



eastwater

#WATER SOUR
RESPONSIBILITY

Useful

Reserve

Detect

CORPORATE VISION

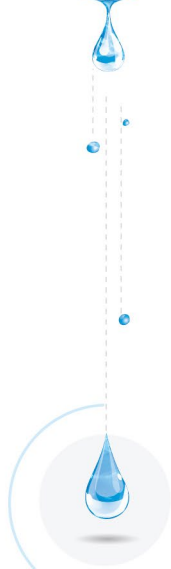
“To be the leader in total water solutions of the country”

MISSIONS

1. To develop the security and maintain stability of water resources in response to the long-term water demand.
2. To expand the investment in water related business for continuous and sustainable growth.
3. To increase competitive advantages through technologies and innovations.
4. To develop human resources and improve management efficiency.
5. To be socially and environmentally responsible and establish good relationships with all stakeholders in accordance with corporate governance principles.



USEFUL



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RESERVE



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DETECT



#WATERISOUR
RESPONSIBILITY

Water is Our
responsibility



URD

Useful

Reserve

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Consolidated and Separate Financial Statements

Investors can study information of additionally issued securities from the Annual Registration Statements (56-1 Form) of the Company as shown in www.set.or.th or www.eastwater.com



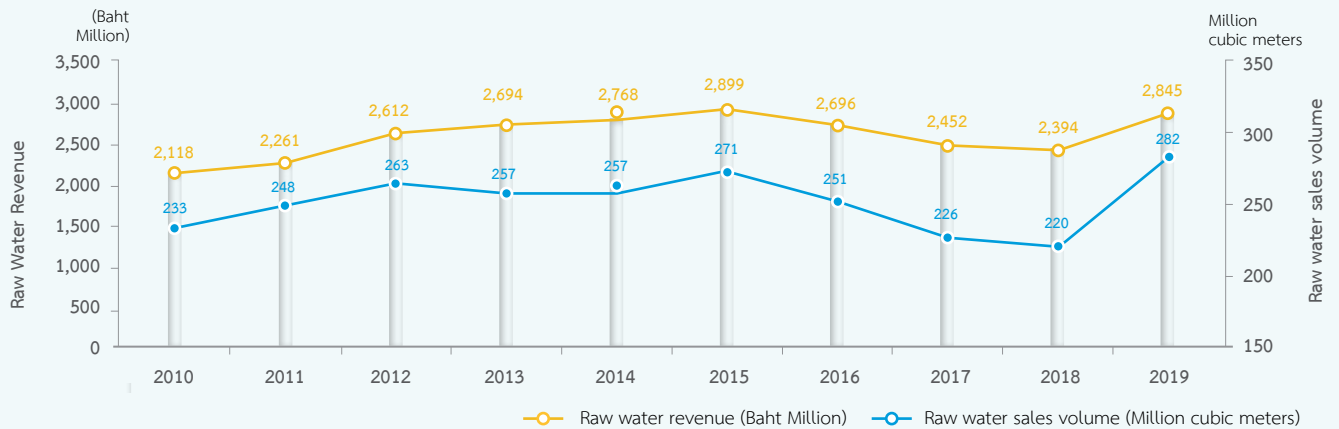
BUSINESS OVERVIEW

	2015	2016	2017	2018	2019
Statements of Income (Baht Million)					
Sales from supply of raw water business	2,898.67	2,696.43	2,452.05	2,393.82	2,844.70
Sales from supply of tap water business	1,160.24	1,392.87	1,422.75	1,438.40	1,503.16
Total revenue	4,563.14 ¹	4,295.73 ¹	4,080.98 ¹	4,022.75 ¹	4,526.15 ¹
EBITDA	2,444.71	2,404.24	2,347.33	2,280.92	2,309.08
Net profit (loss)	1,591.24	1,318.61	1,232.02	1,129.77	1,055.91
Net profit attributable to owners of the parent	1,584.94	1,309.23	1,221.18	1,117.52	1,044.79
Statements of Financial Position (Baht Million)					
Total assets	19,627.46	19,860.40	19,482.62	20,140.90	21,180.88
Total liabilities	10,127.90	9,812.09	9,052.71	9,335.75	10,167.06
Shareholders' equity	9,499.56	10,048.30	10,429.91	10,805.15	11,013.82
Owners of the parent	9,294.69	9,854.47	10,242.56	10,624.66	10,839.60
Financial Ratios					
Book value per share (Baht/share)	5.59	5.92	6.16	6.39	6.52
Net profit per share (Baht/share)	0.95	0.79	0.73	0.67	0.63
Dividend per share (Baht/share)	0.47	0.47	0.47	0.47	0.21 ²
Net profit margin (%)	30.55	30.96	30.55	28.33	23.59
Return on equity (ROE) (%)	17.83	13.67	12.15	10.71	9.74
Return on assets (ROA) (%)	9.09	6.63	6.21	5.64	5.06
Debt to equity ratio (D/E) (Times)	1.09	1.00	0.88	0.88	0.94

Remarks: ¹ excluded "construction revenues under concession agreements" which is a newly classified revenue as a result of a new interpretation of financial reporting standards TFRIC12

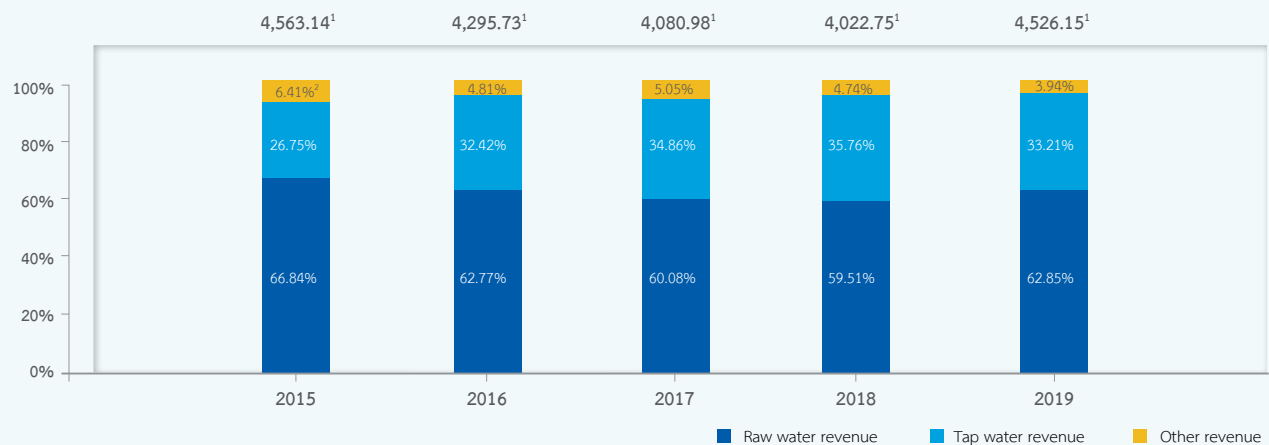
² In 2019, "Interim dividends" as approved by the Board of Directors' Meeting No. 9/2019 held on 14 August 2019 was Baht 0.21 per share.

Raw Water Sales Volume and Revenue



Remarks : Excluding raw water volume pumped to tap water units of the Company and its subsidiaries

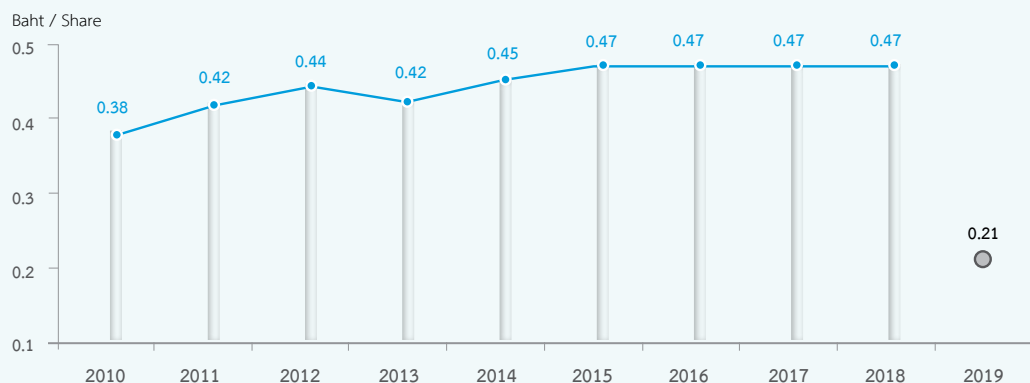
Sources of Revenue (Baht Million)



Remarks : ¹ excluded "Construction revenues under concession agreements" which is a newly classified revenue as a result of a new interpretation of financial reporting standards TFRIC 12 (revised 2014) under the topic of "Service concession arrangements".

² "Other revenues" in 2015 excluded a profit of Baht 226.32 million from measuring fair value of 15.88% equity interest in Egcom Tara Company Limited held before the business integration.

Dividend History (Baht per Share)



Remarks : ¹ In 2019, "Interim dividends" as approved by the Board of Directors' Meeting No. 9/2019 held on 14 August 2019 was Baht 0.21 per share. The Board of Directors will propose to the 2020 Annual General Meeting of Shareholders to approve a dividend based on the operating result ending 2019 on 22 April 2020.



• MESSAGE FROM THE BOARD OF DIRECTORS

To Shareholders

2019 was a very challenging year, with many factors affecting the Thai economy. Despite the low unemployment rates and revival of the agricultural sector; the industrial sector saw a declining trend in line with the reduction in exports caused by the global economic slowdown and trade barriers. The issue of Thai baht compromising the export sector's pricing competitiveness also served as a headwind for the Thai economy. Public and private investments were faced with limited growth.

