident Fund with the rates of employees' contribution appropriate for the length of employment of each one, ranging from 5% to 10%; organized annual physical checkup, provides free treatment for illnesses in accordance with a respective health benefits scheme; and maintained good environment of the workplace by adopting a policy and practice guide regarding safety and hygiene in the workplace. The company also provides office cars for the executive management who hold a managerial position of a department or higher; so they can have more flexibility and convenience in performing their jobs. The company also promotes various activities for employees, such as the establishment of a jogging club, badminton club, soccer club, and so on. TTW emphasizes the importance of a long-term human resource development, as well as the provision of opportunity for employees to learn and develop their capacities for achieving a progress in career path and good quality of life in the future. To this end, the company has adopted a professional management system in human resource management in order to maximize the capacity of employees. TTW has encouraged and supported employees at all levels to further their education and acquire



new skills through the participation in the workshops organized by leading institutions. The company has prepared employee handbook for all employees to acknowledge clearly about TTW policies and their eligibility for benefits. Furthermore, the company has adopted a policy and practice guidelines regarding the development of knowledge and capabilities among employees, as well as the allotment of training hours, based on the belief that personnel are the most precious resource for driving the organization together toward the achievement of the goals. Hence, the company has a strong commitment to develop its personnel for the sake of better knowledge and capability, as well as a better life quality among them. With regard to the path of learning and development among employees, TTW has developed appropriate learning programs for each period throughout of the course of employment of the employees starting from the first day to the date of retirement. TTW has fostered the development of employees' participation continuously by conducting employee satisfaction survey and employee engagement survey; and by allowing the participation of employees in the management of employees' welfare, occupational health and safety issues through Safety and Occupational Health Committee. TTW has promoted and supported the enhancement of employees' knowledge through the contribution of time, budgets, and the opportunity for career path progression.

To ensure that TTW would have qualified personnel and enough manpower for running its current business smoothly (which include tap water production and distribution; and tap water and wastewater management); one important factor is to develop the personnel of the company to gain knowledge, capabilities and preparedness for entering into any new businesses. Hence, the company has defined a frame of personnel development for each position, which includes the setting up of a development plan, the preparation for the development, and the implementation of such development. In this regard, the company has analyzed and defined the Core Competency, Managerial Competency and Functional Competency; and used them as the frame for the development.

All new employees of TTW Public Company will be orientated about practice procedures; organizational policies; knowledge of business, good corporate governance and environment; the prohibition of human rights abuse, intellectual property rights infringement; effective use of resources; and the establishment of relationship between current and new employees. During their employment with the company, they will be offered with various forms of learning and development in accordance with the type and level of works, which include on-the-job training, knowledge training inside and outside the company, and the assignment of work rotation in order to learn various kinds of works and accumulate assorted experiences. For the support of self-learning, TTW has set up "Edutainment Room" equipped with texts and a complete set of entertaining materials. For the employees who get promoted to a higher position, TTW has a training program to ensure their preparedness for a change in their roles from an ordinary employee to a supervisor or leader. In 2016, TTW organized 220 skill training courses for employees with 8,396 training hours collectively; and in 2017 TTW organized 127 skill training courses for employees with 6,554 training hours collectively.

## Evaluation of Work Performance and Career Development

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 hand-on experience, interpersonal relationship and formal training.

## Customers

As the manufacturer and distributor of tap water, TTW strictly observes the obligated commitment toward its customers. The products and services are delivered to all customers with an emphasis on cleanness, adequacy and continuity, and based on the principles of equitability as well as the promotion of sustainable relationship between the company and customers. TTW has defined a concrete policy and practice guidelines for providing services to customers with due responsibility.

In 2017, no dispute occurred between the company and customers. In the business sector of tap water manufacturing and distribution, TTW was able to produce tap water for the customers in line with the terms and conditions set in the contracts. Overall, TTW had the capacity for supplying tap water beyond the criteria set in the sale and purchase contracts of tap water; and been able to produce tap water in compliance with WHO standards.

## 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 practice guidelines on how to deal with creditors properly, so as to establish the 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 a 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 2017, TTW and its subsidiary companies were able to completely fulfill all the terms and conditions that had been agreed with 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 covers 7 areas as follows.

1. Expertise and experience
2. Technical skills
3. Financial status
4. Records of complaints and legal proceedings
5. Business reputation
6. Risks arising from serving many customers
7. Service policy

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 2017, no dispute occurred between TTW or its subsidiary companies and business counterparts or contractual counterparties.

## Competitors

TTW treats business competitors within a frame of proper competition and does not take advantage over the competitors through an illegal method. TTW has defined rules, criteria and standards that are favorable for working together with the 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.

In 2017, no dispute occurred between TTW or its subsidiary companies and the competitors.

## Communities and Society

TTW operates its business with a cautious concern about communities and society, especially the communities where TTW has an operation in. 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 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. In this regard, TTW has implemented various projects and activities for communities and society on a continual basis, which cover 3 aspects: 1) Life quality development of communities surrounding water treatment plant; 2) Promotion of knowledge about water conservation; and 3) The conservation of watershed areas and environment.

TTW implemented a number of projects for the benefits and development of communities and society continuously; conserved watershed forests for sustainable fertility; and generated employment opportunities for community people in project's areas through the cooperation with the Department of National Parks, Wildlife and Plants Conservation in setting up "1-million seedlings afforest watershed" project for planting 1 million seedlings in 5,000 Rai of watershed area within a period of 5 years (2011-2015), divided into 1,000 Rai of planting per each year (planting 200,000 seedlings in each Rai), and taking care of these plants for another 2 years after that with expected survival rate of the plants as not less than 80% before handing over to Department of National Parks, Wildlife and Plant Conservation. In 2017, TTW has completed the implementation of this project since 2015; and will hand it over to Department of National Parks, on 15 December 2017. The Company will carry out the dam Project at Department of National Parks area Kanchanaburi Province within a period of 5 years.

## Environmental Implementation

TTW is well aware that operating a business without responsibility would cause severe impacts on environment, especially in the communities where TTW operates its business. Therefore, TTW has a strong commitment to protect and conserve environment by giving importance as if it is a business operating factor of TTW. However, according to the experience of TTW in operating its business for several years, TTW realizes very well that by conducting everything in compliance with rules and regulations alone is not effective enough for the protection and conservation of environment. There are other important factors to be considered apart from abiding by the defined rules and regulations, which include the development of internal action plan for emergency situations, the quality control system and regular procurement of advance technologies for mitigating the impacts on environment. In order to ensure the compliance with the rules and regulations regarding emergency situations and quality control system, TTW has adopted a policy for running its business following the environmental standards.

## Environmental Achievements

1. Annual meeting was organized every year to consider and discuss the issues related to environmental laws.
2. Environmental protection policy was set up in accordance with TISI Standard 14001. TTW adopted this policy to ensure the sustainability of environment protection and conservation in favor of better living condition (as detailed in "TISI Standard of Environmental Management System 14001 (ISO 14001)").
3. Goals and objectives of environmental management has been defined and assigned to be achieved by employees inside the organization and those working under the supervision of other work units in various operating sites. The durations of operation and implementation have also been defined clearly. TTW is well aware that training and selling ideas to employees at all levels would lead to achievement of environmental policy.
4. TTW conducted an assessment of significant factors that might cause environmental impacts on the activities of the organization and found that the regulations and procedures currently employed by TTW could effectively reduce the impacts on environments.
5. In-house training project was established for all employees in accordance with environmental management policy with an aim to instill and raise the awareness regarding the environment. This training project organized training sessions both at the headquarters and affiliated work units.
6. TTW has put best efforts in convincing and encouraging all business counterparts to comply with environmental standards

## 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 during a long absence of executive management from their rooms, and using a car pool for a same operation or direction. The implementation of these projects may not yield a clear result in term of reduction in energy costs or expenditures; however, it would help develop personal awareness that employees can use in the daily life in their families to become a good citizen of society.

## Respect to 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 2017, TTW announced a whistle blower policy as the channel for employees to submit the 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 the compliance with good corporate governance principles. In 2017, 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 the human rights, and to comply with Universal Declaration of Human Rights, are as follows.

- TTW shall treat all employees with a respect to their honor and dignity.
- TTW shall provide communication channel for employee to submit suggestions and complaints about the frustration from work. These suggestions shall be considered seriously to define a solution in favor of the benefits of all parties and good working relationship.
- TTW shall support employees to exercise their rights as a rightful citizen, as provided by constitution and laws.
- TTW shall maintain confidentiality of employees' personal information such biography, health record, work record, etc. Any disclosure or transfer of employees' personal information shall be merely done upon an approval from such employees. Violation of this matter is considered as a disciplinary offence, except in a case that it is required by company regulation or by laws.
- TTW shall not support the activities that violate the Universal Declaration of Human Rights; and shall not support the corruption either.
- All employees shall not conduct any abusive or threatening actions, either verbally or physically, against other persons based on race, religion, gender, and physical or mental disability.

## 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 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 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.

## Anti-corruption and Bribery

TTW has adopted zero tolerance policy regarding the corruption and bribery. Board of Directors, executive management, supervisors, employees in all levels, or any related persons are prohibited from involving in all forms of corruptions in any business transactions; and they shall comply with rules, regulations and laws of any countries that TTW has been dealing a business with. 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 in business.

TTW has adopted a policy on anti-corruption and bribery, and has 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 a wrongful action or illegally omit an action in favor of a malpractice in his/her position.

TTW announced its policies and practice guidelines regarding anti-corruption and bribery on 21 October 2016 on and these have been in effect ever since.

## Competitor Treatment

Business competitors are the outsiders that TTW must compete with throughout the course of business operation. However, the completion must be carried out fairly without a use of distorted or fake information, or any other improper methods in contrary to the principles of good competition. TTW is the biggest manufacturer and distributor of tap water in Thailand. The company produces and distributes tap water to Provincial Waterworks Authority, which is the business counterpart of TTW. The company does not have any direct competitors at all. Despite this fact, TTW still managed to have a policy and practice guidelines in place for proper treatment against competitors.

## Section 4: Disclosure of Information and Transparency

TTW realizes the importance of disclosing financial, general and significant information in a correct, complete, timely and transparent manner in line with the requirement of the Office of Securities Exchange Commission and SET; in order that all shareholders and stakeholders can be acknowledged inclusively. TTW has distributed such information through the following channels.

### 1. Disclosing information on website

To allow shareholders and investors to search for the publicized information rapidly, TTW has presented the regularly updated information on the website [www.ttwplc.com](http://www.ttwplc.com) in Thai and English as below.

- Background, vision, mission, and structure of the organization.
  - Corporate governance consisting of the principles of good corporate governance, corporate governance committee, subsidiary committees, and executive management.
  - Information for investors consisting of significant financial information, structure of shareholders, and investors' calendar.
  - News and movements of the organization consisting of news about the business operation and CSR activities.
  - Corporate social responsibility consisting of the concept and direction of CSR activities, the news and information on current CSR activities.
2. Providing information to stock analysts or investors who pay a visit and consult with TTW executive management.
  3. Travelling to provide an on-site presentation to investors.
  4. Organizing a stock analysts meeting.
  5. Providing information via public media such as newspapers, magazines, journals and televisions.

## Section 5: Responsibilities of Board of Directors

### 1. Structure of Board of Directors

The Board of Directors consists of at least 5 directors. To change the number of directors in the Board, an approval is required from shareholders through a majority vote of not less than two-third of shareholders who attend the meeting and are eligible to vote.

As of 31 December 2017, the Board consists of 12 directors. Of these, 11 directors (equal to 92% of the entire Board) are the outsiders who are not the executive management of TTW. Among these outsiders, 4 of them (equal to 33.3% of the entire Board) are independent directors; and there is one female director.

Nomination and Remuneration Committee shall consider and screen all the candidates for being appointed as a director, which covers both the candidates for the directors who are the representative of shareholders and the candidates for independent directors. The committee will consider these candidates based on the appropriateness of skills and experiences that are necessary for enhancing the strength of the Board in overseeing the operation of the company. The committee also reviews the work records of the candidates to see the issues of transparency, moral, responsibility, maturity and professionalism. The structure of Board of Directors is reviewed annually. The Board comments that the structure and elements of current Board comprising 11 male directors and 1 female director that are the experts in the areas of engineering, economics and business administration, accounting and finance, and laws in a proportion of 50%, 33.3%, 8.3% and 8.3% respectively, has constituted a diverse range of professions with useful and necessary experiences and expertise for the operation of TTW business; and that is an appropriate balance of directors.

Table displaying the positions taken in subsidiary committees

Name of directors	Sub-Committees					Remark
	Executive Committee	Audit Committee	Nomination and Remuneration Committee	Corporate Governance Committee	Risk Management Committee	
1. Mr. Phongsarit Tantisuvanitchkul	Chairman	-	-	-	-	Non-executive Director
2. Dr. Sombat Kitjalaksana	Director	-	-	-	-	Non-executive Director

Table displaying the positions taken in subsidiary committees

Name of directors	Sub-Committees					
	Executive Committee	Audit Committee	Nomination and Remuneration Committee	Corporate Governance Committee	Risk Management Committee	Remark
3. Mr. Hideo Matsumoto	Director	-	-	-	Director	Non-executive Director
4. Mr. Suvich Pungchareon	Director	-	-	-	-	Non-executive Director
5. Mr. Chaiwat Utaiwan	Director	-	-	Director	Director	Managing Director
6. Mr. Techapit Sangsingkeo	-	Chairman	-	Director	Chairman	Independent Director
7. Mr. Phairuch Mekaporn	-	Director	Chairman	Director	-	Independent Director
8. Mr. Somnuk Chaidejsuriya	-	Director	Director	Chairman	-	Independent Director
9. Mrs. Payao Marittanaporn	-	-	Director	-	Director	Non-executive Director
10. Mr. Yasutaka Suzuki	-	-	Director	-	-	Non-executive Director

## 2. Board of Directors Meeting

The Board has a regular meeting every 3 months and some extraordinary meetings as necessary with a notification of the agenda in advance. The Board also has an agenda on the monitoring of the operation on a regular basis. Corporate Affairs Department shall send out the meeting invitation letter at least 10 days in advance and send out meeting documents at least 7 days in advance; so that the Board members can have enough time to review before attending the meeting.

In 2017, the meetings of the Board of Directors and those of subsidiary committees were organized 22 times collectively as follows.