Although the global and Thai economies were volatile and unfavorable to high income growth or profitability of businesses, the Board of Directors and executives continued to seek opportunities to increase income through the Eastern Economic Corridor (EEC) Development Plan in the three provinces, namely Chonburi, Rayong, and Chachoengsao, the Company's operational sites, governed by the Eastern Special Development Zone Act B.E. 2561 (A.D. 2018). This led to the EEC's concrete advancement in terms of area usage planning, public and private joint infrastructure project investments, social structure development, and people's well-being promotion. Thus, 2019 was not only the 3rd year of the EEC in its operations, but also an important year in which the Company had executed various projects as planned. This contributed to the EEC project development progress and served as the Company's long-term source of income.

However, the current water supply quota in the Company's relevant locations did not match a rise in the water demand of 106 million cubic meters following the next-10-year industrial sector expansion under the EEC policy. Water usage is expected to commence in 2021. In order to mitigate water shortages, it was necessary for the Company to find additional water supply sources. In April 2019, the Board of Directors approved an investment in the raw water delivery pipeline system from Khlong Luang Reservoir, Chonburi. This was in line with the Company's master plan on developing water sources and water delivery pipeline systems in the eastern coastal areas, and the EEC Development Plan 2017-2021 issued by EEC Policy Committee.



Mr. Veerasak Kositpaisal
Chairman of the Board of Directors

Mr. Jirayut Rungsrihong
President & Chief Executive Officer

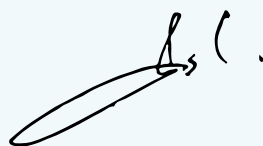
In 2019, the Company continued to live up to its vision of “To be the leader in total water solutions of the country” through the following three strategies: 1) Operational Excellence, 2) Total Water Solutions, and 3) Sustainability. The Company followed the vision by starting the construction of the tap water production system-phase 1; the installation of the raw water pipeline for a total water solutions project for the U-Tapao International Airport; and the expeditious construction of the industrial water production system-phase 1 (Amata City Industrial Estate) and phase 2 (Gulf Power Plant).

Raw water services remained one of the Company’s main business segments. The Company continuously developed its services for customers. The Board of Directors approved revision of the water pricing structure formula for the industrial customer group to be less complicated and more user-friendly for communication and understanding. This revision did not affect the overall pricing structure approved earlier or the prices charged to the customers or the Company’s profit margins. Furthermore, the Board of Directors approved a plan to revamp the water pumping and distribution system to be ready for the new water pricing structure. The plan includes material and equipment upgrade, data collection, and infrastructure project enhancement in terms of water distribution and delivery pipeline system development. Under the smart water plan, data collection is made to support advanced analysis for enhanced efficiency and confidence in the water pumping and distribution system; corporate expenses are saved; and service standards according to the service level agreement (SLA) are maintained.

Realizing that personnel at each and every level is the most valuable asset of the business group, the Company developed the concept of “Endless Possibilities” as a principal guideline for personnel development. This concept comprises 5 principles or “SHARP”, including “S: Stakeholder Focus,” “H: Holistic Thinking,” “A: Adaptability,” “R: Result Acceleration,” and “P: Proactive and Creative Thinking.” The Company encouraged its people to abide by the aforesaid principles so that they can be proactive and inspired to initiate and create new ideas, methods, or innovations in order to further improve and advance work systems, functions, and the entire organization to achieve greater efficiency.

The Company’s Board of Directors, executives and employees performed duties in strict compliance with relevant laws, regulations and rules, and in line with the Sustainability Development Roadmap for Listed Companies and the Corporate Governance Code for Listed Companies of the Office of the Securities and Exchange Commission (SEC). As such, the Company was chosen as 1 of the 98 listed companies to be in the “Thailand Sustainability Investment (THSI)” or “Sustainable Stock” 2019 list. The awards were to recognize the listed companies that operated business in a sustainable manner with a focus on environment, social and governance (ESG) performance. The Company also won the Rising Star Sustainability Awards 2019 in the category of Sustainability Excellence for its outstanding performance in conducting business towards sustainability. In addition, according to the Corporate Governance Reporting of Thai Listed Company (CGR) assessment 2019, the Company was given a score of 96% or an “Excellent” rating. Moreover, the Thaipat Institute, in collaboration with the SEC, presented the Sustainability Disclosure Recognition Award 2019 to the Company. These several sustainability and good corporate governance awards earned by the Company paid testimony to its commitment to good corporate governance, transparency, and auditability. Regarding credit ratings, the Company still maintained the company rating and the debenture rating at “A+/Stable.” In light of the abovementioned operations and achievements, all shareholders and stakeholders can be assured of the capability and performance of the Board of Directors and the management team.

On behalf of the Board of Directors, we would like to thank all shareholders, customers, trading partners, relevant government and private agencies, business alliances, and executives and employees for the unwavering support for the Company’s business success. We look forward to your ongoing support for the Company to attain sustainable growth in all aspects under the principles of good corporate governance and to be a key driver of the country’s advancement and stability in the years to come.



Mr. Veerasak Kositpaisal
Chairman of the Board of Directors



Mr. Jirayut Rungsritthong
President & Chief Executive Officer



Report of the Audit Committee



Mrs. Tatchada Jitmahawong
Chairman of the Audit Committee



To Shareholders

The Audit Committee consists of 3 independent directors and one advisor.

1. Mrs. Tatchada Jitmahawong
Chairman
2. Mrs. Asvini Tailanga
Member
3. Admiral Sucheep Whoungmaitree
Member
4. Trairat Rungaratna
Advisor
5. Mrs. Thidarat Kraiprasit,
Executive Vice President, Internal Audit Office
Secretary

In 2019, the Audit Committee held a total of 17 meetings, including the meetings with the internal auditor, the executives, and the external auditor. The Audit Committee's performance was reported to the Board of Directors' meeting every quarter. The key operations can be summarized as follows:

1. Review of Financial Reports

The Audit Committee performed reviews of the quarterly and annual financial reports of the Company and the consolidated financial statements. The meetings were conducted with the external auditor and the internal auditor with clarifications from the executives. The Audit Committee opined that the financial reports of the Company were correct and reliable, and disclosed sufficient and timely information. The Audit Committee also provided useful observations in relation to disclosing information as necessary and appropriate to the Company. Moreover, the Audit Committee had two meetings with the external auditor without the presence of the executives, to be informed of important audit issues and the independence and scope of audit of the external auditor.

2. Review of Internal Control System Effectiveness

The Audit Committee paid importance on the principles of good corporate governance, risk management, and internal control by promoting a corporate culture with a focus on a good internal control. The Audit Committee also reviewed the assessment results of the efficiency and effectiveness of the internal control system by the Internal Audit Office according to international standards for the work processes across the business group every quarter. The Audit Committee provided additional recommendations beneficial to enhancing the efficiency and effectiveness of the Company's operations. The Audit Committee also consistently monitored the executives to ensure that corrective actions were undertaken as recommended and asked that the reports on the corrective actions be presented to the Audit Committee's meeting every month. The Audit Committee opined that the Company's internal control system was adequate and appropriate.

3. Review of Compliance with Applicable Laws, Rules, Regulations, Directives, and Ethics

The Audit Committee supervised the transparent disclosure of information and reviewed the Company's compliance with laws relating to the business, the Securities and Exchange Act, and the requirements of the Stock Exchange of Thailand (SET). The Audit Committee required that the executives report results of the compliance with applicable laws, rules, and regulations every year. The Audit Committee was assigned by the Board of Directors to consider and give opinions about the revision of the key operating regulations to be complied with internally before submission thereof to the Board of Directors for consideration and approval.

4. Supervision of Internal Audit

The Audit Committee considered the risk based internal audit plan 2019 and the scope of audit as well as existing controls embedded within the internal processes of the Company. The Audit Company also considered the past audit results and the risk assessment results of the Company, including the interviews of the executives to identify any needs or concerns. The Audit Committee considered and approved the action plan, the annual budget, and the manpower framework of the Internal Audit Office; and supported and promoted the independent work of the Internal Audit Office. To ensure enhanced operational efficiency, the Audit Committee gave recommendations on the development of the internal audit processes and technologies used in the operations.

The Audit Committee considered the Internal Audit Office's manual and charter to ensure alignment with international standards and changing circumstances, and the criteria for measuring operating results and assessing performance of the Internal Audit Office of the entire year. The Audit Committee opined that the Internal Audit Office's operations met specific targets and plans.

5. Consideration of Related Party Transactions

The Audit Committee reviewed a number of related party transactions across the business group to ensure that the transactions were undertaken on an arm's length basis and with reasonableness. The Company issued a policy to refrain from any conflict of interest and a policy to manage subsidiaries' operations.

6. Review of External Audit Operations and External Auditor Appointment

The Audit Committee considered requirements regarding the hiring of an external auditor in order to select and nominate

an external auditor for the business group for 2020; and also reviewed qualifications of the external auditor and found that they were proper and complete. Thus, the Audit Committee resolved to endorse the matter to be presented to the Board of Directors for consideration and endorsement before submission thereof to the Annual General Meeting of Shareholders 2020 for approval.

7. Self-Assessment and Review of Audit Committee's Charter and Manual

The Audit Committee conducted an annual self-assessment by using the form for self-assessment according to the principles of good corporate governance and reported the results to the Board of Directors for consideration. The self-assessment rating was "very good." The Audit Committee reviewed and revised its charter and manual to keep up with the changing situation and to ensure that the committee performed duties for the whole year fully as assigned and in line with the best practices by the SET. The results were then presented to the Board of Directors' meeting for approval.