Table displaying the numbers of times of directors' attendance in the meetings

Name of Directors	Meeting attendance in 2017 (number of times)						
	General Share holders Meeting	Board of Directors	Executive Committee	Audit Committee	Nomination and Remuneration Committee	Corporate Governance Committee	Risk Management Committee
1. Dr. Thanong Bidaya	1/1	4/4	-	-	-	-	-
2. Mr. Plew Trivisvavet	-	3/4	-	-	-	-	-
3. Mr. Phongsarit Tantisuvanitchkul	1/1	3/4	4/4	-	-	-	-
4. Mr. Techapit Sangsingkeo	1/1	3/4	-	4/4	-	2/2	4/4
5. Mr. Phairuch Mekaporn	1/1	4/4	-	4/4	3/3	2/2	-
6. Mr. Somnuk Chaidejsuriya	1/1	3/4	-	4/4	3/3	2/2	-
7. Dr. Sombat Kitjalaksana	1/1	3/4	4/4	-	-	-	-
8. Mr. Suvich Pungchareon	1/1	4/4	4/4	-	-	-	-
9. Mrs. Payao Marittanaporn	1/1	3/4	-	-	2/3	-	3/4



Name of Directors	Meeting attendance in 2017 (number of times)						
	General Share holders Meeting	Board of Directors	Executive Committee	Audit Committee	Nomination and Remuneration Committee	Corporate Governance Committee	Risk Management Committee
10. Mr. Tomoaki Matsumoto	1/1	3/4	3/4	-	-	-	3/4
11. Mr. Hideo Matsumoto <sup>(1)</sup>	-	1/4	-	-	-	-	-
12. Mr. Yasutaka Suzuki	1/1	4/4	-	-	3/3	-	-
13. Mr. Chaiwat Utaiwan	1/1	4/4	4/4	-	-	2/2	4/4

Remark <sup>(1)</sup> Mr. Hideo Matsumoto was appointed to be the Director as per the resolution of Board of Directors Meeting No. 4/2017 on 21 December 2017 to replace Mr. Tomoaki Matsumoto who had resigned.

### Self-assessment of Board of Directors

The meeting number 4/2017 of the Board on 21 December 2017 had a resolution to acknowledge the results of Board's self-assessment for the year 2017, covering the 6 aspects as below.

Aspects of Assessment	Full scores	Mean score	
		2017	2016
1. Structure and qualification of the Board	4	3.9	3.8
2. Comprehension of roles and responsibilities of the Board	4	3.7	3.7
3. The Board Meeting	4	3.8	3.8
4. Duties of the Board	4	3.8	3.9
5. Relationship with executive management	4	4.0	3.9
6. Development and training	4	3.8	3.8
Overall self-assessment scores		3.8	3.8

Conclusion: The results of self-assessment of the entire Board, with a mean score of 3.8 out of 4.0 for each aspect same as last year.

### The Definition of Independent Director of TTW Public Company Limited

TTW Public Company Limited has set the definition of independent director more straightly in line with, or more strictly and more concisely than the minimal requirement criteria set by the Stock Exchange of Thailand and that of the Securities and Exchange Commission (as provided in the letter number Kor Lor Tor Jor (Wor) 59, dated 1 December 2004, regarding the setting up of the definition of independent director) as follows.

1. Not being a person holding shares exceeding 0.5% of the total number of voting shares held by the company, subsidiary companies and affiliated companies, or by other juristic persons that may come up with a conflict (including related persons as provided in Section 258 of Securities and Exchange Act).
2. Not being a person having involvement in the management of the company, its subsidiary or affiliated companies, and a major shareholder of the company; and not being a worker, an employee, or a consultant who receive a regular salary from the company, its subsidiary or affiliated companies, or from a major shareholder of the company.
3. Not being a person holding a relationship through bloodline or through a legal registration as a father, mother, spouse, sibling or child, including the spouse of the child of an executive management, a major shareholder who has a controlling authority, or a person nominated as a candidate for appointing as an executive management who has a controlling authority of the company or its subsidiary companies.
4. Not being a person having direct or indirect benefits or effects from the financial and management issues of the company, its subsidiary or affiliated companies, or the major shareholders of the company; and not having such benefits and effects for at least one year prior to being appointed as the independent director, except in the case

that the Board has considered thoroughly and viewed that such benefits and effects in the past would not affect the performance and the expressing of independent opinion of the independent director.

5. Not being a person appointed as a representative to protect the benefits of a director, a major shareholder, or a shareholder that have some involvement with a major shareholder of the company.
6. Being a person that can perform duties, share opinions, or report the results of the performance as assigned by the Board independently without being under the control of the management, a major shareholder of the company, as well as related persons or close relatives of such persons.
7. Being a person that can attend the meeting of the Board of Directors and make judgment independently.
8. Not being a person that operates any business similarly to and in a significant competitive manner with the business of the company or its subsidiaries; and not being a significant shareholder in a partnership or an executive management, worker, employee, and advisor who receives a regular salary from or holds shares exceeding 0.5% of the total number of voting shares of other companies that run a business similarly to and in a significant competitive manner with the business of the company or its subsidiaries.
9. Not being a person having any characteristics that make him/her incapable of expressing opinions independently regarding the operation of the company.
10. Being a person that can protect the benefits of all shareholders equally.
11. Being a person that can regulate to prevent conflicts of interest.
12. Not being a person that used to be convicted of violating the securities and stock exchange laws, financial institution laws, life insurance laws, non-life insurance laws, anti-money laundering laws, or any other financial laws of a similar nature, as enacted by either authorized agencies in Thailand or those in a foreign country, by committing an offence related to unfair securities trading or the operation of a management with a perpetration of deception, fraud or corruption.

## Nomination of the Members of the Board of Directors

Nominating and Remuneration Committee shall consider a person with appropriate qualifications for being appointed as a director and propose to the Board of Directors for presenting further in the general meeting of shareholders to seek approval. This shall be in compliance with the principles of TTW corporate governance as below. The Board of the Directors shall consist of a chairperson and members, totaled as not less than 5 but not exceeding 15 persons. The proportion of non-executive directors shall not be less than half of the total number of all members of the Board; and there shall be at least 3 members who are independent directors (or equal to at least one-third of the entire Board). TTW has defined that, apart from having the characters of independency as provided in the announcement of the Securities and Exchange Commission, the independent directors of the company shall also have the following qualifications

- (1) Not being a person holding shares exceeding 0.5% of the total number of voting shares held by the company, subsidiary companies and affiliated companies, or by other juristic persons that may come up with a conflict (including related persons as provided in Section 258 of Securities and Exchange Act).
- (2) Not being a person having involvement in the management of the company, its subsidiary or affiliated companies, and a major shareholder of the company; and not being a worker, an employee, or a consultant who receive a regular salary from the company, its subsidiary or affiliated companies, or from a major shareholder of the company.
- (3) Not being a person holding a relationship through bloodline or through a legal registration as a father, mother, spouse, sibling or child, including the spouse of the child of an executive management, a major shareholder who has a controlling authority, or a person nominated as a candidate for appointing as an executive management who has a controlling authority of the company or its subsidiary companies.
- (4) Not being a person having direct or indirect benefits or effects from the financial and management issues of the company, its subsidiary or affiliated companies, or the major shareholders of the company; and not having such benefits and effects for at least one year prior to being appointed as the independent director, except in the case that the Board has considered thoroughly and viewed that such benefits and effects in the past would not affect the performance and the sharing of independent opinion of the independent director.
- (5) Not being a person appointed as a representative to protect the benefits of a directors, a major shareholder, or a shareholder that have some involvement with a major shareholder of the company.
- (6) Being a person that can perform duties, share opinions, or report the results of the performance as assigned by the Board independently without being under the control of the management, a major shareholder of the company, as well as related persons or close relatives of such persons.

- (7) Being a person that can attend the meeting of the Board of Directors and make judgment independently.
- (8) Not being a person that operates any business similarly to and in a significant competitive manner with the business of the company or its subsidiaries; and not being a significant shareholder in a partnership or an executive management, worker, employee, and advisor who receives a regular salary from or holds shares exceeding 0.5% of the total number of voting shares of other companies that run a business similarly to and in a significant competitive manner with the business of the company or its subsidiaries.
- (9) Not being a person having any characteristics that make him/her incapable of expressing opinions independently regarding the operation of the company.
- (10) Being a person that can protect the benefits of all shareholders equally.
- (11) Being a person that can regulate to prevent conflicts of interest.
- (12) Not being a person that used to be convicted of violating the securities and stock exchange laws, financial institution laws, life insurance laws, non-life insurance laws, anti-money laundering laws, or any other financial laws of a similar nature, as enacted by either authorized agencies in Thailand or those in a foreign country, by committing an offence related to unfair share trading or the operation of a management with a perpetration of deception, fraud or corruption.

### **Nomination of Executive Committee**

Executive Committee shall consist of 5 members, at least 3 of which but not exceeding 5 are appointed from members of the Board, to take function in reducing the burdens of the Board on the part of managerial tasks and routine works that require a higher level of authority than that of the Managing Director; in order that the Board can have more time for overseeing the policy related tasks and supervising the management functions.

### **Nomination of Independent Audit Committee**

Audit Committee shall consist of 3 members, and at least 3 of which are appointed from the members of the Board. All members of this committee shall be the independent directors that have the characteristics of independency as provided in the announcement of the Securities and Exchange Commission and in accordance with the principles of TTW corporate governance. At least 1 member of this committee shall possess the knowledge in accountancy and/or finance in order to take function in inspecting and overseeing the operation of the company, financial reports, internal control system, the nomination of auditor, and the considerations on the conflicts of interest.

### **Nomination of Nomination and Remuneration Committee**

Nomination and Remuneration Committee shall consist of 4 members, at least 3 of which are appointed from the members of the Board. At least 1 member shall be an independent director, which shall serve as the chairperson of this committee.

In 2017, there were 2 independent directors as the members of this committee, which was equal to 50%.

### **Nomination of Corporate Governance Committee**

Corporate Governance Committee shall consist of 4 members, at least 3 of which are appointed from the members of the Board. A majority of members shall be independent directors; and there shall be an independent director to serve as the chairman of this committee.

### **Nomination of Risk Management Committee**

Risk Management Committee shall consist of 4 members, at least 3 of which are appointed from the members of the Board; and there shall be an independent director to serve as the chairperson of this committee.

### **Overseeing the Use of Internal Information**

TTW has adopted some measures to prevent the use of internal information by employees in all levels; and store the information and documents in a way that they could not be revealed to a third party. For the information available for mutual use among the employees inside the company, only the authorized and responsible persons for performing a related duty shall have an access to. TTW has developed the written Guideline for the Prevention of Internal Information Usage, which has been approved in the meeting of the Board No. 1/2016 organized on 28 July 2016. TTW has distributed this guideline in a circulating letter for the employees and the management to acknowledge inclusively and to comply strictly with it.



## Guideline for the Prevention of Internal Information Usage

### 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 from 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. 2535 (5<sup>th</sup> Version) as announced in 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 with.

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 good corporate government 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 compile with very strictly. All these persons shall comply with the provisions in Securities and Exchange Act (5<sup>th</sup> Version) B.E. 2535, 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 to any third party the business confidential information or any information that may affect 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 these information are disclosed to public.
- (4) Directors shall not reveal any unpublicized information to a third party, which may lead to a reservation of purchase or a sale of 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 public.
- (2) For a 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 himself or assign a responsible person to do so.
- (3) The work units in central administration that take function in providing information to public and investors include Investors Relation and Company Secretary Units (under the Corporate Affairs Division) and so on. The work units that own information have 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 45 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 outside prior to a formal disclosure. These measures and control system 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 been 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) Executive directors or the persons with an 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, or can have access to, internal information.
- (3) The persons holding a 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 a same mother or a same father, of the persons mentioned in (1) (2) and (3).
- (6) The spouses of, or 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.

## Reporting Procedures of Prohibited Persons

### The Required Duty to Prepare the Report

- (1) Managing Director or a person holding 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 holding a position as a department head or higher shall prepare a report on the acquisition and the selling of TTW securities in their possession in the case that the volume of such acquisition or sale is equal to or over 5% of the total securities that have been sold.

## Reporting Method

- (1) Managing Director or a person holding an executive management position that have a duty as required by laws shall prepare and submit a report on the possession of TTW securities of their own, and that of 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) Executive management holding a position as a department head or higher shall prepare a report on the possession and the changes in the possession of TTW securities of their own, and that of their spouses and minor descendants; and submit to the company within 7 working days from the date of ownership transfer of such securities.

## The Remuneration of Auditor

The Board of Directors has appointed an auditor of the company, which was dominated by the Audit Committee based on the consideration about the outcome of previous performance, experience, the preparedness in term of personnel, the acceptable standard of auditing service, and the status of being the auditor certified by the Securities and Exchange Commission (SEC). TTW decided to hire EY Office Co., Ltd. (formerly known as Earnst & Young Ltd.), comprising Ms. Manee Rattanabynnakij, authorized auditor No. 5313, Ms. Sumalee Rivarabandit, authorized auditor No. 3970, and Mrs. Poonnart Paocharoen, authorized auditor No. 5238, as the auditor of TTW.

TTW appointed auditor also served as the auditor of subsidiary companies such as PTW and TWO. However, the auditor did not have any relationship with or hold any benefits from TTW and its subsidiaries, executive management, major shareholders, or any other persons involving with such persons, in a way that would affect their independency in performing their duties. Also, TTW did not receive any other services from the auditor apart from the auditing service. The comparison between the remunerations for the auditor in the past 3 years is displayed as follows.

Description	2017	2016	2015
1. Auditing the annual financial statements	625,000	625,000	600,000
2. Reviewing financial statements of the first three quarters	600,000	600,000	600,000
3. Checking compliance with BOI regulations	75,000	75,000	150,000
4. Other service fees	-None-	-None-	-None-
<b>Total</b>	<b>1,300,000</b>	<b>1,300,000</b>	<b>1,350,000</b>

## Definition of “Related Party Disclosure According to Accounting Standards”

A related party is a person or entity that is 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 applies:
  - 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 the others).
  - 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.





## Compensation Paid To Directors, Management And Employees

### Compensation of Directors

TTW has adopted a policy to pay compensation to directors in a suitable level and with a rate high enough to retain quality directors for working with the company without a need to pay compensation too excessively. The consideration of compensation paid to directors is based on the principle that it should be fair and reasonable enough when compared to the compensation commonly paid by other entities for the same level of works in the same or similar industry. The rate of the pay is also considered based on the experience, duties or work burdens, scope of roles and responsibilities of each director, as well as the additional duties and responsibilities from serving as a member of a subsidiary committee.

In 2017, the company paid the compensations to directors totally 7,755,400 Baht, which comprised 6,312,000 Baht as the regular compensation; 1,443,400 Baht as the meeting allowance and 18,241,167 as the annual bonus for 2017.

Compensation paid to each director in 2017

First & Last Name	Position	Regular Compensation	Meeting Allowance	Total	Bonus	Total
1. Dr. Thanong Bidaya	Independent Director and Chairman of the Board of Directors	785,600	196,400	982,000	2,292,000	3,274,000
2. Mr. Plew Trivisvavet	Director and Vice Chairman of the Board of Directors	643,200	120,600	763,800	1,873,000	2,636,800
3. Mr. Narong Sangsuriya <sup>(1)</sup>	Director and Chairman of Executive Committee	-	-	-	49,907	49,907
4. Mr. Phongsarit Tantisuvanitchkul	Director and Chairman of Executive Committee	520,800	113,100	633,900	1,289,260	1,923,160
5. Mr. Techapit Sangsingkeo	Independent Director, Chairman of Audit Committee, Chairman of Risk Management Committee, and Corporate Governance Committee	636,000	141,900	777,900	1,858,000	2,635,900

First & Last Name	Position	Regular Compensation	Meeting Allowance	Total	Bonus	Total
6. Mr. Phairuch Mekarporn	Independent Director, Chairman of Nomination and Remuneration Committee, Audit Committee, and Corporate Governance Committee	572,800	143,200	716,000	1,672,000	2,388,000
7. Mr. Somnuk Chaidejsuriya	Independent Director, Chairman of Corporate Governance Committee, Audit Committee, and Nomination and Remuneration Committee	572,800	126,100	698,900	1,672,000	2,370,900
8. Dr. Sombat Kitjalaksana	Director, Executive Committee	401,600	83,300	484,900	1,171,000	1,655,900
9. Mr. Suvich Pungchareon	Director, Executive Committee	401,600	100,400	502,000	1,171,000	1,673,000
10. Mrs. Payao Marittanaporn	Director, Nomination and Remuneration Committee, and Risk Management Committee	416,000	78,000	494,000	1,215,000	1,709,000
11. Mr. Yasutaka Suzuki	Director, Nomination and Remuneration Committee	344,800	86,200	431,000	1,007,000	1,438,000
12. Mr. Tomoaki Matsumoto <sup>(2)</sup>	Director, Executive Committee, and Risk Management Committee	459,667	114,917	574,584	1,381,000	1,955,584
13. Mr. Hideo Matsumoto <sup>(3)</sup>	Director, Executive Committee, and Risk Management Committee	13,133	3,283	16,416	-	16,416
14. Mr. Chaiwat Utaiwan	Director, Executive Committee, Risk Management Committee, Corporate Governance Committee, and Managing Director	544,000	136,000	680,000	1,590,000	2,270,000
<b>Total</b>		<b>6,312,000</b>	<b>1,443,400</b>	<b>7,755,400</b>	<b>18,241,167</b>	<b>25,996,567</b>

Remark <sup>(1)</sup> Mr. Narong Sangsuriya resigned on 13 January 2016.  
<sup>(2)</sup> Mr. Tomoaki Matsumoto resigned on 27 November 2017  
<sup>(3)</sup> Mr. Hideo Matsumoto was appointed on 21 December 2017

#### Comparison of Compensations Paid to Directors in 2017, 2016 and 2015

Description	2017		2016		2015	
	Number of Persons	Amount	Number of Persons	Amount	Number of Persons	Amount
Regular Compensation	13	6,312,000	15	6,303,000	15	6,262,500
Meeting Allowance	13	1,443,400	15	1,488,700	15	1,581,000
Consolidated Bonus	13	18,241,167	15	18,420,000	15	19,940,000
<b>Total</b>	<b>-</b>	<b>25,996,567</b>	<b>-</b>	<b>26,209,700</b>	<b>-</b>	<b>27,783,500</b>

## Compensation of Management

The payment of compensation for the management shall conform to the policy and criteria defined by directors and based on the performance outcomes of the company as assessed in accordance with the assessment system in which the Board of Directors and the management would work together to define indicators and goals for each year (which could be used for guiding the direction of the operation and as the basis for the assessment of work performance). The details about compensation, bonus and the contribution to provident fund of the management were as follows.

## Comparison of Compensation, Bonus and Contribution to Provident Fund paid to Executive Management

Description	2017		2016		2015	
	No. of Persons	Amount	No. of Persons	Amount	No. of Persons	Amount
Total Compensation	8	24,322,552	8	24,699,780	8	20,637,660
Consolidated Bonus	8	7,140,015	7	8,848,610	7	7,371,640
Contribution to Provident Fund	8	1,563,024	8	1,580,431	8	1,317,874

## Compensation of Employee

TTW has set the rate of wages and compensations comparable to those of other entities in the same group of industry. In order that the company can carry out wage management properly, the company has studied, compared and improved the pay scale of employees every year. Wage management is carried out based on the principle of fairness, the scope and responsibility of the position, as well as the ability to perform duties. TTW also honor employees with awards, commendation, and grant a promotion for employees who have good performance outcomes, so as to motivate them to produce excellent outcomes.

As the company realizes the importance of personnel development, the company has defined a policy specifically for personnel development activities and defined an aim to elevate the level of remuneration for employee from around 50 percentile to 75 percentile of the remunerations paid by listed public utilities companies in the Stock Exchange of Thailand within 5 years, in order to enhance motivation and establish organizational commitment among employees. Therefore, the elevation of employees' remuneration level is being carried out simultaneously with capability building for them in order to elevate the level of their work efficiency as well.

The company also allocates a budget in an amount proportionally to the performance outcomes of the company in each given year for paying to all employees. For the management holding a position in a high or moderate level, the company has arranged the so called "variable bonus" which will be considered paying based on the result of performance appraisal against KPIs of each person in each year. Therefore, employees from all levels will be considered for receiving compensation based on the performance result of each one. The structure of salary, welfare and benefits is appropriate and comparable to other leading companies in the same category of industry. The starting salary is defined based on educational background.

TTW collectively paid compensation to employees in form of salary, bonus and other benefits in 2014, 2015, 2016 and 2017 at the amounts of 71.02 million Baht, 76.82 million Baht, 81.59 million Baht and 86.87 million Baht respectively.

PTW collectively paid compensation to employees in form of salary and bonus in 2014, 2015, 2016 and 2017 at the amounts of 9.71 million Baht, 10.36 million Baht, 10.07 million Baht and 11.50 million Baht respectively.

TWO collectively paid compensation to employees in form of salary and bonus in 2014, 2015, 2016 and 2017 at the amounts of 49.4 million Baht, 49.97 million Baht, 54.37 million Baht and 58.76 million Baht respectively.

The company collectively paid compensation to employees of the company and those of subsidiary companies in form of salary, bonus and other benefits as follows.

(Unit : million Baht)

Company/Subsidiaries	2017	2016	2015
TTW Company (The Company)	86.87	81.59	76.82
Pathum Thani Water Co. Ltd. (Subsidiary)	11.50	10.70	10.36
Thai Water Operations Co. Ltd (Subsidiary)	58.76	54.37	49.97

## Other Compensation

The company has provided welfares and other benefits (apart from salary, bonus and contribution to provident fund) for the management and employees appropriately in accordance with economic situation, cost of living, as well as the benchmarks of the leading companies in the same category of business.



## Report on the Board of Directors' Responsibility towards Financial Report

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 believes that the 2017 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 recording to accounting information is accurate and complete, the choice of accounting policy is appropriate and consistent 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.



(Dr. Thanong Bidaya)  
Chairman of the Board of Directors



(Mr. Chaiwat Utaiwan)  
Managing Director

# Auditing Committee Report

Audit Committee of TTW Public Company Limited was appointed by Board of Directors. This committee comprises 3 independent directors who are the experts and have experiences in various areas, such as Mr. Techapit Sangsingkeo as the Chairman, Mr. Phairuch Mekarporn and Mr. Somnuk Chaidejsuriya as the members. The Manager of Internal Audit Division has been assigned to take function as the secretary of this committee.

Audit Committee has performed duties independently within the scope of duties and responsibilities to accomplish the missions as assigned by Board of Directors, which is consistent with to the regulations set by Stock Exchange of Thailand, which also include the provision of suggestions on any related issues. The Audit Committee held 4 meetings in 2017 attended by the executivemanagement, internal auditors, and TTW auditor; the contents of which are summarized below.

## 1. Verification of Financial Reports

This is to ensure that the accounting system and financial reports were correct and creditable, the disclosure of information in financial statements was sufficient, the engagement in related party transactions with subsidiary companies and affiliated companies was reported; and that the company had operated its business in accordance with regular business conditions and the criteria set by the Stock Exchange of Thailand for the benefits of investors. The Audit Committee shared a same comment with the auditor that quarterly financial statements and annual financial states of the year 2017 were accurate on the part of significant contents in accordance with generally acceptable accounting principles (GAAP).

## 2. Verification of Internal Audit

The Committee carried this out against the scope of duties, responsibilities and independency of Internal Audit Division and came to conclusion that TTW had adopted sufficient, appropriate and efficient internal control systems in line with international standards.

The Audit Committee reviewed and endorsed the scope of internal audit plan for 2017 and reviewed the report of internal audit results by asking the Internal Audit Division to submit the reports directly to Audit Committee on a quarterly basis, and found that the internal control systems of the operational process and that of significant functions were appropriate for the current operation. The Committee also provided additional suggestions that might be useful for the operation; monitored and regulated the management and administrative divisions to adapt and improve as recommended by internal auditors. With regard to the compliance with Securities and Exchange Act, the regulations of Stock Exchange of Thailand, and/or any applicable laws, the Committee did not find any significant deficiencies.

## 3. Review Related Party Transactions

There was not any reviewal in 2017.

## 4. Considering the Selection and Appointment of Auditor, Proposing Audit Fee

The Audit Committee considered the selection and appointment of auditor and proposed audit fee for presenting to the Board of Directors based on creditability, competency in providing service and recommendation in accordance with accounting standards, and ability in endorsing financial statements in time.

In 2017, the Audit Committee considered to appoint Mrs. Poonnart Paocharoen, authorized auditor No. 5238 and/or Miss Sumalee Rivarabandit, authorized auditor No. 3970 and/or Miss Manee Rattanabunnakij, authorized auditor No. 5313 of EY Office Co., Ltd., as the auditor of the company for the year 2017. This auditor had creditable qualifications and could perform duties in accordance with the standards of accounting and auditing profession. The audit fee was proposed as not exceeding 1,300,000 Baht. Board of Directors has considered and approved this for presenting further in shareholders meeting for approval.



(Mr. Techapit Sangsingkeo)  
Chairman of the Audit Committee

# Independent Auditor's Report

## 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 2017, and 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 2017, 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 Company and its subsidiary recognised the amortisation expenses of the assets for the production of treated water of the Company, the assets that must be transferred at the end of concession of the subsidiary, the rights to produce, sell treated water and treat waste water of the Company in the financial statements amounting to Baht 767 million, of which the expenses during this year accounted for 35% of total expenses in the separate financial statements and 37% of total expenses in the consolidated financial statements. In calculating the amortisation expenses, the Company and its subsidiary 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. 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 Company and its subsidiary with actual past and current production volumes and tested the Company's and its subsidiary'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.



Manee Rattanabunnakit

Certified Public Accountant (Thailand) No. 5313

EY Office Limited

Bangkok: 27 February 2018

# Operation Result Analysis and Report

## Analysis of Income from Tap Water Sale

(Unit : Million Baht)

Description	2017	2016	Change	Percent
Tap Water - TTW PLC.	3,771.5	3,623.7	147.8	4.1
Tap Water - Pathum Thani Water Co., Ltd.	1,703.0	1,646.5	56.5	3.4
Total	5,474.5	5,270.2	204.3	3.9

### Income from Tap Water Sale

In 2016 and 2017, TTW and its subsidiaries earned income from selling tap water supply for 5,270.2 Million Baht and 5,474.5 Million Baht respectively which increased for 204.3 Million Baht or 3.9% from the previous year. The increased income from selling tap water supply can be described as follows:

- 1) The income from selling tap water supply of TTW increased for 147.8 Million Baht or 4.1 % as the total amount of tap water sale increased by 7.5 million cubic meter and the selling price had been increased from the previous year. The total revenue from sale of tap water increased by 121.7 million Baht and total amount of tap water sale in Bang Pa-In Industrial Estate increased by 0.6 million cubic meter as well as the increase of tap water charge. The total amount of tap water sale in Bang Pa-In Industrial Estate increased by 26.1 million Baht or 14.5%.
- 2) The income from selling tap water supply of Pathum Thani Water Co., Ltd. increased for 56.5 Million Baht or 3.4% as the Sales Volumes of PTW had been increased for 4.4 Million Baht or 3.3%

### The prices of tap water sold to PWA by TTW and PTW in the past 3 years

Timeline	Price of Tap Water of TTW (Baht/Cubic Meter)		Price of Tap Water of PTW (Baht/Cubic Meter)
	The First 300,000 Cubic Meters	Over 300,000 Cubic Meters	
1 Jan 2015- 31 Dec 2015	28.583588	12.14	12.66
1 Jan 2016 - 31 Dec 2016	28.269482	11.97	12.53
1 Jan 2017 - 31 Dec 2017	28.564794	12.02	12.54

### Income from Services

In 2016 and 2017, TTW and its subsidiaries earned income from services for 108.7 Million Baht and 120.7 Million Baht respectively which was an increase of 12.0 Million Baht or 11.0% due to an increase in income from services of subsidiary company and an increase in waste water treatment service charge in Bang Pa-In Industrial Estate.



## Other Incomes

The income of TTW and its subsidiaries consists of interest income from the bank deposit and remuneration from cash flow management of TTW, income from selling assets and other incomes.

In 2016 and 2017, TTW and its subsidiaries earned income for 120.1 Million Baht and 152.2 Million Baht respectively which was an increase of 32.1 Million Baht or 26.7% due to an increase in remuneration from cash flow management.

## Expenses Analysis

(Unit : Million Baht)

Description	2017	2016	Change	Percent
Cost of tap water sale and service	1,564.4	1,497.5	66.9	4.5
Administrative expense	257.3	244.3	13.0	5.3
Financial expense	407.0	433.2	(26.2)	(6.0)
Income tax expense	632.2	606.7	25.5	4.2
Total	2,860.9	2,781.7	79.2	2.9

## Cost of sales and services

Cost of sales and services of water supply of TTW and its subsidiaries consists of depreciation of assets for water production, electricity expenses, chemical expenses, land rent for pipe orientation, production and maintenance personnel-related expenses, repair costs and other production costs.

In 2016 and 2017, TTW and its subsidiaries had cost of sales and services of 1,497.5 Million Baht and 1,564.4 Million Baht respectively which was the increase of 66.9 Million Baht or 4.5%, compared with the same period of the previous year due to an increase in depreciation value, caused by an increase in tap water production assets.

## Administration expenses

Administration expenses of TTW and its subsidiaries for 2016 and 2017 were 244.3 Million Baht and 257.3 Million Baht respectively which was an increase of 13.0 Million Baht or 5.3% when compared with the same period of the previous year due to an increase in customer support and public relations expenses and other reserves.

## Financial Expenses

The financial expenses in 2016 and 2017 were 433.2 Million Baht and 407.0 Million Baht respectively which was a decrease of 26.2 Million Baht or 6.0% as the loans were reduced and the interest rate of loans was decreased, compared with the same period of the previous year.

## Corporate Income Tax

The corporate income tax in 2016 and 2017 was 606.7 Million Baht and 632.2 Million Baht respectively which was an increase of 25.5 Million Baht or 4.2% due to an increase in TTW's operational profit, compared with the same period of the previous year.

## Analysis of share of profits in associates

The share of profits from investment with associates in 2016 and 2017 was 13.9 Million Baht and 40.2 Million Baht respectively which was a increase of 26.3 Million Baht or 189.2% due to an increase in the total value of electricity sale by subsidiary company, compared with the same period of the previous year.

## Net Profit

In 2016 and 2017, TTW and its subsidiaries had net profit of 2,492.5 Million Baht and 2,680.8 Million Baht respectively calculated as total income of TTW and its subsidiaries for 45.33% and 46.64% respectively. The net profit in 2017 increased from the previous year to 188.3 Million Baht or 7.6%

## Analysis of Financial Position

(Unit : Million Baht)

Financial Position Statement	31 Dec 2017	31 Dec 2016	Change	Percent
Total Assets	23,277.0	25,764.8	(2,487.8)	(9.7)
Total Liabilities	11,399.1	14,229.4	(2,830.3)	(19.9)
Shareholders	11,877.9	11,535.4	342.5	3.0

## Assets Analysis

The assets of TTW and its subsidiaries consist of land, premises and equipment, investment with associates, water supply asset during construction, water supply production assets owned by TTW, water supply production assets that need to be transferred at the end of contract of the subsidiaries, rights in production and selling water supply and wastewater treatment and rights in production and selling water supply from buying businesses.