In conclusion, the Audit Committee performed its duties in full compliance with requirements specified in the charter as approved by the Board of Directors. This was in line with requirements of the Office of the Securities and Exchange Commission (SEC) and the SET. The Audit Committee also agreed with the external auditor that the Company's financial reports were presented fairly in all material aspects in accordance with the generally accepted accounting standards of Thailand. Also, the Company provided appropriate, efficient, and effective internal control and internal audit systems while strictly complying with applicable laws, rules, regulations, and directives. In 2019, no significant problems or weaknesses were found in the operations. In addition, the Company constantly improved its operations to ensure alignment and appropriateness with the current business environment.



Mrs. Tatchada Jitmahawong
Chairman of the Audit Committee



Report of the Investment Committee



Mr. Surachai Kanasa

Chairman of the Investment Committee



To Shareholders

The Investment Committee consists of the following members:

1. Mr. Surachai Kanasa
Chairman
2. Mr. Kritsada Sunkhamani
Member
3. Mr. Virgilio Cervantes River, Jr.
Member
4. Mr. Jirayut Rungsrithong
Member
5. Mr. Vicha Nilpetploy
Advisor
6. Mr. Charin Sony
Senior Executive Vice President and Chief Strategy
and Business Development Officer
Secretary

In 2019, the Investment Committee held a total of 6 meetings. The Investment Committee considered and screened various projects, provided useful advice, and endorsed and submitted 2 projects worth a total of Baht 2,483 million (exclusive of VAT) to the Board of Directors for consideration and approval. The results of operations can be summarized as follows:

1. The expanding industrial sector following the government's policy on the Eastern Economic Corridor (EEC) led to the Company's need to identify new water supply sources to accommodate the water demand in this part. Thus, the Investment Committee considered and screened details of a raw water pipeline construction project in Khlong Luang Reservoir-Chonburi for submission to the Board of Directors for consideration and approval. The Investment Committee provided useful advice in terms of project construction works, financial analysis, and expected returns.

2. The Investment Committee provided the management with recommendations on plans to improve water pumping systems to support the new water pricing structure; and endorsed such plans for submission to the Board of Directors for consideration and approval for further plan implementation to the ultimate benefit of the Company.
3. The Investment Committee clearly set out investment plans, budgets, and benefits; and monitored progress updates on the key projects as assigned by the Board of Directors to ensure that the investment results met specific goals.
4. The Investment Committee reviewed its charter by considering its role and duties to ensure appropriateness and alignment with the current situation.

The Investment Committee performed all duties as assigned by the Board of Directors and according to the charter. The Investment Committee exercised prudence and caution in its operations, taking into consideration the highest benefit of the Company and its stakeholders. The Investment Committee also complied with relevant laws, rules and regulations with transparency and auditability, and reported the results of operations to the Board of Directors for acknowledgement on a consistent basis.

Mr. Surachai Kanasa
Chairman of the Investment Committee



Report of the Risk Management Committee

Mrs. Asvini Tailanga
Chairman of the Risk Management Committee



To Shareholders

The Board of Directors realizes the importance of managing risks to ensure that business plans meet targets. Therefore, the Risk Management Committee was set up. The Committee consists of 3 members, namely

1. Mrs. Asvini Tailanga
Chairman
2. Mr. Pisit Hongvanishkul
Member
3. Mr. Jirayut Rungsrithong
Member
4. Mr. Siwa Sangmanee
Advisor
5. Mr. Charin Sony
Senior Executive Vice President and Chief Strategy and Business Development Officer
Secretary

The Risk Management Committee is responsible for considering and screening surrounding factors, business context, and significant risks; and also providing appropriate recommendations and solutions. Its duties include stipulating risk management policies, considering enterprise risks, assessing risks affecting the business, determining preventive and mitigation measures for possible impacts, and monitoring and reviewing relevant risks on a continuous basis. In 2019, the Risk Management Committee held a total of 4 meetings to consider important issues which can be summarized as follows:

1. Reviewed and delivered the risk management policy for the entire organization to comply with; and ensured that the policy was implemented.
2. Reviewed the Charter of the Risk Management Committee to ensure appropriateness and alignment with relevant regulations and the current situation according to the good corporate governance principles.

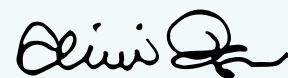
3. Considered risk assessment criteria and determined Key Risk Indicators (KRIs).

4. Monitored and reviewed risk issues on a consistent basis; and required that assessment of effectiveness of the control measures be conducted to ensure achievement of the risk management objectives.

5. Considered and endorsed that Risk Owners prepare risk management plans and develop preventive control measures or mitigation solutions to contain risk impact to be at a desirable or acceptable level.

6. Supervised revision of the enterprise risk management manual according to the COSO-ERM guiding principles which serve as risk management universal standards.

The Risk Management Committee is committed to ensuring that the Company develops and improves its risk management system as part of the good corporate governance principles in order to execute business plans most effectively with appropriate risk management. Moreover, self-performance assessment is conducted annually and the assessment results are used to improve and solve relevant issues such that the Company manages risks according to its strategic plans and meets its business targets.



Mrs. Asvini Tailanga
Chairman of the Risk Management Committee



Report of the Corporate Governance and Sustainability Development Committee



Mr. Amorn Laohamontri

Chairman of the Corporate Governance
and Sustainability Development Committee



To Shareholders

The Corporate Governance and Sustainability Development Committee consists of 3 independent directors, namely

1. Mr. Amorn Laohamontri
Chairman
2. Mrs. Tatchada Jitmahawong
Member
3. Mrs. Asvini Tailanga
Member
4. Mrs. Namphon Rassadanukul
The Executive Vice President and Company Secretary
Secretary

In 2019, the Corporate Governance and Sustainability Development Committee approved the activity plan to promote the sustainable development and good corporate governance principles for 2018-2020 on 3 fronts according to the Sustainable Development Plan for Listed Companies of the Office of the Securities and Exchange Commission (SEC) as follows:

1. “CG in substance” - To promote the commitment of the Board of Directors and the management to driving a satisfactory, sustainable, and reliable corporate performance;
2. “CSR in process” - To ensure that daily business operations of the Company are performed with social and environmental responsibility; and
3. “Anti-corruption in practice” - To support implementation for fruitful outcomes.

The Corporate Governance and Sustainability Development Committee not only paid attention to the sustainable development and good corporate governance principles as their priorities, but also considered and reviewed important matters according to laws, charters, and regulations concerned before submission to the Board of Directors for consideration through their total 5 committee meetings. The details can be summarized as follows:

1. Determined policies, strategies, and operational plans on corporate sustainability. In 2019, the committee pushed forward the integration of sustainability performance assessment as part of organizational strategies. The Company received the sustainability performance assessment score of 84 points from the Stock Exchange of Thailand (SET).
2. Reviewed the code of conduct of the business group by revising the complaint handling procedures to ensure clarity and fairness for the complainants before submission to the Board of Directors for consideration and approval

3. Reviewed the good corporate governance principle of the business group by including relevant stakeholders and adding the definitions of “Spouse” and “Child”; revised the anti-corruption policy by including relevant parties and adding the definition of “Spouse” according to the Notification of the National Anti-Corruption Commission (NACC); and reviewed the requirements that the directors must disclose their reports of purchases-sales of the Company’s securities to the Board of Directors and according to the criteria of the Corporate Governance Report of Thai Listed Companies (CGR)

4. Followed up on the quarterly summaries of complaints and actions taken according to the complaint handling procedures of the Company

5. Acknowledged that the Company received a score of 96% or an “Excellent” rating according to the 2019 Corporate Governance Report of Thai Listed Companies (CGR); and that the Company was chosen as 1 of the 98 listed companies to be on the 2019 “Thailand Sustainability Investment” or “Sustainable Stock” list

6. Provided suggestions on key sustainability issues as a guideline for the management to further develop a more comprehensive sustainability report

On behalf of the Corporate Governance and Sustainability Development Committee, I will support and strive for ensuring that our directors, executives, employees, and personnel at all levels of the business group perform duties according to the established sustainable development and good corporate governance principles for long-term business sustainability.

Mr. Amorn Laohamontri
Chairman of the Corporate Governance
and Sustainability Development Committee



Report of the Nomination and Remuneration Committee



Admiral Sucheep Whoungmaitree

Chairman of the Nomination and Remuneration Committee



To Shareholders

The Nomination and Remuneration Committee consists of the following members:

1. Admiral Sucheep Whoungmaitree
Chairman
2. Mr. Surachai Kanasa
Member
3. Miss Somchint Pilouk
Member
4. Mr. Bumrungsak Chingwangtakor
Member
5. Miss Chinda Mahaisawariya
Senior Executive Vice President and Chief Supporting Officer
Secretary

In 2019, the Nomination and Remuneration Committee performed its duties in full compliance with its Charter. The Committee held a total of 8 meetings to consider and review various matters before submission to the Board of Directors for consideration and approval, which can be summarized as follows:

1. Determined the 2019 corporate KPIs; and reviewed the corporate KPIs handbook to ensure alignment with the corporate vision and missions for use by the management and employees as guidelines for conducting performance evaluation at all levels
2. Monitored and evaluated the performance against the corporate KPIs for 2019 as well as provided recommendations on guidelines for improvements and developments to ensure efficiency of operations and achievement of specific objectives and goals
3. Considered the structures and compositions of the boards of directors of the group companies; nominated persons with appropriate qualifications according to criteria and procedures of particular supervisory bodies and proposed them for appointment as directors of the group companies; and selected and proposed the directors to serve as members of the subcommittees to the Board of Directors and the shareholders' meeting respectively

4. Nominated qualified candidates according to specific criteria for the position of Advisor to the Board of Directors
5. Proposed directors' remuneration of the business group to the shareholders' meeting for consideration and approval. The rates of remuneration were compared with those as per the Thai Institute of Directors Association (IOD)'s Thai Directors Compensation Survey and those offered by peer companies in the same industrial sector.
6. Renewed employment contracts and paid remuneration of the President & CEO and other top executives of the group companies as appropriate and commensurate with responsibilities
7. Set out KPIs for the President & CEO and reported his performance based on the said KPIs to the Board of Directors for consideration and approval
8. Considered and reviewed the criteria for paying wages, compensation and bonuses to employees in the business group to ensure appropriateness and consistency with the operating results so as to motivate the employees to perform their duties to achieve targets. Also, the criteria for paying compensation to employees joining in the Mutual Separation Program (MSP) in 2019 were considered as the program enabled the employees to have options of other careers that matched their ways of life.
9. Reviewed the Charter of the Nomination and Remuneration Committee to ensure alignment with the current situation

Admiral Sucheep Whoungmaitree
Chairman of the Nomination
and Remuneration Committee



BOARD OF DIRECTORS



01

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01.

Mr. Veerasak Kositpaisal

- Independent Director
- Chairman

02.

Mr. Amorn Laohamontri

- Independent Director
- Chairman of the Corporate Governance and Sustainability Development Committee

03.

Mr. Surachai Kanasa

- Independent Director
- Chairman of the Investment Committee
- Member of the Nomination and Remuneration Committee

04.

Mrs. Tatchada Jitmahawong

- Independent Director
- Chairman of the Audit Committee
- Member of the Corporate Governance and Sustainability Development Committee

05.

Mrs. Asvini Tailanga

- Independent Director
- Chairman of the Risk Management Committee
- Member of the Audit Committee
- Member of the Corporate Governance and Sustainability Development Committee

06.

Mr. Kritsada Sunkhamani

- Director
- Member of the Investment Committee



07

08

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07.

Mr. Virgilio Cervantes Rivera, Jr.

- Director
- Member of the Investment Committee

08.

Miss Somchint Pilouk

- Director
- Member of the Nomination and Remuneration Committee

09.

Mr. Pisit Hongvanishkul

- Director
- Member of the Risk Management Committee

10.

Mr. Bumrungsak Chingwangtakor

- Director
- Member of the Nomination and Remuneration Committee

11.

Admiral Sucheep Whoungmaitree

- Independent Director
- Chairman of the Nomination and Remuneration Committee
- Member of the Audit Committee

12.

Mr. Jirayut Rungsritthong

- Director and President & CEO
- Member of the Investment Committee
- Member of the Risk Management Committee



PROFILES OF BOARD OF DIRECTORS

Mr. Veerasak Kositpaisal

- Independent Director
- Chairman

Age 65 Years



Mr. Amorn Laohamontri

- Independent Director
- Chairman of the Corporate Governance and Sustainability Development Committee

Age 69 Years

Date appointed as Director on April 23, 2018

Education

- Master of Science (Mechanical Engineering), Texas A&I University, USA
- Bachelor of Engineering (Mechanical), Chulalongkorn University

Training

- Director Certification Program (DCP) 82/2006, Thai Institute of Directors Association (IOD)
- Finance for Non-Finance Director (FND) 30/2006, Thai Institute of Directors Association (IOD)
- Certificate in Top Executives in the Energy Education Program Class 5, Thailand Energy Academy (TEA)
- Leadership Development Program "Enhancing Competitiveness", International Institute for Management Development (IMD)
- Top Executive Program in Commerce and Trade (TEPCoT) 2/2009, Commerce Academy, University of the Thai Chamber of Commerce
- Capital Market Academy Leadership Program Class 11, Capital Market Academy (CMA)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company

- Mar 14, 2019 - Present Glow Energy Public Company Limited
- Feb 2017 - Present Director, Chairman of Nomination and Remuneration Committee, Member of the Audit Committee, TOA Paint (Thailand) Public Company Limited
- Jan 2015 - Jun 2019 Vice Chairman, Chairman of the Corporate Governance Committee, Member of the Risk Management Committee, MCOT Public Company Limited
- May 2012 - Sep 2014 President and CEO, Thai Oil Public Company Limited
- Oct 2011 - Apr 2012 Chief Executive Officer, PTT Global Chemical Public Company Limited
- Oct 2008 - Oct 2011 Chief Executive Officer, PTT Chemical Public Company Limited

Position in Other Non-Listed Company / Other Organization

- Oct 2019 - Present Member of Sub-committee, Evaluation and development of State Enterprises
- Sep 2017 - Present Director, Member of the Audit Committee, Sapthip Company Limited
- Apr 2008 - Present Vice Chairman, The Federation of Thai Industries
- Jul 17, 2018 - Jun 2019 Director, Tobacco Authority of Thailand
- Sep 5, 2014 - Oct 16, 2018 Chairman of the Board of Directors, HMC Polymers Company Limited

Date appointed as Director on December 1, 2014

Education

- Master of Public Administration, Pennsylvania State University
- Bachelor of Laws, Chulalongkorn University

Training

- Risk Management Program for Corporate Leaders (RCL) 4/2016, Thai Institute of Directors (IOD)
- Advanced Audit Committee Program (AAP) 18/2015, Thai Institute of Directors (IOD)
- Director Accreditation Program (DAP) 114/2015, Thai Institute of Directors (IOD)
- Director Certification Program (DCP) 208/2015, Thai Institute of Directors (IOD)
- Financial Statements for Directors (FSD) 27/2015, Thai Institute of Directors (IOD)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- 2014 - 2019 Working Group of Deputy Minister, Ministry of Interior
- 2007 - 2010 Legal Advisor, Office of the Permanent Secretary, Ministry of Interior
- 2005 - 2007 Senior Expert in Local Legal Affairs, Department of Local Administration, Ministry of Interior
- 2002 - 2005 Director Bureau of Local Legal Affairs, Department of Local Administration, Ministry of Interior
- 2000 - 2002 Director Division of Structure and System Development, Department of Provincial Administration, Ministry of Interior

Mr. Surachai Kanasa

- Independent Director
- Chairman of the Investment Committee
- Member of the Nomination and Remuneration Committee

Age 62 Years



Mrs. Tatchada Jitmahawong

- Independent Director
- Chairman of the Audit Committee
- Member of the Corporate Governance and Sustainability Development Committee

Age 62 Years



Date appointed as Director on July 20, 2017

Education

- Master of Public Administration (Honors), Public Policy and Project Management, National Institute of Development Administration
- Bachelor of Political Science Program (First-class honors), Politics and Government, Thammasat University

Training

- IT Governance a Cyber Resilience Program (ITG) 8/2018, Thai Institute of Directors (IOD)
- Director Certification Program (DCP) 250/2017, Thai Institute of Directors Association (IOD)
- Ethical Leadership Program (ELP) 10/2017, Thai Institute of Directors Association (IOD)
- The National Defence Course (NDC) Class 49, Thailand National Defence College
- Capital Market Academy Leadership Program Class 13, Capital Market Academy (CMA)
- Executive Development Program Class 39, Ministry of Interior
- Institute of Administration Development (IAD) Class 37

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- Oct 1, 2015 - Sep 30, 2017 Provincial Governor of Pathum Thani, Office of the Permanent Secretary for Interior
- Oct 1, 2013 - Sep 30, 2015 Provincial Governor of Pichit, Office of the Permanent Secretary for Interior
- Oct 8, 2012 - Sep 30, 2013 Provincial Governor of Chanthaburi, Office of the Permanent Secretary for Interior
- Nov 28, 2011 - Oct 7, 2012 Provincial Governor of Lamphun, Office of the Permanent Secretary for Interior
- Dec 20, 2010 - Nov 27, 2011 Director - General of Community Development Department, Community Development Department, Ministry of Interior
- Oct 1, 2010 - Dec 19, 2010 Acting in Position of Director - General of Department of Promotion of Local Administration, Department of Promotion of Local Administration, Ministry of Interior
- Oct 1, 2009 - Sep 30, 2010 Provincial Governor of Samut Prakan, Office of the Permanent Secretary for Interior

Date appointed as Director on December 24, 2014

Education

- Master of Business Administration, Kasetsart University
- Bachelor of Arts (Accounting) (Second-class Honors), Chiang Mai University