As of 31 December 2017, TTW and its subsidiaries had total assets of 23,277.0 Million Baht which is a decrease of 2,487.8 Million Baht when compared with that in 31 December 2016, mainly caused by a decrease of 2,118.0 Million in temporary investment, 140.1 Million Baht decrease in land, plants and equipment, 290.0 Million Baht decrease in assets that must be transferred at the end of contract of subsidiaries, 195.4 Million Baht decrease in the right to operate tap water production and distribution from the purchase of business operation while cash and cash equivalent increased by 70.5 Million Baht, trade receivable increase by 70.5 Million Baht and rights in production and selling water supply and wastewater treatment from the private sectors increased to 100.3 Million Baht.

## Liability Analysis

The liabilities of TTW and its subsidiaries consist of debenture, long-term loans and long-term loans due in one year, deferred income tax liabilities, accrued income tax liabilities, accrued interest and trade account payables and other account payable.

As of 31 December 2017, TTW and its subsidiaries had total liabilities of 11,399.1 Million Baht which is a decrease of 2,830.3 Million Baht when compared with 31 December 2016 due to loan payback of 2,670.0 million Baht, a decrease of 197.2 million Baht in trade account payables and an increase of 29.7 million Baht in deferred income tax liabilities.

## Equity Analysis

As of 31 December 2017, TTW and its subsidiaries had equity of 11,877.9 Million Baht which is an increase of 342.5 Million Baht when compared with 31 December 2016 as in 2017 TTW had an annual net profit of 2,680.8 Million Baht and paid dividend at the amount of 2,393.7 million Baht.

## Cash Flow Analysis

### Cash Flows from Operating Activities

In 2016, TTW and its subsidiaries had net cash flow from operations at an amount of 3,272.1 Million Baht which is a decrease from the same period of the previous year for 455.3 Million Baht or 12.2% as in 2016 TTW paid 398.1 Million Baht more income tax.

In 2017, TTW and its subsidiaries had net cash flow from operations at an amount of 3,417.2 Million Baht which is an increase from the same period of the previous year for 145.1 Million Baht or 4.4% as in 2017, the interest payment was decreased by 55.2 Million Baht and trade account payables and other account payables decreased by 75.0 Million Baht while the sharing of profit from investment in subsidiaries increased by 26.3 Million Baht.

### Cash Flow from Investment

In 2016, TTW and its subsidiaries had cash flow from investment for 331.6 Million Baht which is a decrease from the same period of the previous year for 3,345.9 Million Baht or 91% as in 2016, total temporary investment of TTW and its subsidiaries decreased by 2,126 Million Baht. Moreover, in 2015, total investment in associates increased by 1,471.9 Million Baht.

In 2017, TTW and its subsidiaries had cash flow from investment for 1,734.4 Million Baht which is an increase from the same period of the previous year for 2,066.0 Million Baht or 623.0% as in 2017, the total temporary investment of TTW and its subsidiaries decreased by 646.9 Million Baht, while the value of land, plants and equipment decreased by 198.2 Million Baht, the assets in water supply production under the contract decreased by 1,045.6 Million Baht and water supply production assets that need to be transferred at the end of contract of the subsidiaries decreased by 83.6 Million Baht.

### Cash flow from financial generating activities

In 2016, TTW and its subsidiaries had cash flow from fund generating activities at an amount of 3,478.9 Million Baht which is an increase from the year 2015 as in 2018, the company issued 1,500 Million Baht debentures to pay for the construction cost of the second tap water production plant and 1,400 Million Baht debentures to invest in CKP's newly issued shares. In 2016, TTW used an amount of 1,800 Million Baht deposit to payback the debentures that matured in February 2016.

In 2017, TTW and its subsidiaries had cash flow from fund generating activities for 5,081.1 Million Baht which is an increase from the year 2016 as in 2017, TTW used an amount of 1,580 Million Baht deposit to payback long-term loan before the due date.

### The remuneration of auditor

For the remuneration of auditor 2017, TTW and subsidiaries had hired EY Co., Ltd. to be an auditor of TTW and subsidiaries in accordance with the resolution of the Annual General Meeting of Shareholders 2017 on 18 April 2017. The auditor received remuneration from TTW in the total amount of 1,300,000 Baht.

### Research and Development Expenses

TTW and subsidiaries did not have these expenses.

# Financial Statements





# Statement of financial position

## TTW Public Company Limited and its subsidiaries

As at 31 December 2017

(Unit: Baht)

	Note	Consolidated financial statements		Separate financial statements	
		2017	2016	2017	2016
<b>Assets</b>					
<b>Current assets</b>					
Cash and cash equivalents	7	316,808,375	246,286,986	280,915,300	196,869,602
Current investments	8	2,359,470,155	4,477,538,942	1,744,711,852	3,771,093,280
Trade and other receivables	9	553,314,173	497,006,571	380,288,058	346,050,729
Current portion of long-term loans to related party and interest receivable	6	-	-	367,433,193	367,422,440
Raw materials and supplies	10	23,054,712	21,700,544	12,696,313	11,646,086
Other current assets		26,903,290	41,035,585	22,500,456	34,988,626
<b>Total current assets</b>		<b>3,279,550,705</b>	<b>5,283,568,628</b>	<b>2,808,545,172</b>	<b>4,728,070,763</b>
<b>Non-current assets</b>					
Long-term loans to related party, net of current portion	6	-	-	461,080,000	828,220,000
Investments in subsidiaries	11	-	-	2,358,675,014	2,580,169,162
Investment in associate	12	4,508,502,298	4,507,336,539	4,228,013,282	4,228,013,282
Other long-term investments	13	29,000,000	15,000,000	-	-
Property, plant and equipment	14	775,909,824	916,041,515	714,865,259	855,164,794
Assets for production of treated water with public sector agency:					
Assets that are owned by the Company	15	9,993,245,750	9,960,230,533	9,993,245,750	9,960,230,533
Assets that must be transferred at end of concession of subsidiary	16	2,270,108,038	2,560,062,990	-	-
Rights to produce and sell treated water and treat waste water from private sector agency	17	1,238,007,688	1,137,733,871	1,238,007,688	1,137,733,871
Rights to produce and sell treated water from business acquisition	18	1,128,552,669	1,323,985,418	-	-
Intangible assets	19	4,044,641	5,205,150	-	-
Deferred tax assets	27	3,615,468	2,761,831	-	-
Advance payment to subcontractor - related party		-	8,948,084	-	8,948,084
Other non-current assets		46,504,062	43,948,712	43,042,488	43,010,062
<b>Total non-current assets</b>		<b>19,997,490,438</b>	<b>20,481,254,643</b>	<b>19,036,929,481</b>	<b>19,641,489,788</b>
<b>Total assets</b>		<b>23,277,041,143</b>	<b>25,764,823,271</b>	<b>21,845,474,653</b>	<b>24,369,560,551</b>

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

# Statement of financial position (continued)

TTW Public Company Limited and its subsidiaries

As at 31 December 2017

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2017	2016	2017	2016
Liabilities and shareholders' equity					
Current liabilities					
Trade and other payables	20	127,840,506	324,964,181	88,315,016	289,626,318
Current portion of long-term loans	21	480,000,000	1,090,000,000	480,000,000	1,090,000,000
Current portion of debentures	22	1,000,000,000	-	1,000,000,000	-
Income tax payable		269,785,430	280,069,856	208,300,796	200,479,209
Accrued interest		100,018,297	100,955,440	100,018,297	100,955,440
Other current liabilities		68,680,219	58,104,150	46,506,903	37,830,966
Total current liabilities		2,046,324,452	1,854,093,627	1,923,141,012	1,718,891,933
Non-current liabilities					
Retention payable - subsidiary	6	-	-	5,000,000	5,000,000
Long-term loans, net of current portion	21	3,795,000,000	5,855,000,000	3,795,000,000	5,855,000,000
Debentures, net of current portion	22	5,395,118,308	6,393,017,554	5,395,118,308	6,393,017,554
Provision for long-term employee benefits	23	40,252,967	34,650,832	21,318,624	17,894,998
Deferred tax liabilities	27	122,439,796	92,672,008	90,586,456	70,889,525
Total non-current liabilities		9,352,811,071	12,375,340,394	9,307,023,388	12,341,802,077
Total liabilities		11,399,135,523	14,229,434,021	11,230,164,400	14,060,694,010

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

# Statement of financial position (continued)

## TTW Public Company Limited and its subsidiaries

As at 31 December 2017

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2017	2016	2017	2016
Shareholders' equity					
Share capital					
Registered					
3,990,000,000 ordinary shares of Baht 1 each		3,990,000,000	3,990,000,000	3,990,000,000	3,990,000,000
Issued and fully paid-up					
3,990,000,000 ordinary shares of Baht 1 each		3,990,000,000	3,990,000,000	3,990,000,000	3,990,000,000
Share premium		2,637,769,601	2,637,769,601	2,637,769,601	2,637,769,601
Retained earnings					
Appropriated - statutory reserve	24	399,000,000	399,000,000	399,000,000	399,000,000
Appropriated - other reserve	25	1,691,230,767	1,691,230,767	1,691,230,767	1,691,230,767
Unappropriated		3,699,628,987	3,432,942,542	1,897,309,885	1,590,866,173
Other components of shareholders' equity		(582,130,970)	(657,808,002)	-	-
Equity attributable to owners of the Company		11,835,498,385	11,493,134,908	10,615,310,253	10,308,866,541
Non-controlling interests of the subsidiaries		42,407,235	42,254,342	-	-
Total shareholders' equity		11,877,905,620	11,535,389,250	10,615,310,253	10,308,866,541
Total liabilities and shareholders' equity		23,277,041,143	25,764,823,271	21,845,474,653	24,369,560,551

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

# Statement of comprehensive income

## TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

		Consolidated financial statements		Separate financial statements	
	Note	2017	2016	2017	2016
Profit or loss:					
Revenues					
Sales of treated water to public sector agency:					
Sales of treated water - minimum offtake quantities		5,003,360,943	4,981,686,284	3,364,759,143	3,339,905,444
Sales of treated water - above minimum offtake quantities		264,938,943	108,409,053	200,560,551	103,659,043
Sales of treated water to private sector agencies		206,194,672	180,139,377	206,194,672	180,139,377
Total sales of treated water	28	5,474,494,558	5,270,234,714	3,771,514,366	3,623,703,864
Service income		120,748,441	108,743,783	42,787,851	36,932,945
Interest income		13,119,225	29,162,349	54,429,769	87,875,269
Dividend income	11, 12	-	-	962,108,563	782,678,725
Other income		139,085,792	90,948,200	142,109,627	94,071,445
Total revenues		5,747,448,016	5,499,089,046	4,972,950,176	4,625,262,248
Expenses					
Cost of sales of treated water and services		1,564,424,330	1,497,485,032	925,274,978	904,371,302
Administrative expenses		257,303,906	244,344,320	199,357,257	196,204,676
Amortisation of investments in subsidiaries	11	-	-	221,494,148	222,100,981
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	17	50,474,847	43,380,104	50,474,847	43,380,104
Amortisation of rights to produce and sell treated water from business acquisition	18	195,432,749	195,480,491	-	-
Total expenses		2,067,635,832	1,980,689,947	1,396,601,230	1,366,057,063
Profit before share of profit from investment in associate, finance cost and income tax expenses		3,679,812,184	3,518,399,099	3,576,348,946	3,259,205,185
Share of profit from investment in associate	12	40,185,469	13,934,354	-	-
Profit before finance cost and income tax expenses		3,719,997,653	3,532,333,453	3,576,348,946	3,259,205,185
Finance cost		(407,025,029)	(433,178,951)	(407,025,029)	(433,178,951)
Profit before income tax expenses		3,312,972,624	3,099,154,502	3,169,323,917	2,826,026,234
Income tax expenses	27	(632,221,086)	(606,667,937)	(469,823,369)	(434,539,522)
Profit for the year		2,680,751,538	2,492,486,565	2,699,500,548	2,391,486,712

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



# Statement of comprehensive income (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

Note	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Other comprehensive income:</b>				
<i>Other comprehensive income to be reclassified to profit or loss in subsequent periods:</i>				
Unrealised gain from cash flow hedges - net of income tax	71,676,718	19,978,476	-	-
Gain on change in value of available-for-sale investments - net of income tax	4,000,314	4,973,988	-	-
<i>Other comprehensive income not to be reclassified to profit or loss in subsequent periods</i>				
Actuarial gain (loss) - net of income tax	(2,682,991)	(2,849,112)	821,574	(668,153)
<b>Other comprehensive income for the year</b>	<b>72,994,041</b>	<b>22,103,352</b>	<b>821,574</b>	<b>(668,153)</b>
<b>Total comprehensive income for the year</b>	<b>2,753,745,579</b>	<b>2,514,589,917</b>	<b>2,700,322,122</b>	<b>2,390,818,559</b>
<b>Profit attributable to:</b>	<b>2,663,247,846</b>	<b>2,475,559,072</b>	<b>2,699,500,548</b>	<b>2,391,486,712</b>
Equity holders of the Company	17,503,692	16,927,493		
Non-controlling interests of the subsidiaries	2,680,751,538	2,492,486,565		
<b>Total comprehensive income attributable to:</b>				
Equity holders of the Company	2,736,241,887	2,497,662,424	2,700,322,122	2,390,818,559
Non-controlling interests of the subsidiaries	17,503,692	16,927,493		
	<b>2,753,745,579</b>	<b>2,514,589,917</b>		
<b>Basic earnings per share</b>	<b>29</b>			
Profit attributable to equity holders of the Company	0.67	0.62	0.68	0.60