Training

- Board Nomination & Compensation Program (BNCP) 7/2019, Thai Institute of Directors Association (IOD)
- How to Develop a Risk Management Plan (HRP) 22/2019, Thai Institute of Directors Association (IOD)
- IT Governance a Cyber Resilience Program (ITG) 7/2018, Thai Institute of Directors Association (IOD)
- Boards that Make a Difference (BMD) 8/2018, Thai Institute of Directors Association (IOD)
- Ethical Leadership Program (ELP) 10/2017, Thai Institute of Directors Association (IOD)
- Successful Formulation & Execution the Strategy (SFE) 30/2017, Thai Institute of Directors Association (IOD)
- Risk Management Program for Corporate Leaders (RCL) 4/2016, Thai Institute of Directors Association (IOD)
- Advanced Audit Committee Program (AAP) 18/2015, Thai Institute of Directors Association (IOD)
- Director Accreditation Program (DAP) 114/2015, Thai Institute of Directors Association (IOD)
- Director Certification Program (DCP) 208/2015, Thai Institute of Directors Association (IOD)
- Financial Statements for Directors (FSD) 27/2015, Thai Institute of Director Association (IOD)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- Jul 26, 2016 - Sep 30, 2017 Director of Public Sector Receipt and Disbursement Administration Division, The Comptroller General's Department, Ministry of Finance
- 2011 - 2016 Director of Office of Government Fiscal Management Information System, The Comptroller General's Department, Ministry of Finance
- 2007 - 2011 Specialist of Development Fiscal Management System, The Comptroller General's Department, Ministry of Finance
- 2005 - 2007 Head of Office of Secretary, The Comptroller General's Department, Ministry of Finance
- 1999 - 2005 Provincial Treasury, The Comptroller General's Department, Ministry of Finance
- 1997 - 1998 Head of Planning Division, The Comptroller General's Department, Ministry of Finance
- 1996 - 1997 Head of Internal Audit Group, The Comptroller General's Department, Ministry of Finance

Mrs. Asvini Tailanga

- Independent Director
- Chairman of the Risk Management Committee
- Member of the Audit Committee
- Member of the Corporate Governance and Sustainability Development Committee

Age 66 Years**Mr. Kritsada Sunkhamani**

- Director
- Member of the Investment Committee

Age 57 Years**Date appointed as Director on** April 23, 2018**Education**

- Bachelor Degree, Faculty of Commerce & Accountancy, Chulalongkorn University
- Program for Management Development Graduate School of Business Administration, Harvard University (PMD 61)
- Program for Families in Business From Generation to Generation, Harvard Business School, Harvard University

Training

- Corporate Governance for Capital Market Intermediaries (CGI) 11/2016, Thai Institute of Directors Association (IOD)
- Audit Committee Program (ACP) 18/2007, Thai Institute of Directors Association (IOD)
- Audit Committee Program (ACP) 15/2006, Thai Institute of Directors Association (IOD)
- Director Certification Program (DCP) 18/2002, Thai Institute of Directors Association (IOD)
- Capital Market Academy Leadership Program Class 1, Capital Market Academy (CMA)

Company Shareholding (%) : None**Family Relationship among Directors and Executives** : None**Work Experience****Position in Other Listed Company**

- | | |
|------------------|--|
| • 2016 - Present | Director/Executive Director/Senior Executive Advisor, Thanachart Securities Public Company Limited |
| • 2013 - Present | Member, Product & Marketing Steering Committee, The Stock Exchange of Thailand |
| • 2000 - 2015 | Managing Director, Thanachart Securities Public Company Limited |
| • 2009 - 2013 | Chairman of Executive Board, Thanachart Securities Public Company Limited |

Position in Other Non-Listed Company / Other Organization

- | | |
|---------------|---|
| • 2017 - 2018 | Member, Appeal Committee, Thailand Futures Exchange Public Company Limited (TFEX) |
| • 2013 - 2016 | Director, Association of Thai Securities Companies (ASCO) |

Date appointed as Director on November 30, 2017**Education**

- Bachelor of Engineering (Electrical Engineering), Prince of Songkla University

Training

- Director Certification Program (DCP) 281/2019 Thai Institute of Directors Association (IOD)
- Advanced Master of Management Program (AMM) 2/2018, National Institute of Development Administration
- Anti-Corruption Strategic Management for Senior Executives 9/2018, The National Anti-Corruption Commission
- Public-Private Partnerships for Executive Program (PEP) 1/2016, Institute of Research and Development for Public Enterprises (IRDP)
- Leadership Succession Program (LSP) 1/2013, Institute of Research and Development for Public Enterprises (IRDP)
- Integrated Water Management for Executives class 2/2012, Thai Waterwork Association

Company Shareholding (%) : None**Family Relationship among Directors and Executives** : None**Work Experience****Position in Other Listed Company** : None**Position in Other Non-Listed Company / Other Organization**

- | | |
|-------------------------------|--|
| • Oct 1, 2018 - Present | Deputy Governor (Technical Affairs), Provincial Waterworks Authority |
| • Nov 27, 2015 - Sep 30, 2018 | Deputy Governor (Administration) / Acting in position Assistant Governor (Administration 1), Provincial Waterworks Authority |
| • Oct 17, 2012 - Nov 26, 2015 | Assistant Governor (Administration), Provincial Waterworks Authority |
| • Dec 29, 2011 - Oct 16, 2012 | Director of Office of Operation 4, Provincial Waterworks Authority |

Mr. Virgilio Cervantes Rivera, Jr.

- Director
- Member of the Investment Committee

Age 58 Years



Miss Somchint Pilouk

- Director
- Member of the Nomination and Remuneration Committee

Age 58 Years



Date appointed as Director on March 14, 2018

Education

- Master of Economics, De La Salle University, the Philippines
- Bachelor of Commerce (Major in Economics), University of Santo Tomas, the Philippines
- Bachelor of Behavioral Science, University of Santo Tomas, the Philippines
- Advanced Management Program, Harvard Business School

Training

- Director Accreditation Program (DAP) 158/2019 (English Program), Thai Institute of Directors Association (IOD)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- 2018 - Present Fellow and Board Member, International Water Association (IWA)
- 2015 - Present Chief Operating Officer (COO), New Business Operations, Manila Water Company, Inc.
- 2015 - Present President and CEO, Manila Water Philippine Ventures, Inc.
- 2015 - Present President and CEO, Manila Water Asia Pacific, Pte., Ltd.
- 2005 - Present Managing Director (Secondment to Manila Water Company, Inc.), Ayala Corporation.
- Present Director and Board Member, various subsidiaries of Manila Water Asia Pacific, Pte., Ltd.
- 1999 - 2015 Group Director, Corporate Strategy and Development, Manila Water Company, Inc.

Date appointed as Director on December 11, 2018

Education

- Doctor of Philosophy (Environmental Engineering and Management), Asian Institute of Technology (AIT)
- Master of Engineering (Executive), Asian Institute of Technology (AIT)
- Master of Engineering (Civil Engineer), Kasetsart University
- Bachelor of Science (Occupational Health), Mahidol University

Training

- Director Certification Program (DCP) 283/2019 Thai Institute of Directors Association (IOD)
- Metropolitan Development Program
- Executive Management with Business Development and Investment (Institute of Business and Industrial Development)
- A senior executive of the ruling Justice (The office of Administrative courts of Thailand)
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives (College of Politics and Governance King Prajadhipok's Institute)
- Advanced Certificate Course in Public Economics Management for Executives (College of Politics and Governance King Prajadhipok's Institute)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- Sep 27, 2018 - Present Governor, Industrial Estate Authority of Thailand
- Dec 26, 2018 - Present Director, Global Utilities services company
- Dec 26, 2017 - Sep 27, 2018 Director, Gem Environmental Management Company
- Oct 1, 2016 - Sep 27, 2018 Deputy Governor (Special Affairs), Industrial Estate Authority of Thailand
- Mar 5, 2013 - Sep 30, 2016 Deputy Governor (Service and Environment), Industrial Estate Authority of Thailand
- Jun 29, 2012 - Jun 5, 2013 Assistant to Governor (Industrial Port), Industrial Estate Authority of Thailand

Mr. Pisit Hongvanishkul

- Director
- Member of the Risk Management Committee

Age 61 Years**Date appointed as Director on** April 23, 2019**Education**

- Master of Science (Business Economics), Kasetsart University
- Bachelor of Engineering (Civil Engineering), Chiang Mai University
- Post Graduated Diploma (Sanitary Engineering), International Institute for Hydraulic and Environmental Engineering (IHE), Delft, the Netherlands

Training

- Director Certification Program (DCP) 277/2019, Thai Institute of Directors Association (IOD)
- Financial Management for Executives
- Water Management for Domestic Usage
- Review of Corporate Action Plan and Strategic Plan
- Corporate governance in accordance with ITA (Integrity and Transparency Assessment) standards
- Corporate strategic plan formulation
- Nation-wide meeting of waterworks managers
- World Irrigation Forum
- Internal control plan formulation
- PWA's water basin working group network
- Regional workshop urban water service

Company Shareholding (%) : None**Family Relationship among Directors and Executives** : None**Work Experience****Position in Other Listed Company** : None**Position in Other Non-Listed Company / Other Organization**

- 2018 - Sep 30, 2019 Deputy Governor (Corporate Strategy), Provincial Waterworks Authority
- 2015 Assistant Governor (Corporate Strategy), Provincial Waterworks Authority
- 2009 Director of Corporate Strategy Department, Provincial Waterworks Authority
- 2008 Director of Planning Department, Provincial Waterworks Authority
- 2005 Director of Plan & Strategy Division, Provincial Waterworks Authority
- 2002 Director of Division, Provincial Waterworks Authority
- 1995 Head of Section, Provincial Waterworks Authority

Mr. Bumrungsak Chingwangtakor

- Director
- Member of the Nomination and Remuneration Committee

Age 56 Years**Date appointed as Director on** April 23, 2019**Education**

- Master of Public Administration, Ramkhamhaeng University
- Bachelor of Laws, Sukhothai Thammathit Open University
- Bachelor of Political Science, Ramkhamhaeng University

Training

- Middle Executive of the Ministry of Interior, Class 20, Damrong Rajanupab Institute Ministry of the Interior
- Financial Management for Executives
- Review of Corporate Action Plan and Strategic Plan
- Advance Certificate Course in Promotion of a Peaceful Society, King Prajadhipok's Institute
- Corporate governance in accordance with ITA (Integrity and Transparency Assessment) standards
- Corporate strategic plan formulation
- "PWA's tap water production and distribution" technical tour
- Preparation for Procurement Act