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

# Cash flows statement

## TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Cash flows from operating activities</b>				
Profit before tax	3,312,972,624	3,099,154,502	3,169,323,917	2,826,026,234
Adjustments to reconcile profit before tax to				
net cash provided by (paid from) operating activities:				
Depreciation and amortisation	733,990,700	658,231,610	440,352,261	386,950,260
Amortisation of investments in subsidiaries	-	-	221,494,148	222,100,981
Amortisation of rights to produce and sell treated water from business acquisition	195,432,749	195,480,491	-	-
Amortisation of rights to produce and sell treated water and treat waste water from private sector agency	50,474,847	43,380,104	50,474,847	43,380,104
Loss (gain) on sales/written off of equipment	8,412	(1,258,867)	-	(373,830)
Gain on sales of assets for production of treated water that must be transferred at the end of concession of subsidiary	-	(7,496,388)	-	-
Share of profit from investment in associate	(40,185,469)	(13,934,354)	-	-
Dividend income	-	-	(962,108,563)	(782,678,725)
Withholding tax deducted at source written off	862,055	2,461,380	-	-
Allowance for doubtful accounts	10,063,547	-	5,610,428	-
Provision for long-term employee benefits	7,626,487	6,675,290	5,229,739	4,464,867
Interest expenses	407,025,029	433,178,951	407,025,029	433,178,951
Profit from operating activities before changes in operating assets and liabilities	4,678,270,981	4,415,872,719	3,337,401,806	3,133,048,842
Operating assets (increase) decrease				
Trade and other receivables	(58,578,990)	19,899,238	(32,066,351)	18,746,797
Raw materials and supplies	(1,354,168)	407,009	(1,050,227)	330,373
Other current assets	12,038,687	7,333,383	12,488,170	6,402,937
Other non-current assets	457,684	(10,050,670)	469,685	(10,068,070)
Operating liabilities increase (decrease)				
Trade and other payables	(201,498,776)	(126,503,237)	(205,686,403)	(108,106,587)
Other current liabilities	10,576,069	3,916,572	8,675,937	8,248
Cash paid for long-term employee benefits	(1,930,496)	(3,377,180)	(779,146)	(3,377,180)
Cash from operating activities	4,437,980,991	4,307,497,834	3,119,453,471	3,036,985,360
Cash paid for interest expenses	(405,861,418)	(461,077,837)	(405,861,418)	(461,077,837)
Cash paid for corporate income tax	(614,889,504)	(574,272,856)	(442,510,247)	(412,854,438)
<b>Net cash from operating activities</b>	<b>3,417,230,069</b>	<b>3,272,147,141</b>	<b>2,271,081,806</b>	<b>2,163,053,085</b>

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

# Cash flows statement (continued)

## TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Cash flows from investing activities</b>				
Decrease in current investments	2,114,513,178	1,467,556,813	2,022,825,819	1,653,175,132
Increase in other long-term investments	(14,000,000)	(15,000,000)	-	-
Decrease in long-term loans to related party	-	-	367,140,000	367,140,000
Increase in property, plant and equipment	(12,731,564)	(210,902,770)	(10,472,329)	(209,377,837)
Cash paid for capitalised interest	(45,656,464)	(71,487,063)	(45,656,464)	(71,487,063)
Increase in assets for production of treated water with public sector agency - assets that are owned by the Company	(403,297,732)	(1,448,924,964)	(403,297,732)	(1,448,924,964)
Increase in assets for production of treated water that must be transferred at the end of concession of subsidiary	(440,000)	(84,079,478)	-	-
Increase in rights to produce and sell treated water and treat waste water from private sector agency	(15,944,106)	-	(15,944,106)	-
Proceeds from sales of equipment	-	1,258,879	-	373,832
Proceeds from sales of assets for production of treated water that must be transferred at the end of concession of subsidiary	-	9,100,000	-	-
Dividend received	111,938,666	41,603,871	962,108,563	782,678,725
Increase in advance payment to subcontractor - related party	-	(20,716,950)	-	(20,716,950)
<b>Net cash from (used in) investing activities</b>	<b>1,734,381,978</b>	<b>(331,591,662)</b>	<b>2,876,703,751</b>	<b>1,052,860,875</b>
<b>Cash flows from financing activities</b>				
Cash receipt from long-term loans	-	1,500,000,000	-	1,500,000,000
Repayment of long-term loans	(2,670,000,000)	(770,000,000)	(2,670,000,000)	(770,000,000)
Repayment of debentures	-	(1,800,000,000)	-	(1,800,000,000)
Dividend paid	(2,393,739,859)	(2,393,814,211)	(2,393,739,859)	(2,393,814,211)
Dividend paid for non-controlling interests of the subsidiary	(17,350,799)	(15,124,320)	-	-
<b>Net cash used in financing activities</b>	<b>(5,081,090,658)</b>	<b>(3,478,938,531)</b>	<b>(5,063,739,859)</b>	<b>(3,463,814,211)</b>
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>70,521,389</b>	<b>(538,383,052)</b>	<b>84,045,698</b>	<b>(247,900,251)</b>
Cash and cash equivalents at beginning of year	246,286,986	784,670,038	196,869,602	444,769,853
<b>Cash and cash equivalents at end of year</b>	<b>316,808,375</b>	<b>246,286,986</b>	<b>280,915,300</b>	<b>196,869,602</b>

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

# Cash flows statement (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Supplemental cash flows information</b>				
<b>Non-cash transactions</b>				
Increase (decrease) in dividend payable	138,551	(75,091)	138,551	(75,091)
Increase in accounts receivable from securities trading	(7,792,159)	(1,076,817)	(7,792,159)	(1,076,817)
Increase in accounts payable from securities trading	4,236,550	4,299,536	4,236,550	4,299,536
Transfer deposit to construction in progress	-	1,255,530	-	1,255,530
Portion of advance payment to subcontractor deducted from payment for equipment	1,244,416	19,472,534	1,244,416	19,472,534
Portion of advance payment to subcontractor deducted from payment for assets for production of treated water with public sector agency	7,703,668	284,823,908	7,703,668	284,823,908
Portion of advance payment to subcontractor deducted from payment for assets for production of treated water that must be transferred at end of concession of subsidiary	-	12,705,402	-	-
Transfer property, plant and equipment to (from) assets for production of treated water with public sector agency	7,700,000	(72,000)	7,700,000	(72,000)
Transfer property, plant and equipment to rights to produce and sell treated water and treat waste water from public sector agency	134,711,099	-	134,711,099	-
Transfer assets for production of treated water with public sector agency to rights to produce and sell treated water and treat waste water	(93,459)	-	(93,458)	-
Transfer assets for production of treated water with public sector agency to other non-current assets	(502,111)	-	(502,111)	-
Increase in property, plant and equipment from construction payable	-	4,454,865	-	4,454,865
Increase in assets for production of treated water from construction payable	-	173,103,346	-	173,103,346

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



# Statement of changes in shareholders' equity

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

Consolidated financial statements											
Equity attributable to owners of the Company											
	Note	Retained earnings				Other comprehensive income			Other components of equity		
		Issued and paid-up share capital	Share premium	Appropriated - statutory reserve	Appropriated - other reserve	Unappropriated	Surplus on changes in value of available-for-sale investments	Unrealised gain (loss) from cash flow hedges	Difference on reorganisation of business of group companies	Total other components of shareholders' equity	Total equity attributable to owners of the Company
Balance as at 1 January 2016		3,990,000,000	2,637,769,601	399,000,000	1,445,616,272	3,599,586,197	-	(82,397,600)	(600,362,866)	(682,760,466)	11,389,211,604
Profit for the year		-	-	-	-	2,475,559,072	-	-	-	-	2,475,559,072
Other comprehensive income for the year		-	-	-	-	(2,849,112)	4,973,988	19,978,476	-	24,952,464	22,103,352
Total comprehensive income for the year		-	-	-	-	2,472,709,960	4,973,988	19,978,476	-	24,952,464	2,497,662,424
Dividend paid	32	-	-	-	-	(2,393,739,120)	-	-	-	-	(2,393,739,120)
Transferred to other reserve	25	-	-	-	245,614,495	(245,614,495)	-	-	-	-	-
Decrease in non-controlling interests of the subsidiary from dividend payment of the subsidiary		-	-	-	-	-	-	-	-	-	-
Balance as at 31 December 2016		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,432,942,542	4,973,988	(62,419,124)	(600,362,866)	(657,808,002)	11,493,134,908
Balance as at 1 January 2017		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,432,942,542	4,973,988	(62,419,124)	(600,362,866)	(657,808,002)	11,493,134,908
Profit for the year		-	-	-	-	2,663,247,846	-	-	-	-	2,663,247,846
Other comprehensive income for the year		-	-	-	-	(2,682,991)	4,000,314	71,676,718	-	75,677,032	72,994,041
Total comprehensive income for the year		-	-	-	-	2,660,564,855	4,000,314	71,676,718	-	75,677,032	2,736,241,887
Dividend paid	32	-	-	-	-	(2,393,878,410)	-	-	-	-	(2,393,878,410)
Decrease in non-controlling interests of the subsidiary from dividend payment of the subsidiary		-	-	-	-	-	-	-	-	-	-
Balance as at 31 December 2017		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	3,699,628,987	8,974,302	9,257,594	(600,362,866)	(582,130,970)	11,835,498,385

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

# Statement of changes in shareholders' equity (continued)

TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

(Unit: Baht)

		Separate financial statements				
		Issued and paid-up share capital		Retained earnings		
	Note		Share premium	Appropriated - statutory reserve	Appropriated - other reserve	Unappropriated
						shareholders' equity
<b>Balance as at 1 January 2016</b>		3,990,000,000	2,637,769,601	399,000,000	1,445,616,272	1,839,401,229
Profit for the year		-	-	-	-	2,391,486,712
Other comprehensive income for the year		-	-	-	-	(668,153)
Total comprehensive income for the year		-	-	-	-	2,390,818,559
Dividend paid	32	-	-	-	-	(2,393,739,120)
Transferred to other reserve	25	-	-	-	245,614,495	(245,614,495)
<b>Balance as at 31 December 2016</b>		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	1,590,866,173
<b>Balance as at 1 January 2017</b>		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	1,590,866,173
Profit for the year		-	-	-	-	2,699,500,548
Other comprehensive income for the year		-	-	-	-	821,574
Total comprehensive income for the year		-	-	-	-	2,700,322,122
Dividend paid	32	-	-	-	-	(2,393,878,410)
<b>Balance as at 31 December 2017</b>		3,990,000,000	2,637,769,601	399,000,000	1,691,230,767	1,897,309,885

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

# Notes to consolidated financial statements

## TTW Public Company Limited and its subsidiaries

For the year ended 31 December 2017

### 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, RaiKhing, 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 dated 11 October 2016, 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”):

Company's name	Nature of business	Country of incorporation	Percentage of shareholding	
			2017 (%)	2016 (%)
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 Company and its subsidiaries 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

### (a) Financial reporting standards that became effective in the current year

During the year, the Company and subsidiaries have adopted the revised financial reporting standards and interpretations (revised 2016) and new accounting treatment guidance which are effective for fiscal years beginning on or after 1 January 2017. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes directed towards revision of wording and terminology, and provision of interpretations and accounting guidance to users of standards. The adoption of these financial reporting standards does not have any significant impact on the Company's and its subsidiaries' financial statements.

### (b) Financial reporting standards that will become effective in the future

During the current year, the Federation of Accounting Professions issued a number of the revised financial reporting standards and interpretations (revised 2017) which are effective for fiscal years beginning on or after



1 January 2018. These financial reporting standards were aimed at alignment with the corresponding International Financial Reporting Standards with most of the changes and clarifications directed towards disclosures in the notes to financial statements.

The management of the Company and its subsidiaries believe that the revised financial reporting standards will not have any significant impact on the financial statements when they are initially applied.

## 4. Significant accounting policies

### 4.1 Revenues recognition

#### *Sales of treated water*

Sales of treated water are recognised when the Company and a subsidiary supply 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 presents the invoiced value, excluding value added tax, of services rendered.

#### *Interest income*

Interest income is recognised on an accrual basis based on the effective interest rate.

#### *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 Trade accounts receivable

Trade accounts receivable are stated at the net realisable value. Allowance for doubtful accounts is provided for the estimated losses that may be incurred in collection of receivables. The allowance is generally based on collection experience and analysis of debt aging.

### 4.4 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.

### 4.5 Investments

- a) Investments in securities held for trading are stated at fair value. Changes in the fair value of these securities are recorded in profit or loss.

- b) Investment in available-for-sale securities are stated at fair value. Changes in the fair value of these securities are recorded in other comprehensive income, and will be recorded in profit or loss when the securities are sold.
- c) Investments in debt securities, both due within one year and expected to be held to maturity, are recorded at amortised cost. The premium/discount on debt securities is amortised/accreted by the effective rate method with the amortised/accreted amount presented as an adjustment to the interest income.
- d) Investment in associate is accounted for in the consolidated financial statements using the equity method.
- e) Investment in subsidiaries and associate is accounted for in the separate financial statements using the cost method.

The fair value of marketable securities is based on the latest bid price of the last working day of the year. The fair value of debt instruments is determined based on yield rates quoted by the Thai Bond Market Association. The fair value of unit trusts is determined from their net asset value.

The weighted average method is used for computation of the cost of investments.

#### 4.6 Investments in subsidiaries

Investments in subsidiaries 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 subsidiary, and recognised as an expense in profit or loss.

In addition, parts of the investment cost 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 subsidiary. The amortised amount is recognised as expense in profit or loss.

#### 4.7 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 for 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:

Depreciation for the period	=	Net assets for production of treated water at the beginning of period x Percentage of treated water produced in the period
Percentage of treated water produced in the period	=	$\frac{\text{Current period's actual production of treated water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of the Water Purchase Agreement})}$
Net assets for production of treated water as at the beginning of the period	=	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.

#### 4.8 Assets for production of treated water that must be transferred at end of concession and amortisation

Assets for production of treated water of Pathum Thani Water Company Limited that must be transferred to the Provincial Waterworks Authority at the end of the concession to produce and sell treated water (land, water treatment plant and distribution system) are stated at cost less accumulated amortisation and any impairment losses. Amortisation of assets for production of treated water is calculated using the units-of-production method, based on the following formula:

Amortisation for the period	=	Net assets for production of treated water that must be transferred at end of concession as at the beginning of period x Percentage of treated water produced in the period
Percentage of treated water produced in the period	=	$\frac{\text{Current period's actual production of treated water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of concession for production and sale of treated water})}$
Net assets for production of treated water that must be transferred at end of concession as at the beginning of the period	=	Total assets for production of treated water that must be transferred at end of concession - Accumulated amortisation as at the beginning of the period

Amortisation is included in determining income.

No amortisation is provided on assets under installation.

#### 4.9 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:

$$\begin{aligned}\text{Amortisation for the period} &= \text{Net rights to produce and sell treated water as at the beginning of period} \times \text{Percentage of treated water produced in the period} \\ \text{Percentage of treated water produced in the period} &= \frac{\text{Current period's actual production of treated water}}{(\text{Actual production of treated water for the period} + \text{Projected total production of treated water over the remaining term of operation rights})} \\ \text{Net rights to produce and sell treated water as at beginning of the period} &= \text{Total rights to treated water} - \text{Accumulated amortisation as at the beginning of the period}\end{aligned}$$

Amortisation is included in determining income.

##### 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:

$$\begin{aligned}\text{Amortisation for the period} &= \text{Net rights to treat waste water as at the beginning of period} \times \text{Percentage of waste water treated in the period} \\ \text{Percentage of waste water treated in the period} &= \frac{\text{Current period's actual treatment of waste water}}{(\text{Actual treatment of waste water for the period} + \text{Projected total treatment of waste water over the remaining term of operation rights})} \\ \text{Net rights to treat waste water as at beginning of the period} &= \text{Total rights to treat waste water} - \text{Accumulated amortisation as at the beginning of the period}\end{aligned}$$

Amortisation is included in determining income.

#### 4.10 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.

#### **4.11 Borrowing costs**

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalised as part of the cost of the respective assets. All other borrowing costs are expensed in the period they are incurred. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds.

#### **4.12 Intangible assets**

The intangible assets (assets from which the subsidiary obtained the maintenance and management project) of the subsidiary are carried at cost less accumulated amortisation and any accumulated impairment losses.