Company Shareholding (%) : 0.00000120212**Family Relationship among Directors and Executives** : None**Work Experience****Position in Other Listed Company** : None**Position in Other Non-Listed Company / Other Organization**

- 2018 - Present Deputy Governor (Administration), Provincial Waterworks Authority
- 2014 Assistant Governor (Office of Governor), Provincial Waterworks Authority
- 2009 Director of Human Resources Department, Provincial Waterworks Authority
- 2005 Director of Human Resources Division, Provincial Waterworks Authority
- 2000 Head of Section, Provincial Waterworks Authority

Admiral Sucheep Whoungmaitree

- Independent Director
- Chairman of the Nomination and Remuneration Committee
- Member of the Audit Committee

Age 62 Years



Mr. Jirayut Rungsrihong

- Director and President & CEO
- Member of the Investment Committee
- Member of the Risk Management Committee

Age 53 Years

Date appointed as Director on June 21, 2019

Education

- The National Defence Course Class 53
- Naval War College Class 34
- Naval Command and Staff College Class 52
- Royal Thai Naval Academy Class 74
- Armed Forces Academies Preparatory School Class 17

Training

- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives Class 22, King Prajadhipok's Institute
- Director Certification Program (DCP) 221/2016, Thai Institute of Directors (IOD)

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company

- 2015 - Present Director, Bangchak Corporation Public Company Limited

Position in Other Non-Listed Company / Other Organization

- 2016 - May 2019 Member of the National Legislative Assembly
- 2016 - Sep 2017 Executive Board of U-Tapao Airport
- 2016 - 2017 Commander-in-Chief, Royal Thai Fleet
- 2015 - 2016 Director, Bangkok Dock Company Limited
- 2015 Deputy Chief of Staff, Royal Thai Navy
- 2014 Commander, First Naval Area Command

Date appointed as Director on April 1, 2016

Education

- M.S. in Operations Research, George Washington University, USA
- Bachelor of Engineering (Computer), King Mongkut's Institute of Technology Ladkrabang

Training

- Director Certification Program (DCP) 60/2005, Thai Institute of Directors Association (IOD)
- Financial Institutions Governance Program (FGP) 4/2012, Thai Institute of Directors Association (IOD)
- Corporate Governance for Public Director, Class 10, Thailand National Defence College
- The National Defence Course (NDC) Class 61, Thailand National Defence College
- Capital Market Academy Leadership Program Class 10, Capital Market Academy (CMA)
- Bangkok Metropolitan Administration (BMA) Class 1, Institute of Metropolitan Development
- Business Revolution and Innovation Network (BRAIN) 1/2017, The Federation of Thai Industries

Company Shareholding (%) : None

Family Relationship among Directors and Executives : None

Work Experience

Position in Other Listed Company

- 2018 - Present Chairman of the Audit Committee Index Living Mall Public Company Limited
- 2013 - 2015 Independent Director/Audit Committee Member, Christiani & Nielsen (Thai) Public Company Limited
- 2005 - 2006 Director/Managing Director, Bualuang Securities Public Company Limited
- 2004 - 2005 Director/Managing Director, United Securities Public Company Limited

Position in Other Non-Listed Company / Other Organization

- May 16, 2017 - Present Director, Universal Utilities Public Company Limited
- 2015 Advisor to Deputy Minister of Transport
- 2015 Chairman of the Board, Bangkok Metropolitan Administration's Pawnshop Office
- 2011 - 2014 Board Director, SME Development Bank of Thailand
- 2009 - 2011 Director/Chief Executive Officer, CAT Telecom Public Company Limited
- 2009 - 2011 Vice President, The Telecommunications Association of Thailand under the Royal Patronage
- 2006 - 2009 Chief Financial Officer, CAT Telecom Public Company Limited



ADVISORS TO THE BOARD OF DIRECTORS

Mr. Vicha Nilpetploy

- Advisor to the Board
- Advisor to the Investment Committee

Age 70 Years



Gen. Trairat Rangaratna

- Advisor to the Board
- Advisor to the Audit Committee

Age 68 Years

Date appointed as Director on January 16, 2016

Education

- Master of Political Science, Chulalongkorn University
- Bachelor of Laws, Ramkhamkeang University

Company Shareholding (%) : None

Family Relationship among Advisor to the Board and Executives : None

Work Experience

Position in Other Listed Company : None

Position in Other Non-Listed Company / Other Organization

- Present Commission to the Minister of Interior
- 2014 - 2019 Commission to the Deputy Minister of Interior
- 2008 - 2009 Deputy Director, Department of Lands
- 2006 Chief of Bangkok Metropolitan Land Office
- 2004 Inspector General, Department of Lands

Date appointed as Director on June 29, 2017

Education

- Bachelor of Science Program, Chulachomklao Royal Military Academy (batch 22)
- Armed Forces Academies Preparatory School (batch 11)

Training

- Institute of Security Psychology (ISP) Class 79, National Defence Studies Institute Royal Thai Armed Forces Headquarters
- Advanced Security Management Program (ASMP) Class 3, National Defence College of Thailand
- Capital Market Academy Leadership Program Class 20, Capital Market Academy (CMA)
- The National Defence Course (NDC) Class 48, Thailand National Defence College
- Certificate in Top Executives in the Energy Education Program Class 10, Thailand Energy Academy (TEA)

Company Shareholding (%) : None

Family Relationship among Advisor to the Board and Executives : None

Work Experience

Position in Other Listed Company

- Present Chairman of the Board, Pattra House & Property Public Company Limited

Position in Other Non-Listed Company / Other Organization

- Present Advisor to Sub-Commission of Religion, Moral Ethics, Arts and Culture, House of Senate.
- Present Working Group of Deputy Minister of Interior
- 2012 - Present Chairman of the Advisor, Thailand Equestrian Federation
- 2014 - 2019 Member of the National Legislative Assembly/The Energy Commission/The Local Government Commission, The National Legislative Assembly
- 2016 - 2018 Town and Country Planning Committee, Department of Public Works and Town & Country Planning
- 2014 - 2016 Director/Chairman of the Audit Committee/Chairman of the Policy Implementation Sub-Committee, Provincial Waterworks Authority
- 2008 - 2009 Deputy Director, Royal Thai Army Radio & Television
- 1985 - 2012 Special Royal Guard, Royal Thai Aide-De-Camp Department

Mr. Siwa Sangmanee

- Advisor to the Board
- Advisor to the Risk Management Committee

Age 74 Years



Date appointed as Director on October 19, 2017

Education

- Master of Public Administration, National Institute of Development Administration
- Bachelor of Arts (Political Science), Chulalongkorn University

Training

- Advanced Audit Committee Program (AACP) 18/2015, Thai Institute of Directors Association (IOD)
- Director Certification Program (DCP) 97/2007, Thai Institute of Directors Association (IOD)
- Executive Development Program class 20, Ministry of Interior
- The National Defence Course (NDC) Class 37, Thailand National Defence College
- Advanced Certificate Course in Politics and Governance in Democratic Systems for Executives (class 6)
- Capital Market Academy Leadership Program Class 12, Capital Market Academy (CMA)

Company Shareholding (%) : None

Family Relationship among Advisor to the Board and Executives : None

Work Experience

Position in Other Listed Company

- Jun 22, 2017 - Present Chairman of the Audit Committee/ Independent Director, International Research Corporation Public Company Limited
- 2013 - Present Chairman of the Audit Committee/ Independent Director, SEAFCO Public Company Limited
- Apr 18, 2011 - Present Chairman of the Audit Committee/ Independent Director, Ubon Bio Ethanol Public Company Limited

Position in Other Non-Listed Company / Other Organization

- Present Committee Member, King Mongkut's Institute of Technology Ladkrabang
- Sep 6, 2018 - Present Independent Director, Prime Steel Mill Company Limited
- 2019 Advisor to the Deputy Minister of Interior
- Feb 26, 2009 - Jun 21, 2010 Chairman, Thailand Post Company Limited
- Mar 31, 2008 - Jan 30, 2009 Director, Thailand Post Company Limited
- Nov 30, 2006 - May 15, 2008 Chairman of Labor Relation Committee, Provincial Electricity Authority
- Dec 12, 2006 - May 15, 2008 Director, Provincial Electricity Authority
- Jan 1, 2007 - Aug 19, 2007 Member of Constitution Drafting Assembly
- Nov 7, 2006 - Dec 7, 2007 Chairman, State Railway of Thailand



Water is Our
responsibility



URD



Useful



Reserve



Detect



eastwater



PROFILE OF EXECUTIVES

Mr. Jirayut Rungsrihong

- President and Chief Executive Officer

Age 53 Years



Mr. Cherdchai Pitiwacharakul

- Senior Executive Vice President, assigned to serve as Managing Director of Universal Utilities Public Company Limited

Age 55 Years



Education

- M.S. in Operations Research, George Washington University, USA
- Bachelor of Engineering (Computer), King Mongkut's Institute of Technology Ladkrabang

Training

- Director Certification Program (DCP) 60/2005, Thai Institute of Directors Association (IOD)
- Financial Institutions Governance Program (FGP) 4/2012, Thai Institute of Directors Association (IOD)
- Corporate Governance for Public Director, Class 10, Thailand National Defence College
- The National Defence Course (NDC) Class 61, Thailand National Defence College
- Capital Market Academy Leadership Program Class 10, Capital Market Academy (CMA)
- Bangkok Metropolitan Administration (BMA) Class 1, Institute of Metropolitan Development
- Business Revolution and Innovation Network (BRAIN) 1/2017, The Federation of Thai Industries