Intangible assets with finite lives are amortised on a systematic basis over the economic useful life (5 years and 10 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.

#### **4.13 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 associated companies, 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.

#### **4.14 Long-term leases**

Leases of property, plant or equipment which transfer substantially all the risks and rewards of ownership are classified as finance leases. Finance leases are capitalised at the lower of the fair value of the leased assets and the present value of the minimum lease payments. The outstanding rental obligations, net of finance charges, are included in long-term payables, while the interest element is charged to profit or loss over the lease period. The assets acquired under finance leases are depreciated over the shorter of the useful life of the asset and the lease period.

Leases of property, plant or equipment which do not transfer substantially all the risks and rewards of ownership are classified as operating leases. Operating lease payments are recognised as an expense in profit or loss on a straight line basis over the lease term.

#### 4.15 Impairment of assets

At the end of each reporting period, the Company and its subsidiaries perform impairment reviews in respect of the property, plant and equipment and other intangible assets whenever events or changes in circumstances indicate that an asset may be impaired. The Company and its subsidiaries also carry 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.

#### 4.16 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 Company, its subsidiaries and their employees have jointly established a provident fund. The fund is monthly contributed by employees and by the Company and its subsidiaries. The fund's assets are held in a separate trust fund and the Company and its subsidiaries' contributions are recognised as expenses when incurred.

###### *Defined benefit plans*

The Company and its subsidiaries have obligations in respect of the severance payments it must make to employees upon retirement under labor law. The Company and its subsidiaries treat 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 post - employment benefits are recognised immediately in other comprehensive income.

#### 4.17 Provisions

Provisions are recognised when the Company 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.

#### 4.18 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 Company and its subsidiaries recognise deferred tax liabilities for all taxable temporary differences while they 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 Company and its subsidiaries review and reduce 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 Company and its subsidiaries record deferred tax directly to shareholders' equity if the tax relates to items that are recorded directly to shareholders' equity.

#### **4.19 Hedge accounting - Cash flow hedges**

Associate applies hedge accounting when the risk that has been hedged can be clearly identified and the effectiveness of the hedge can be measured.

Gains or losses arising from changes in the fair value of hedging instruments that effectively hedge exposure to fluctuations in cash flows that are either attributable to a particular risk associated with financial asset, financial liability, or highly probable forecast transactions, are recognised directly in other comprehensive income and transferred to be recognised in profit or loss when the hedged cash flow transactions occur. However, if the hedging instruments are not effective, any gains or losses from changes in the fair value of the hedging instruments are recognised immediately to profit or loss.

#### **4.20 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 Company and its subsidiaries apply 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 Company and its subsidiaries measure 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 Company and its subsidiaries determine 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. Use of accounting estimates

The preparation of financial statements in conformity with financial reporting standards requires management to make estimates and assumptions in certain circumstances, affecting amounts reported in these financial statements and related notes. Actual results could differ from these estimates.

## 6. Related party transactions

During the years, the Company and its subsidiaries 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: Million Baht)

	Consolidated financial statements		Separate financial statements		Transfer pricing policy
	2017	2016	2017	2016	
<b>Transactions with subsidiary companies</b> (eliminated from the consolidated financial statements)					
Cost of sales and services	-	-	36	34	Contract price
Interest income	-	-	45	63	Minimum Loan Rate minus stipulated margin per annum
Management income	-	-	16	16	Based on contract
Dividend income	-	-	850	741	As declared
<b>Transaction with associate</b>					
Dividend income	-	-	112	42	As declared
<b>Transactions with related parties</b>					
Sales of treated water	39	31	39	31	Based on contract
Service income	3	2	3	2	Based on contract
Construction in progress	363	2,113	363	2,028	Based on contract
Cost of sales and services	3	4	3	4	Based on contract
Purchases of fixed assets	-	80	-	80	Market price



As at 31 December 2017 and 2016, the balances of the accounts between the Company and those related companies are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Trade and other receivables - related parties (Note 9)</b>				
Subsidiaries	-	-	1,391	1,391
Related companies (related by shareholders or committees)	8,194	5,529	8,194	5,529
<b>Total trade and other receivables - related parties</b>	<b>8,194</b>	<b>5,529</b>	<b>9,585</b>	<b>6,920</b>
<b>Advance payment to subcontractor - related party</b>				
Related company (related by committees)	-	8,948	-	8,948
<b>Total advance payment to subcontractor - related party</b>	<b>-</b>	<b>8,948</b>	<b>-</b>	<b>8,948</b>
<b>Trade and other payables - related parties (Note 20)</b>				
Subsidiaries	-	-	3,157	3,037
Related companies (related by shareholders or committees)	241	197,017	241	197,017
<b>Total trade and other payables - related parties</b>	<b>241</b>	<b>197,017</b>	<b>3,398</b>	<b>200,054</b>
<b>Retention payable - subsidiary</b>				
	-	-	5,000	5,000
	-	-	5,000	5,000

#### Long-term loans to related party

As at 31 December 2017 and 2016, 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 31 December 2016	Increase during the year	Decrease during the year	Balance as at 31 December 2017
Pathum Thani Water Company Limited	Subsidiary				
Loan		1,195,360	-	(367,140)	828,220
Interest receivable		282	45,479	(45,468)	293
<b>Total</b>		<b>1,195,642</b>	<b>45,479</b>	<b>(412,608)</b>	<b>828,513</b>

(Unit: Thousand Baht)

		Separate financial statements	
		2017	2016
<b>Long-term loans to related party and interest receivable</b>			
Pathum Thani Water Company Limited			
Loan		828,220	1,195,360
Interest receivable		293	282
Total		828,513	1,195,642
Less: Current portion and interest receivable		(367,433)	(367,422)
<b>Long-term loans to related party, net of current portion</b>		<b>461,080</b>	<b>828,220</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 2017 and 2016, the Company and its subsidiaries had employee benefit expenses payable to their directors and management as below.

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Short-term employee benefits	101	107	75	82
Post-employment benefits	13	12	10	9
Total	114	119	85	91

## 7. Cash and cash equivalents

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Cash	423	476	43	129
Bank deposits	316,385	245,811	280,872	196,741
Total	316,808	246,287	280,915	196,870

As at 31 December 2017, bank deposits in saving accounts and fixed deposits carried interests between 0.05% and 0.50% per annum (2016: between 0.05% and 0.98% per annum).

## 8. Current investments

The balances of current investments represent investments in trading securities and the 4 - 12 month fixed deposits, carrying interests and return on investments between 0.65% and 4.38% per annum (2016: between 1.15% and 4.70% per annum).

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Fixed deposits</b>	535,176	687,950	405,176	567,950
	535,176	687,950	405,176	567,950
<b>Investments in trading securities at fair value</b>				
Government and state enterprise bonds	522,967	471,741	522,967	471,741
Private sector debt securities	1,065,478	3,085,873	580,720	2,499,427
Marketable equity securities	235,849	231,975	235,849	231,975
	1,824,294	3,789,589	1,339,536	3,203,143
<b>Total current investments</b>	<b>2,359,470</b>	<b>4,477,539</b>	<b>1,744,712</b>	<b>3,771,093</b>

## 9. Trade and other receivables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Trade receivables - related parties</b>				
Aged on the basis of due dates				
Not yet due	3,896	2,872	3,896	2,872
Past due				
Up to 3 months	4,298	2,657	4,298	2,657
<b>Total trade receivables - related parties</b>	<b>8,194</b>	<b>5,529</b>	<b>8,194</b>	<b>5,529</b>
<b>Trade receivables - unrelated parties</b>				
Aged on the basis of due dates				
Not yet due	510,411	470,796	340,827	318,762
Past due				
Up to 3 months	11,121	5,681	11,121	5,681
Over 12 months	-	33	-	33
<b>Total trade receivables - unrelated parties</b>	<b>521,532</b>	<b>476,510</b>	<b>351,948</b>	<b>324,476</b>
<b>Total trade receivables</b>	<b>529,726</b>	<b>482,039</b>	<b>360,142</b>	<b>330,005</b>

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Other receivables</b>				
Other receivables - related parties	-	-	1,391	1,391
Other receivables - unrelated parties	20,139	10	11,221	-
Interest receivables - unrelated parties	3,966	13,202	3,597	12,900
Other receivables from securities trading	9,547	1,755	9,547	1,755
Total other receivables	33,652	14,967	25,756	16,046
Less: Allowance for doubtful debts	(10,064)	-	(5,610)	-
Total other receivables - net	23,588	14,967	20,146	16,046
Total trade and other receivables - net	553,314	497,006	380,288	346,051

## 10. Raw materials and supplies

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Raw materials	5,666	5,096	3,842	2,853
Spare parts	17,389	16,605	8,854	8,793
Total	23,055	21,701	12,696	11,646

## 11. Investments in subsidiaries

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

(Unit: Thousand Baht)

Company's name	Paid-up capital		Shareholding percentage		Cost		Dividend received during the year	
	2017	2016	2017	2016	2017	2016	2017	2016
			(%)	(%)				
Thai Water Operations Company Limited	60,000	60,000	68.5	68.5	700,000	700,000	-	-
Pathum Thani Water Company Limited	1,200,000	1,200,000	98.0	98.0	3,998,310	3,998,310	850,170	741,075
					4,698,310	4,698,310	850,170	741,075
Less: Accumulated amortisation of investments in subsidiaries					(2,319,635)	(2,098,141)	-	-
Less: Dividend received from income before purchase of shares					(20,000)	(20,000)	-	-
Total					2,358,675	2,580,169	850,170	741,075



## 12. Investment in associate

### 12.1 Details of associate:

(Unit: Thousand Baht)

Consolidated financial statements						
Company's name	Nature of business	Country of incorporation	Shareholding percentage		Cost	Carrying amounts based on equity method
			2017	2016		
			(%)	(%)		
CK Power Public Company Limited	Making investment in other companies	Thailand	25.31	25.31	4,228,013	4,508,502
						4,507,337
Total					4,228,013	4,508,502
						4,507,337

(Unit: Thousand Baht)

Separate financial statements						
Company's name	Nature of business	Country of incorporation	Shareholding percentage		Cost	Carrying amounts based on cost method
			2017	2016		
			(%)	(%)		
CK Power Public Company Limited	Making investment in other companies	Thailand	25.31	25.31	4,228,013	4,228,013
						4,228,013
Total					4,228,013	4,228,013
						4,228,013

## 12.2 Share of comprehensive income and dividend received

During the years, the Company has recognised its share of profit from investment in associate company in the consolidated financial statements and dividend income in the separate financial statements as follows:

(Unit: Million Baht)

Associate	Consolidated financial statements				Separate financial statements	
	Share of profit from investment in associate during the year		Share of other comprehensive income from investment in associate during the year		Dividend received during the year	
	2017	2016	2017	2016	2017	2016
CK Power Public Company Limited	40	14	73	25	112	42
Total	40	14	73	25	112	42

## 12.3 Fair value of investment in listed associate

In respect of investment in associate that is listed company on the Stock Exchange of Thailand, its fair value is as follows:

(Unit: Million Baht)

Associate	Fair values as at 31 December	
	2017	2016
CK Power Public Company Limited	7,537 <sup>(1)</sup>	6,604 <sup>(1)</sup>
Total	7,537	6,604

<sup>(1)</sup> Excluding the fair value of warrants amounting to Baht 255 million (2016: Baht 255 million).

## 12.4 Summarised financial information about material associate

Summarised information about financial position

(Unit: Million Baht)

	CK Power Public Company Limited	
	2017	2016
Current assets	6,294	7,666
Non-current assets	54,168	51,639
Current liabilities	(2,669)	(1,488)
Non-current liabilities	(27,134)	(27,311)
Net assets	30,659	30,506

(Unit: Million Baht)

CK Power Public Company Limited		
	2017	2016
Equity attributable to non-controlling interest of the associate	(12,911)	(12,762)
Net assets of the Company	17,748	17,744
Shareholding percentage (%)	25.31	25.31
Share of net assets	4,492	4,491
Goodwill	16	16
Carrying amounts of associate based on equity method	4,508	4,507

Summarised information about comprehensive income

(Unit: Million Baht)

CK Power Public Company Limited		
For the years ended 31 December		
	2017	2016
Revenue	6,930	6,359
Profit	308	194
Other comprehensive income	549	156
Total comprehensive income	857	350

In May 2015, the Company received, at no cost, 490.64 million warrants to purchase 490.64 million newly issued ordinary shares (at a ratio of 1 warrant to 1 ordinary share), with an exercise price of Baht 6 per share. The warrants have a term of 5 years from the date they were issued and offered and can be exercised every 3 months, beginning on 30 September 2015 and with the final exercise date on 28 May 2020.

In addition, during the second quarter of the year 2017, the Company received dividend from the associate amounting to Baht 111.9 million, in accordance with a resolution of the Annual General Meeting of the associate's shareholders held on 25 April 2017.

### 13. Other long-term investment

The Board of Director's meeting of Thai Water Operations Company Limited ("subsidiary") approved investment in mutual funds, and/or government and/or state enterprise and/or private sector debt securities, the subsidiary has made investments in debentures that management intend to hold to maturity and investments in real estate investment trust that management intend to investment in available-for-sale, as follows:

(Unit: Thousand Baht)

				Consolidated financial statements	
Debentures	Life	Maturity date	Interest rate	2017	2016
			(% per annum)		
1	3 years	28 October 2019	4.20	10,000	10,000
2	5 years	2 December 2021	4.50	5,000	5,000
3	5 years	6 October 2022	4.10	9,000	-
Total investments in debentures				24,000	15,000
Investment in available-for-sale securities at fair value					
Real estate investment trust				5,000	-
Total other long-term investments				29,000	15,000



## 14. Property, plant and equipment

(Unit: Thousand Baht)

	Consolidated financial statements				
	Land	Construction in progress	Building and building improvement	Furniture and office equipment	Total
<b>Cost:</b>					
1 January 2016	627,161	4,951	55,124	122,207	860,784
Additions	80,000	137,819	3,112	12,547	236,158
Disposals/ written off	-	-	-	(9)	(3,501)
31 December 2016	707,161	142,770	58,236	134,745	1,093,441
Additions	-	414	3,467	9,137	13,977
Disposals/ written off	-	-	-	-	(494)
Reclassify	-	(142,411)	-	-	(142,411)
31 December 2017	707,161	773	61,703	143,882	964,513
<b>Accumulated depreciation:</b>					
1 January 2016	-	-	18,127	104,133	170,169
Depreciation for the year	-	-	2,434	6,239	10,731
Depreciation on disposals/ written off	-	-	-	(9)	(3,501)
31 December 2016	-	-	20,561	110,363	177,399
Depreciation for the year	-	-	3,314	7,011	11,690
Depreciation on disposals/ written off	-	-	-	-	(486)
31 December 2017	-	-	23,875	117,374	188,603
<b>Net book value:</b>					
31 December 2016	707,161	142,770	37,675	24,382	916,042
31 December 2017	707,161	773	37,828	26,508	775,910
<b>Depreciation for the year</b>					
2016 (Baht 3 million included in cost of sales of treated water and service, and the balance in administrative expenses)					10,731
2017 (Baht 5 million included in cost of sales of treated water and service, and the balance in administrative expenses)					11,690

(Unit: Thousand Baht)

## Separate financial statements

	Land	Construction in progress	Building and building improvement	Furniture and office equipment	Motor vehicles	Tools	Total
<b>Cost:</b>							
1 January 2016	572,429	4,951	55,124	73,992	15,558	10,004	732,058
Additions	80,000	137,819	3,112	12,069	8	1,625	234,633
Disposals/ written off	-	-	-	-	(1,282)	-	(1,282)
31 December 2016	652,429	142,770	58,236	86,061	14,284	11,629	965,409
Additions	-	414	3,467	7,407	361	68	11,717
Reclassify	-	(142,411)	-	-	-	-	(142,411)
31 December 2017	652,429	773	61,703	93,468	14,645	11,697	834,715
<b>Accumulated depreciation:</b>							
1 January 2016	-	-	18,127	61,073	14,336	9,791	103,327
Depreciation for the year	-	-	2,434	4,558	280	927	8,199
Depreciation on disposals/ written off	-	-	-	-	(1,282)	-	(1,282)
31 December 2016	-	-	20,561	65,631	13,334	10,718	110,244
Depreciation for the year	-	-	3,314	5,745	297	250	9,606
31 December 2017	-	-	23,875	71,376	13,631	10,968	119,850
<b>Net book value:</b>							
31 December 2016	652,429	142,770	37,675	20,430	950	911	855,165
31 December 2017	652,429	773	37,828	22,092	1,014	729	714,865
<b>Depreciation for the year</b>							
2016 (Baht 2 million included in cost of sales of treated water and service, and the balance in administrative expenses)							8,199
2017 (Baht 4 million included in cost of sales of treated water and service, and the balance in administrative expenses)							9,606

As at 31 December 2017, 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 155 million (Separate financial statements: Baht 91 million) (2016: Baht 149 million, Separate financial statements: Baht 87 million).

## 15. Assets for production of treated water with public sector agency - assets that are owned by the Company

(Unit: Thousand Baht)

	Consolidated/Separate financial statements		
	Water treatment plant and distribution treated water system	Construction in progress	Total
<b>Cost:</b>			
1 January 2016	10,819,495	1,124,242	11,943,737
Additions	-	1,906,853	1,906,853
Transfer in (out)	907,204	(907,276)	(72)
Capitalised interest	-	71,487	71,487
31 December 2016	11,726,699	2,195,306	13,922,005
Additions	312,746	98,256	411,002
Transfer in (out)	2,334,326	(2,334,326)	-
Capitalised interest	-	45,656	45,656
Reclassify	7,700	(596)	7,104
31 December 2017	14,381,471	4,296	14,385,767
<b>Accumulated amortisation:</b>			
1 January 2016	3,583,023	-	3,583,023
Amortisation for the year	378,751	-	378,751
31 December 2016	3,961,774	-	3,961,774
Amortisation for the year	430,747	-	430,747
31 December 2017	4,392,521	-	4,392,521
<b>Net book value:</b>			
31 December 2016	7,764,925	2,195,306	9,960,231
31 December 2017	9,988,950	4,296	9,993,246
<b>Amortisation for the year</b>			
2016			378,751
2017			430,747

The construction was financed with debentures, issued and offered for sale on 6 February 2015 and loan from financial institution. Borrowing costs amounting to Baht 46 million were capitalised as project costs during the year ended 31 December 2017 (2016: Baht 71 million).

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 2016	418,088	6,008,594	441,160	6,867,842
Additions	-	11,412	85,373	96,785
Disposals	(4,687)	-	-	(4,687)
Transfer in (out)	-	526,533	(526,533)	-
31 December 2016	413,401	6,546,539	-	6,959,940
Additions	-	440	-	440
31 December 2017	413,401	6,546,979	-	6,960,380
<b>Accumulated amortisation:</b>				
1 January 2016	284,027	3,851,348	-	4,135,375
Amortisation for the year	16,653	250,932	-	267,585
Amortisation on disposals	(3,083)	-	-	(3,083)
31 December 2016	297,597	4,102,280	-	4,399,877
Amortisation for the year	17,005	273,390	-	290,395
31 December 2017	314,602	4,375,670	-	4,690,272
<b>Net book value:</b>				
31 December 2016	115,804	2,444,259	-	2,560,063
31 December 2017	98,799	2,171,309	-	2,270,108
<b>Amortisation for the year</b>				
2016				267,585
2017				290,395



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.

## 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 2017 and 2016 is presented below.

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Assets in process	Total
As at 31 December 2017:				
Cost	1,410,075	146,921	3,828	1,560,824
<u>Less: Accumulated amortisation/ depreciation</u>	(318,937)	(3,879)	-	(322,816)
Net book value	1,091,138	143,042	3,828	1,238,008
As at 31 December 2016:				
Cost	1,410,075	-	-	1,410,075
<u>Less: Accumulated amortisation</u>	(272,341)	-	-	(272,341)
Net book value	1,137,734	-	-	1,137,734

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 2017 and 2016 is presented below.

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Assets in process	Total
Net book value as at 1 January 2016	1,181,114	-	-	1,181,114
Amortisation for the year	(43,380)	-	-	(43,380)
Net book value as at 1 January 2017	1,137,734	-	-	1,137,734
Acquisitions at cost	-	12,116	3,828	15,944
Transfer from property, plant and equipment	-	134,711	-	134,711

(Unit: Thousand Baht)

	Consolidated / Separate financial statements			
	Rights	Machinery and equipment	Assets in process	Total
Transfer from assets for production of treated water	-	94	-	94
Amortisation/depreciation for the year	(46,596)	(3,879)	-	(50,475)
Net book value as at 31 December 2017	1,091,138	143,042	3,828	1,238,008

During the current year, the Company had construction in progress to produce, sell treated water and treat water from private sector. These assets must be transferred to the owner of the rights after the end of the 30-year concession.

## 18. Rights to produce and sell treated water from business acquisition

(Unit: Thousand Baht)

	Consolidated financial statements	
	2017	2016
Rights to produce and sell treated water from business acquisition	3,169,109	3,169,109
<u>Less:</u> Accumulated amortisation of rights to produce and sell treated water from business acquisition	(2,040,556)	(1,845,123)
Rights to produce and sell treated water from business acquisition, net	1,128,553	1,323,986

## 19. Intangible assets

The net book value of intangible assets as at 31 December 2017 and 2016 is presented below.

(Unit: Thousand Baht)

As at 31 December 2017	
Cost	14,104
<u>Less</u> Accumulated amortisation	(10,059)
Net book value	4,045
As at 31 December 2016	
Cost	14,104
<u>Less</u> Accumulated amortisation	(8,899)
Net book value	5,205

A reconciliation of the net book value of intangible assets for the years 2017 and 2016 is presented below.

(Unit: Thousand Baht)

	2017	2016
Net book value at beginning of year	5,205	6,369
Amortisation	(1,160)	(1,164)
Net book value at end of year	4,045	5,205

## 20. Trade and other payables

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Trade payables - related party	-	-	3,157	3,037
Trade payables - unrelated parties	18,431	18,255	9,510	9,939
Amounts due to related parties	241	124	241	124
Amounts due to unrelated parties	14,788	15,127	12,268	12,029
Construction payable - related party	-	189,987	-	189,987
Construction payable - unrelated parties	143	143	143	143
Retention payable for contract work - related party	-	6,906	-	6,906
Retention payable for contract work - unrelated parties	4,004	4,186	3,593	3,860
Accounts payable from securities trading	8,536	4,300	8,536	4,300
Accrued expenses	81,698	85,936	50,867	59,301
Total trade and other payables	127,841	324,964	88,315	289,626

## 21. Long-term loans

(Unit: Thousand Baht)

			Consolidated / Separate financial statements	
Loan	Interest rate (%)	Repayment schedule	2017	2016
1.	The 6-month fixed deposit rate + a stipulated margin	Quarterly installments as from March 2010 to June 2019	-	600,000
2.	The 6-month and 12-month fixed deposit rate + a stipulated margin	Quarterly installments as from December 2009 to September 2019	315,000	990,000
3.	The 6-month fixed deposit rate + a stipulated margin	Repayment in full by 9 May 2020	2,760,000	2,760,000
4.	The 6-month fixed deposit rate + a stipulated margin	Quarterly installments as from June 2014 to December 2021	-	1,095,000
5.	Fixed rate at 2.95% per annum	Quarterly installments as from March 2017 to December 2021	1,200,000	1,500,000
Total			4,275,000	6,945,000
<u>Less:</u> Current portion			(480,000)	(1,090,000)
Long-term loans, net of current portion			3,795,000	5,855,000

The loan agreements contain several covenants which, among other things, require the Company to maintain certain debt to equity ratio, net debt to EBITDA and EBITDA to interest ratio at the rate prescribed in the agreements.

In December 2017, the Company made early repayment of a long-term loans of Baht 1,580 million to a bank. The bank did not charge a loan prepayment fee.



## 22. Debentures

(Unit: Thousand Baht)

Debentures	Life	Date of issue	Maturity date	Interest rate (% per annum)	Consolidated / Separate financial statements	
					2017	2016
1	7 years	22 February 2012	22 February 2019	4.40	1,500,000	1,500,000
2	10 years	22 February 2012	22 February 2022	4.60	2,000,000	2,000,000
3	3 years	6 February 2015	6 February 2018	3.06	1,000,000	1,000,000
4	5 years	6 February 2015	6 February 2020	3.37	500,000	500,000
5	10 years	21 May 2015	21 May 2025	3.98	1,400,000	1,400,000
Total					6,400,000	6,400,000
<u>Less:</u> Current portion of debentures					(1,000,000)	-
<u>Less:</u> Deferred debenture issuing costs					(4,882)	(6,982)
Debentures, net of current portion					5,395,118	6,393,018

On 12 November 2014, a meeting of the Company's Board of Directors passed a resolution granting approval for the Company to issue Baht 1,500 million of unsecured senior debentures, with no trustees, in 2 series; to be offered for sale to investors in accordance with the Notification of the Securities and Exchange Commission. Details of the debentures are as follow:-

- A) Series #1 comprises 1,000,000 debentures with a par value of Baht 1,000 or a total of Baht 1,000 million. The debentures mature on 6 February 2018 and bear interest at a fixed rate of 3.06% per annum, payable every 6 months.
- B) Series #2 comprises 500,000 debentures with a par value of Baht 1,000 or total of Baht 500 million. The debentures mature on 6 February 2020 and bear interest at a fixed rate of 3.37% per annum, payable every 6 months.

The Company issued these debentures on 6 February 2015.

On 7 April 2015, a meeting of the Company's Board of Directors passed a resolution granting approval for the Company to issue Baht 1,400 million of unsecured senior debentures, with no trustees, in 1 series; to be offered for sale to investors in accordance with the Notification of the Securities and Exchange Commission. Details of the debentures are as follows:-

- C) Series #3 comprises 1,400,000 debentures with a par value of Baht 1,000 or a total of Baht 1,400 million. The debentures mature on 21 May 2025 and bear interest at a fixed rate of 3.98% per annum, payable every 6 months.

The Company issued these debentures on 21 May 2015.

The Company is required to maintain certain financial ratios i.e. debt to equity ratio, net debt to EBITDA and EBITDA to interest ratio at the rate prescribed.

## 23. 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 financial statements		Separate financial statements	
	2017	2016	2017	2016
Provision for long-term employee benefits at beginning of year	34,651	27,791	17,895	15,972
Included in profit or loss:				
Current service cost	6,795	4,566	4,812	2,697
Interest cost	807	690	413	348
Past service costs and gains or losses on settlement	25	1,420	5	1,420
Included in other comprehensive income:				
Actuarial (gain) loss arising from Demographic assumptions changes	2,535	885	1,475	187
Financial assumptions changes	168	3,409	161	1,564
Experience adjustments	(2,798)	(733)	(2,663)	(916)
Benefits paid during the year	(1,930)	(3,377)	(779)	(3,377)
Provision for long-term employee benefits at end of year	40,253	34,651	21,319	17,895

Line items in profit or loss under which long-term employee benefit expenses are recognised as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Cost of sales of treated water and service	2,414	2,187	535	478
Administrative expenses	5,213	4,489	4,695	3,987
Total expenses recognised in profit or loss	7,627	6,676	5,230	4,465

The Company and its subsidiaries expect to pay Baht 2 million of long-term employee benefits during the next year (Separate financial statements: Baht 2 million) (2016: Baht 1 million, Separate financial statements: nil).

As at 31 December 2017, the weighted average duration of the liabilities for long-term employee benefits is 8.17 - 10.05 years (Separate financial statements: 8.17 years) (2016: 12.02 - 15.42 years, Separate financial statements: 12.02 years).

Significant actuarial assumptions are summarised below:

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
	(% per annum)	(% per annum)	(% per annum)	(% per annum)
Discount rate	2.22 - 2.38	2.31 - 2.53	2.22	2.31
Salary increase rate	5.0	5.0	5.0	5.0
Turnover rate	0 - 14.0	0 - 16.0	0 - 13.0	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 2017 and 2016 are summarised below:

(Unit: million Baht)

	As at 31 December 2017			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(2.7)	3.2	(1.3)	1.5
Salary increase rate	3.2	(2.7)	1.5	(1.3)
Turnover rate	(3.0)	2.0	(1.4)	0.9

(Unit: million Baht)

	As at 31 December 2016			
	Consolidated financial statements		Separate financial statements	
	Increase 1%	Decrease 1%	Increase 1%	Decrease 1%
Discount rate	(2.5)	2.8	(1.1)	1.3
Salary increase rate	2.7	(2.4)	1.2	(1.1)
Turnover rate	(2.6)	1.8	(1.2)	0.8

## 24. 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.

## 25. 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 and 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.

## 26. Expenses by nature

Significant expenses classified by nature are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Salaries, wages and other employee benefits	192,143	178,752	103,130	95,368
Depreciation and amortisation	443,595	390,646	440,352	386,950
Amortisation of assets for production of treated water that must be transferred at end of concession	290,395	267,585	-	-
Amortisation of investments in subsidiaries	-	-	221,494	222,101
Operating and maintenance expenses	-	-	35,588	35,203
Production and maintenance cost	680,081	699,882	387,818	428,662



## 27. Income tax

Income tax expenses for the years ended 31 December 2017 and 2016 are made up as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Current income tax:</b>				
Current income tax charge	603,326	598,995	450,332	435,310
<b>Deferred tax:</b>				
Relating to origination and reversal of temporary differences	28,895	7,673	19,491	(770)
<b>Income tax expenses reported in the statement of comprehensive income</b>	<b>632,221</b>	<b>606,668</b>	<b>469,823</b>	<b>434,540</b>

The amounts of income tax relating to each component of other comprehensive income for the years ended 31 December 2017 and 2016 are as follows:

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Deferred tax on actuarial gain (loss)	(671)	(713)	205	(167)
Deferred tax on gain from the change in value of available-for-sale investments	1,000	1,243	-	-
Deferred tax on unrealised gain (loss) from cash flow hedges	17,919	4,995	-	-
	<b>18,248</b>	<b>5,525</b>	<b>205</b>	<b>(167)</b>

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

(Unit: Thousand Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Accounting profit before tax	3,312,973	3,099,155	3,169,324	2,826,026
Applicable tax rate	20%	20%	20%	20%
Accounting profit before tax multiplied by income tax rate	662,595	619,831	633,865	565,205
Effects of:				
Promotional privileges (Note 28)	(78,069)	(48,297)	(31,523)	(19,570)
Non-deductible expenses	49,125	49,663	46,048	46,136
Additional expense deductions allowed	(1,853)	(1,791)	(1,663)	(1,595)
Exemption of income	-	-	(192,422)	(156,536)
Effect of elimination entry on the consolidated financial statements	(16,161)	(10,567)	-	-
Others	16,584	(2,171)	15,518	900
Total	(30,374)	(13,163)	(164,042)	(130,665)
Income tax expenses reported in the statement of comprehensive income	632,221	606,668	469,823	434,540

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

(Unit: Thousand Baht)

	Statements of financial position as at 31 December			
	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Deferred tax assets</b>				
Provision for long-term employee benefits	8,051	6,930	4,264	3,579
Allowance for doubtful accounts	2,013	-	1,122	-
<b>Total</b>	<b>10,064</b>	<b>6,930</b>	<b>5,386</b>	<b>3,579</b>
<b>Deferred tax liabilities</b>				
Accumulated amortisation - assets for production of treated water	(79,861)	(58,299)	(79,861)	(58,299)
Accumulated amortisation of rights to produce and sell treated water and treat waste water	(15,218)	(15,023)	(15,218)	(15,023)
Accumulated amortisation - assets for production of treated water that must be transferred at end of concession of subsidiary	(27,860)	(16,427)	-	-
Deferred debenture issuing costs	(893)	(1,147)	(893)	(1,147)
Fair value adjustment of assets for production of treated water that must be transferred at end of concession regarding business combination	(5,056)	(5,944)	-	-
<b>Total</b>	<b>(128,888)</b>	<b>(96,840)</b>	<b>(95,972)</b>	<b>(74,469)</b>

## 28. Promotional privileges

The Company received promotional privileges from the Board of Investment for production of treated water, pursuant to the investment promotion certificate No. 2437(2)/2553 issued on 13 September 2010. 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 eight years from the date the promoted operations begin generating revenues (30 September 2010).