Work Experience

Position in Other Listed Company

- 2018 - Present Chairman of the Audit Committee Index Living Mall Public Company Limited
- 2013 - 2015 Independent Director/Audit Committee Member, Christiani & Nielsen (Thai) Public Company Limited
- 2005 - 2006 Director/Managing Director, Bualuang Securities Public Company Limited
- 2004 - 2005 Director/Managing Director, United Securities Public Company Limited

Position in Other Non-Listed Company / Other Organization

- May 16, 2017 - Present Director, Universal Utilities Public Company Limited
- 2015 Advisor to Deputy Minister of Transport
- 2015 Chairman of the Board, Bangkok Metropolitan Administration's Pawnshop Office
- 2011 - 2014 Board Director, SME Development Bank of Thailand
- 2009 - 2011 Director/Chief Executive Officer, CAT Telecom Public Company Limited
- 2009 - 2011 Vice President, The Telecommunications Association of Thailand under the Royal Patronage
- 2006 - 2009 Chief Financial Officer, CAT Telecom Public Company Limited

Education

- Master of Science (Information Technology), King Mongkut's Institute of Technology Ladkrabang
- Bachelor of Engineering, Khon Kaen University

Training

- Top Executive Program in Commerce and Trade (TEPCoT) by Commerce Academy (2019)
- The 4 Essential Roles of Leadership by PacRim (2018)
- Anti-Corruption: The Practical Guide, Thai Institute of Directors Association (IOD) (2017)
- DSTART UP, Sripatum University (2017)
- Strategic Marketing, Brand Building and Customer Relationship Management for Public & Private Enterprise Executives (Smart Marketing) by Institute of Research and Development for Public Enterprises (IRDP) (2015)
- Leadership Development Workshop by Executive Coaching Institute (Module 2), Berkeley USA, 2013
- Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA, 2012
- Director Certification Program (DCP), Thai Institute of Directors Association (IOD) (2010)
- Executive Development Program (EDP), Thai Listed Companies Association (TLCP) (2009)
- Integrated Water Management for Executives by Thai Waterwork Association (TWWA)
- Mini MBA Kasetsart University (2002)
- Mini MIS Kasetsart University (1997)

Work Experience

Eastern Water Resources Development and Management Public Company Limited

- March 2019 - Present Senior Executive Vice President, assigned to serve as Managing Director of Universal Utilities Public Company Limited
- October 2015 - February 2019 Executive (assigned to supervise the operations of the subsidiaries) and Managing Director of Universal Utilities Public Company Limited
- September 2013 - October 2015 Senior Vice President, Operations and Customer Service Department
- March 2010 - September 2013 Vice President, Operations and Customer Service Department and Acting Managing Director, Universal Utilities Public Company Limited
- January 2009 - March 2010 Vice President, Business Development Department
- August 2008 - January 2009 Acting Managing Director, Universal Utilities Company Limited
- November 2007 - January 2009 Vice President, Special Projects Department
- November 2001 - November 2007 Vice President of Chachoengsao Operational Center and Acting Vice President of Rayong Operational Center

Mr. Charin Sony

- Senior Executive Vice President and Chief Strategy and Business Development Officer (CSBDO)

Age 39 Years



Mr. Bordin Udol

- Senior Executive Vice President and Chief Operating Officer (COO) and Acting Vice President Construction Project Management Department

Age 50 Years



Education

- Master of Commerce (Finance and International Business), The University of Sydney
- Bachelor of Economics (English Program) in Finance, Thammasat University

Training

- Storytelling for Innovative Leader (2019)
- Business Revolution and Innovation Network (Brain), Federation of Thai Industries (FTI), 2019
- Director Certificate Program (DCP), Thai Institute of Directors Association (IOD), 2017
- Water Management Leadership Program, Federation of Thai Industries (FTI), 2017
- Non-Financial Disclosure and GRI Reporting for Executives (2017)

Work Experience

Eastern Water Resources Development and Management Public Company Limited

- March 2019 - Present Senior Executive Vice President and Chief Strategy and Business Development Officer (CSBDO)
- October 2017 - February 2019 Executive Vice President and Chief Business Development Officer (CBDO)
- June - Oct 2017 Acting Executive Vice President, Corporate Strategy Office and Vice President, Corporate Strategy Department
- June 2013 - December 2016 Chief Executive Officer, Lam Water Solution Company Limited
- August 2010 - June 2015 Chief Financial Officer, Flexmedia Company Limited
- 2005 - 2010 Deputy Chief of Customer Relations, Globlex Securities Company Limited
- 2003 - 2005 Assistant Chief of Customer Relations, UOB Kay Hian Securities (Thailand) Public Company Limited

Education

- Master of Business Administration, Sasin Graduate Institute of Business Administration, Chulalongkorn University
- Master of Science in Environmental Management, Houston University, USA
- Bachelor of Engineering, Chulalongkorn University

Training

- Public-Private Partnerships for Executives Program (PEP), Institute of Research and Development for Public Enterprises (IRDPE) (2019)
- Public Administration for Sustainable Development for Executives, Institute for Good Governance Promotion (IGP), Office of the Public Sector Development Commission (OPDC) (2019)
- Executive Development Program (EDP), Thai Listed Companies Association (TLCA) (2019)
- The 4 Essential Roles of Leadership, PacRim (2018)
- New Era of Governance & Internal Controls, EY Corporate Services Limited, 2018
- Emergency Response Planning 2018
- Safety and Occupational Health Committee (2018)
- Safety Officer at Executive Level (2018)

Work Experience

Eastern Water Resources Development and Management Public Company Limited

- March 2019 - Present Senior Executive Vice President and Chief Operating Officer (COO)
- October 2017 - February 2019 Executive Vice President and Chief Operating Officer (COO)
- 2016 - 2017 Senior Vice President, Team Consulting Engineering and Management Company Limited
- 2014 - 2016 Deputy CEO, GMM One Digital TV, GMM Grammy Public Company Limited Managing Director, GMM One TV Company Limited
- 2001 - 2014 Managing Director, Utilities Business Alliance Company Limited
- 1996 - 2001 Project Manager, Nawarat Patanakarn Public Company Limited

Miss Chinda Mahaisawariya

- Senior Executive Vice President and Chief Supporting Officer (CSO)

Age 57 Years**Mr. Sombat Yusamant**

- Senior Executive Vice President and Chief Financial Officer (CFO)

Age 49 Years**Education**

- Master of Development Administration (Social Development), National Institute of Development Administration (NIDA)
- Bachelor of Arts (General Management), Suan Dusit Rajabhat University

Training

- The 4 Essential Roles of Leadership, PacRim (2018)
- Board Nomination & Compensation Program (BNCP), Thai Institute of Directors Association (IOD), 2018
- Director Certificate Program (DCP), Thai Institute of Directors Association (IOD), 2018
- Fundamentals for Corporate Secretaries, Thai Institute of Directors Association (IOD), 2018
- New Era of Governance & Internal Controls, EY Corporate Services Limited, 2018
- Sustainability Strategy: Key Blueprint for Business Growth, Stock Exchange of Thailand (SET), 2017
- The Challenges of Administration Management Leadership, Ideal Forum, 2017
- The Supervisory Grid, GRID Business Solutions Company Limited (2016)
- Modern Executive Micro MBA, 2015
- Train the Trainers
- Anti-Corruption: The Practical Guide, Thai Institute of Directors Association (IOD) ACPG 13/2014
- Leadership Development Workshop by Executive Coaching Institute (Module 2), Berkeley USA, 2013
- Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA, 2012
- Executive Development Program (EDP) 2011, Thai Institute of Directors Association (IOD)

Work Experience**Eastern Water Resources Development and Management Public Company Limited**

- March 2019 - Present Senior Executive Vice President and Chief Supporting Officer (CSO)
- October 2017 - February 2019 Executive Vice President and Chief Supporting Officer (CSO)
- July 2015 - September 2017 Vice President, Corporate Affairs Department
- February - June 2015 Acting Vice President, Corporate Affairs Department
- 2011 - 2015 Assistant Vice President, Corporate Affairs Department
- 2009 - 2011 Manager, Procurement Division, Corporate Affairs Department
- 2006 - 2009 Manager, Corporate Relations Division, Corporate Communication Department
- 2004 - 2006 Manager, Procurement Division, Corporate Affairs Department

Education

- Master of Business Administration, Kasetsart University
- Bachelor of Accounting, Kasetsart University
- Certified Public Accountant (CPA)

Training

- Director Certificate Program (DCP), Thai Institute of Directors Association (IOD) (2019)
- The 4 Essential Roles of Leadership, PacRim (2018)
- Techniques on Use of Accounting and Finance Information for Executives, Dharmniti Seminar and Training Co., Ltd., 2018
- New Era of Governance & Internal Controls, EY Corporate Services Limited (2018)
- Water Management Leadership Program, Water Institute for Sustainability, Federation of Thai Industries (FTI), 2017
- Anti-Corruption: The Practical Guide (ACPG), Thai Institute of Directors Association (IOD), 2014
- Chief Financial Officer Certification Program (CFO), Thailand Federation of Accounting Professions (TFAP), 2012
- Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA, 2012
- Executive Development Program (EDP), Thai Listed Companies Association (TLCA) (2010)

Work Experience**Eastern Water Resources Development and Management Public Company Limited**