During the year 2013, the Company received promotional privileges from the Board of Investment to restore investment after the floods, pursuant to the promotion certificate No. 5177(2)/2556 issued on 27 May 2013 (replacing earlier promotion certificate No. 1382(2)/2545 which expired in 2012). 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, with the amount of tax exempted capped at 150% of investment, excluding land and working capital, only the repair expenses of machinery and equipment damaged due to flooding, for a period of eight years from the date the promoted operations begin generating revenues (30 June 2013).

The Company's operating revenues for the years ended 31 December 2017 and 2016, divided between promoted and non-promoted operations, are summarised below.

(Unit: Thousand Baht)

	Promoted operations		Non-promoted operations		Total	
	2017	2016	2017	2016	2017	2016
Sales of treated water	349,729	252,759	3,421,785	3,370,945	3,771,514	3,623,704

## 29. 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.

The following table sets forth the computation of basic earnings per share:

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
<b>Basic earnings per share</b>				
Profit for the year (Thousand Baht)	2,663,248	2,475,559	2,699,501	2,391,487
Weighted average number of ordinary shares (Thousand shares)	3,990,000	3,990,000	3,990,000	3,990,000
Profit attributable to equity holders of the Company (Baht per share)	0.67	0.62	0.68	0.60

## 30. 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 Company and the subsidiaries are 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 Company and its subsidiaries operate 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 2017, the Company and its subsidiaries have revenue from a major customer in amount of Baht 5,268 million (2016: Baht 5,090 million).

### 31. Provident fund

The Company, its subsidiaries and their 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 - 7.5% 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 2017 amounting to approximately Baht 7 million (Separate financial statements: Baht 4 million) (2016: Baht 7 million, Separate financial statements: Baht 4 million) were recognised as expenses.

### 32. Dividend paid

Dividends	Approved by	Total dividends (Thousand Baht)	Dividend per share (Baht)
Dividends from the earnings of the promoted operations for July to December 2015	Annual General Meeting of the shareholders on 7 April 2016	43,886	0.011
Dividends from the earnings of the non-promoted operations for July to December 2015	Annual General Meeting of the shareholders on 7 April 2016	965,482	0.242
Dividends from unappropriated retained earnings	Annual General Meeting of the shareholders on 7 April 2016	187,511	0.047
Interim dividends from the earnings of the promoted operations for January to June 2016	Board of Directors' meeting on 11 August 2016	43,885	0.011
Interim dividends from the earnings of the non-promoted operations for January to June 2016	Board of Directors' meeting on 11 August 2016	1,053,237	0.264
Dividends from unappropriated retained earnings	Board of Directors' meeting on 11 August 2016	99,738	0.025
Total dividends for 2016		2,393,739	0.600
Dividends from the earnings of the promoted operations for July to December 2016	Annual General Meeting of the shareholders on 18 April 2017	51,865	0.013
Dividends from the earnings of the non-promoted operations for July to December 2016	Annual General Meeting of the shareholders on 18 April 2017	1,145,015	0.287



Dividends	Approved by	Total dividends (Thousand Baht)	Dividend per share (Baht)
Interim dividends from the earnings of the promoted operations for January to June 2017	Board of Directors' meeting on 14 August 2017	63,840	0.016
Interim dividends from the earnings of the non-promoted operations for January to June 2017	Board of Directors' meeting on 14 August 2017	1,133,158	0.284
Total dividends for 2017		2,393,878	0.600

### 33. Commitments and contingent liabilities

#### 33.1 Capital commitments

As at 31 December 2017, the Company had capital commitments of Baht 6 million relating to magnetic flow chamber construction in Mahachai pumping station and installation of fire protection system at Bang Len water supply plant (2016: Baht 52 million relating to the area water supply capacity expansion project and relocation of raw water pump).

#### 33.2 Service commitments and other commitments

- a) The Company 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 system. Under the conditions of the agreements, the Company 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 2017, the Company and its subsidiaries had commitments totaling Baht 12 million (Separate financial statements: Baht 3 million) (2016: Baht 11 million (Separate financial statement: nil)) under other service agreements.

#### 33.3 Operating lease commitments

The Company has entered into vehicles and land lease agreements for office building. The term of the land lease agreement is between 1 March 2010 and 31 August 2039.

Future minimum lease payments required under this non-cancellable operating lease contract were as follows:

(Unit: Million Baht)

	Separate financial statements	
	2017	2016
Payable:		
In up to 1 year	8	7
In over 1 and up to 5 years	17	20
In over 5 years	34	36

### 33.4 Bank guarantees

As at 31 December 2017, there were outstanding bank guarantees of Baht 307 million (Separate financial statements: Baht 120 million) (2016: Baht 296 million (Separate financial statements: Baht 109 million)) issued by banks on behalf of the Company and its subsidiaries in respect of certain performance bonds as required in the normal course of business. These included letters of guarantee as follows:

(Unit: Million Baht)

	Consolidated financial statements		Separate financial statements	
	2017	2016	2017	2016
Guarantee under the Water Purchase Agreement with the Provincial Waterworks Authority	228	228	62	62
Guarantee electricity use	66	65	45	44
Guarantee for others	13	3	13	3
Total	307	296	120	109

### 34. Fair value hierarchy

As of 31 December 2017 and 2016, the Company and its subsidiaries had the assets and liabilities that were measured or disclosed at fair value using different levels of inputs as follows:

(Unit: Million Baht)

	Consolidated financial statements			
	As at 31 December 2017			
	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Held for trade investments				
Equity instruments	236	-	-	236
Debt instruments	-	1,588	-	1,588
Other long-term investment - real estate investment trust	5	-	-	5
<b>Asset for which fair value are disclosed</b>				
Investment in associate	7,537	-	-	7,537
Other long-term investment - debentures	-	24	-	24
<b>Liability for which fair value are disclosed</b>				
Debentures	-	6,787	-	6,787

(Unit: Million Baht)

Consolidated financial statements

As at 31 December 2016

	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Held for trade investments				
Equity instruments	232	-	-	232
Debt instruments	-	3,558	-	3,558
<b>Asset for which fair value are disclosed</b>				
Investment in associate	6,604	-	-	6,604
Other long-term investment - debentures	-	15	-	15
<b>Liability for which fair value are disclosed</b>				
Debentures	-	6,753	-	6,753

(Unit: Million Baht)

Separate financial statements

As at 31 December 2017

	Level 1	Level 2	Level 3	Total
<b>Financial assets measured at fair value</b>				
Held for trade investments				
Equity instruments	236	-	-	236
Debt instruments	-	1,104	-	1,104
<b>Asset for which fair value are disclosed</b>				
Investment in associate	7,537	-	-	7,537
<b>Liability for which fair value are disclosed</b>				
Debentures	-	6,787	-	6,787

(Unit: Million Baht)

Separate financial statements				
As at 31 December 2016				
	Level 1	Level 2	Level 3	Total
Financial assets measured at fair value				
Held for trade investments				
Equity instruments	232	-	-	232
Debt instruments	-	2,971	-	2,971
Asset for which fair value are disclosed				
Investment in associate	6,604	-	-	6,604
Liability for which fair value are disclosed				
Debentures	-	6,753	-	6,753

## 35. Financial instruments

### 35.1 Financial risk management

The Company's and its subsidiaries' financial instruments, as defined under Thai Accounting Standard No. 107 "Financial Instruments: Disclosure and Presentations", principally comprise cash and cash equivalents, current investments, trade and other receivables, other long-term investments, long-term loans to related party, trade and other payables, debentures and long-term loans. The financial risks associated with these financial instruments and how they are managed is described below.

#### *Credit risk*

The Company and its subsidiary are exposed to credit risk primarily with respect to trade accounts receivable and other receivables and there is a high concentration of risk since the Company and its subsidiary have only one major customer, the Provincial Waterworks Authority. However, because the Provincial Waterworks Authority is a government agency, the Company and its subsidiary do 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 Company's and its subsidiaries' exposures to interest rate risk relate primarily to their cash at banks, current investments, long-term loans to related party, debentures and long-term loans. However, since most of the Company's and the subsidiaries' 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.

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: Million Baht)

As at 31 December 2017

## Consolidated financial statements

## Fixed interest rates

	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing	Total	Effective interest rate (% per annum)
<b>Financial assets</b>							
Cash and cash equivalents	-	-	-	285	32	317	0.05 - 0.50
Current investments	2,123	-	-	-	236	2,359	0.65 - 4.38
Trade and other receivables	-	-	-	-	553	553	-
Other long-term investments	-	24	-	-	5	29	4.10 - 4.50
	2,123	24	-	285	826	3,258	
<b>Financial liabilities</b>							
Trade and other payables	-	-	-	-	128	128	-
Long-term loans	-	-	-	4,275	-	4,275	2.75 - 3.10
Debentures	1,000	3,997	1,398	-	-	6,395	3.06 - 4.60
	1,000	3,997	1,398	4,275	128	10,798	



(Unit: Million Baht)

As at 31 December 2016

	Consolidated financial statements						
	Fixed interest rates						
	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing	Total	Effective interest rate
	(% per annum)						
Financial assets							
Cash and cash equivalents	8	-	-	206	32	246	0.05 - 0.98
Current investments	4,246	-	-	-	232	4,478	1.15 - 4.70
Trade and other receivables	-	-	-	-	497	497	-
Other long-term investments	-	15	-	-	-	15	4.20 and 4.50
	4,254	15	-	206	761	5,236	
Financial liabilities							
Trade and other payables	-	-	-	-	320	320	-
Long-term loans	-	-	-	6,945	-	6,945	2.8125 - 3.1000
Debentures	-	2,998	3,395	-	-	6,393	3.06 - 4.60
	-	2,998	3,395	6,945	320	13,658	

(Unit: Million Baht)

As at 31 December 2017

## Separate financial statements

## Fixed interest rates

	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing	Total	Effective interest rate (% per annum)
<b>Financial assets</b>							
Cash and cash equivalents	-	-	-	249	32	281	0.05 - 0.50
Current investments	1,509	-	-	-	236	1,745	0.65 - 4.38
Trade and other receivables	-	-	-	-	380	380	-
Long-term loans to related party	-	-	-	829	-	829	4.25 - 4.40
	1,509	-	-	1,078	648	3,235	
<b>Financial liabilities</b>							
Trade and other payables	-	-	-	-	88	88	-
Long-term loans	-	-	-	4,275	-	4,275	2.75 - 3.10
Debentures	1,000	3,997	1,398	-	-	6,395	3.06 - 4.60
	1,000	3,997	1,398	4,275	88	10,758	

(Unit: Million Baht)

As at 31 December 2016

## Separate financial statements

## Fixed interest rates

	Within 1 year	1-5 years	Over 5 years	Floating interest rate	Non-interest bearing	Total	Effective interest rate (% per annum)
<b>Financial assets</b>							
Cash and cash equivalents	8	-	-	157	32	197	0.05 - 0.98
Current investments	3,539	-	-	-	232	3,771	1.15 - 4.70
Trade and other receivables	-	-	-	-	346	346	-
Long-term loans to related party	-	-	-	1,196	-	1,196	4.25 - 4.65
	3,547	-	-	1,353	610	5,510	
<b>Financial liabilities</b>							
Trade and other payables	-	-	-	-	285	285	-
Long-term loans	-	-	-	6,945	-	6,945	2.8125 - 3.1000
Debentures	-	2,998	3,395	-	-	6,393	3.06 - 4.60
	-	2,998	3,395	6,945	285	13,623	

**Foreign currency risk**

The Company and its subsidiaries do not consider themselves exposed to foreign currency risk because they have no significant foreign currency transactions.

### 35.2 Fair values of financial instruments

Since the majority of the Company's and the subsidiaries' 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)

	As at 31 December 2017		As at 31 December 2016	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial liabilities</b>				
Debentures	6,395	6,787	6,393	6,753

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

- a) 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 years, there were no transfers within the fair value hierarchy.

## 36. Capital management

The primary objective of the Company's capital management is to ensure that it has appropriate capital structure in order to support its business and maximise shareholder value. As at 31 December 2017, the Group's debt-to-equity ratio was 0.96:1 (2016: 1.23:1) and the Company's was 1.06:1 (2016: 1.36:1).

## 37. Events after the reporting period

37.1 On 21 December 2017, a meeting of the Company's Board of Directors passed a resolution granting approval for the Company to issue Baht 1,000 million of unsecured senior debentures, with no trustees. The debentures bear interest at a fixed rate of 2.33% per annum and mature on 1 February 2023, payable every 6 months. The Company issued and received payment for these debentures on 1 February 2018.

37.2 On 27 February 2018, a meeting of the Company's Board of Directors passed a resolutions to propose a dividend payment for the year 2017 of Baht 0.60 per share, of which Baht 0.30 per share was paid as an interim dividend and the final dividend payment will be Baht 0.30 per share. Dividend payment is subject to the approval of shareholders.

## 38. Approval of financial statements

These financial statements were authorised for issue by the Company's Board of Directors on 27 February 2018.







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