- March 2019 - Present Senior Executive Vice President and Chief Financial Officer (CFO) and Deputy Managing Director, Administration, Universal Utilities Public Company Limited
- October 2017 - February 2019 Executive Vice President and Chief Financial Officer (CFO) and Deputy Managing Director, Administration, Universal Utilities Public Company Limited
- August 2017 - September 2017 Vice President, Finance and Accounting Department and Deputy Managing Director, Administration, Universal Utilities Public Company Limited
- 2015 - 2017 Deputy Managing Director, Administration, Universal Utilities Public Company Limited
- 2011 - 2015 Vice President, Finance and Accounting Department
- 2009 - 2011 Assistant Vice President, Finance and Accounting Department
- 2009 - 2009 Acting Assistant Vice President, Finance and Accounting Department
- 2009 - 2011 Manager of Finance and Accounting (Secondment), Universal Utilities Public Company Limited
- 2007 - 2009 Manager of Accounting Division, Finance and Accounting Department
- 2005 - 2007 Manager of Administration and Accounting Department (Secondment), Global Water System Co., Ltd.
- 2003 - 2005 Manager of Budget and Finance Department

Mrs. Thidarut Kraiprasit

- Executive Vice President,
Internal Audit Office

Age 56 Years



Mrs. Namphon Rassadanukul

- Executive Vice President
and Company Secretary

Age 57 Years



Education

- Master of Business Administration (MBA), Kasetsart University
- Bachelor of Accounting, Thammasat University
- Certified Public Accountant (CPA)

Training

- Board Reporting Program (BRP), Thai Institute of Directors Association (IOD) (2017)
- Strategic CFO in Capital Markets Program, Stock Exchange of Thailand (SET) (2015)
- Director Certification Program (DCP), Thai Institute of Directors Association (IOD) (2014)
- Leadership Development Workshop by Executive Coaching Institute (Module 2), Berkeley USA (2013)
- Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA (2012)
- Audit Committee Program (ACP), Thai Institute of Directors Association (IOD) (2009)
- Executive Development Program (EDP), Thai Listed Companies Association (TLCA)
- Advanced Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute (KPI)

Work Experience

Eastern Water Resources Development and Management Public Company Limited

- 2017 - Present Executive Vice President, Internal Audit Department
- 2015 - 2017 Senior Vice President, Finance and Accounting Department
- 2009 - 2015 Senior Vice President, Internal Audit Department
- 2007 - 2008 Senior Vice President, Finance and Accounting Department
- 2004 - 2007 Senior Vice President, Finance and Human Resources Department

Education

- Master of Political Science (Politics and Governance), Sukhothai Thammathirat University
- M.A. in Public Administration, Glasgow College of Technology, UK
- Certificate in Computer Programming and Information Processing, London School, UK
- Bachelor of Arts in Political Science (Public Administration), Thammasat University

Training

- Corporate Governance For Executives (CGE), Thai Institute of Directors Association (IOD) (2019)
- Ethical Leadership Program (ELP), Thai Institute of Directors Association (IOD) (2019)
- Thammasat Leadership Program (TLP), Thammasat Association (under the Royal Patronage of His Majesty the King) (2019)
- Certificate Program for Environmental Governance for Executives, Department of Environment Quality Promotion (2018)
- The 4 Essential Roles of Leadership, PacRim (2018)
- Innovation for Organizational and Social Sustainable Development, Institute for Good Governance Promotion (IGP), Office of the Public Sector Development Commission (OPDC) (2017)
- ASEAN/Thailand M&A 2016: Legal, Tax & Business Strategies
- The 5th Training Course on Administrative Justice for Executives
- Public Administration for Sustainable Development for Executives, Institute for Good Governance Promotion (IGP), Office of the Public Sector Development Commission (OPDC)
- Leadership Development Workshop by Executive Coaching Institute (Module 2), Berkeley USA, 2013
- Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA, 2012
- Senior Executive Program (SEP), Sasin 2011
- Politics and Governance in Democratic Systems for Executives, King Prajadhipok's Institute (KPI)
- Public Law and Management for Executives, King Prajadhipok's Institute (KPI)
- Director Certification Program (DCP), Thai Institute of Directors Association (IOD) (2000)

Work Experience

Eastern Water Resources Development and Management Public Company Limited

- March 2019 - Present Executive Vice President and Company Secretary
- January - February 2019 Company Secretary, President and CEO Office
- May - December 2018 Senior Vice President, President and CEO Office
- October 2017 - April 2018 Senior Vice President, Corporate Strategy Department and Acting Executive Vice President, Corporate Strategy Office
- July 2016 - September 2017 Senior Vice President, Business Development Department
- February 2015 - June 2015 Senior Vice President, Human Resources Department
- 2007 - 2015 Senior Vice President, President and CEO Office and Company Secretary
- 2004 - 2007 Senior Vice President, Internal Audit Department and Company Secretary
- 2001 - 2004 Vice President, Internal Audit Department
- March - October 2001 Vice President, President and CEO Office
- 1995 - 2001 Vice President, Management Department and Acting Vice President, Internal Audit Department



BOARD OF EXECUTIVES



01

02

03

04

05

06

01.

Mr. Sokul Chuepakdee

- Vice President, President & CEO Office and Assigned to temporary work at Universal Utilities Public Company Limited

02.

Miss Suneewan Sudsawatvorakul

- Vice President, Legal Affairs and Corporate Governance Office

03.

Mrs. Bongkod Meonsorn

- Vice President, Business Development Department and Acting Business Development Division Manager

04.

Mr. Wiwat Charoensukrungruang

- Vice President, Engineering Department

05.

Miss Kanyanart Viraphandu

- Vice President, Corporate Strategy Department

06.

Mr. Suphatat Sabimarn

- Vice President, Operations & Customer Service Department



07

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07.

Mr. Jakrapong Boonrasri

- Vice President, Facility & Maintenance Department

08.

Miss Doungrat Pitak

- Vice President, Human Resources Department

09.

Miss Tharntip Photisorn

- Vice President, Information Technology Department

10.

Miss Araya Ponvichai

- Vice President, Business Administration Department

11.

Miss Chatkaew Poomarin

- Vice President, Corporate Communication Department

12.

Miss Suwanna Korcharoenrat

- Vice President, Finance Department

13.

Mr. Phanumart Preebua

- Vice President, Accounting Department

1 COMPANY POLICY AND BUSINESS OVERVIEW

1.1 CORPORATE VISION, MISSIONS, AND STRATEGIES

CORPORATE VISION

“To be the leader in total water solutions of the country”

MISSIONS

1. To develop the security and maintain stability of water resources in response to the long-term water demand.
2. To expand the investment in water related business for continuous and sustainable growth.
3. To increase competitive advantages through technologies and innovations.
4. To develop human resources and improve management efficiency.
5. To be socially and environmentally responsible and establish good relationships with all stakeholders in accordance with corporate governance principles.

STRATEGIES

Operational Excellence Theme

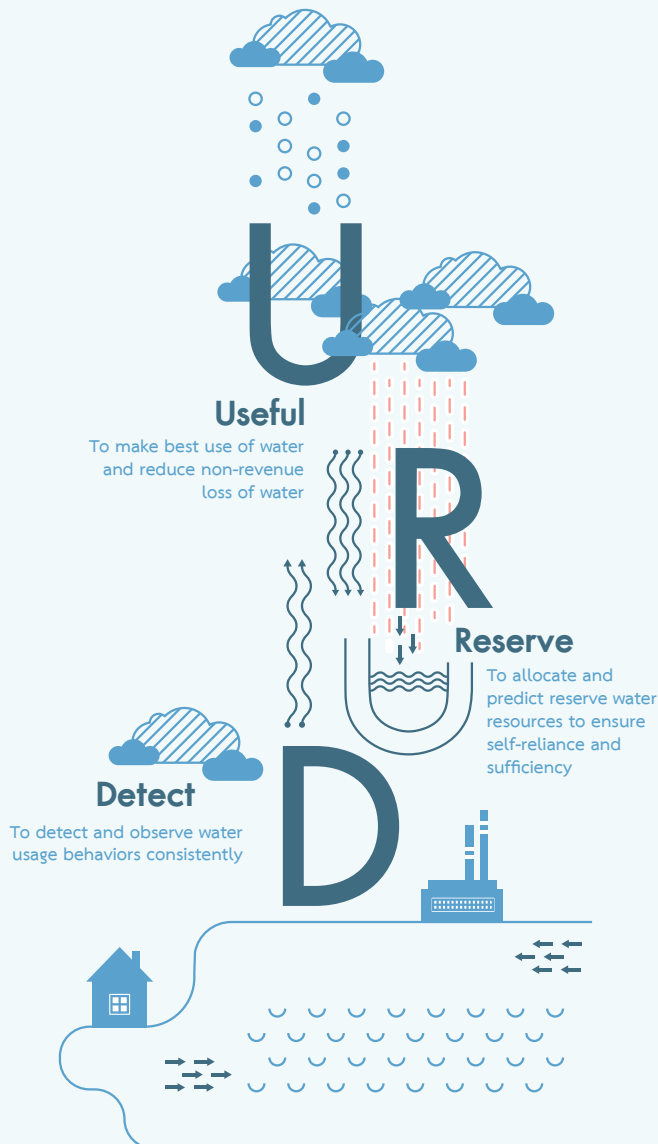
- Strategy 1 - To enhance customer satisfaction with efficient and effective services (Effectiveness)
- Strategy 2 - To reduce costs of production, pumping and distribution, and internal processes (Cost Reduction)

Total Water Solutions Theme

- Strategy 3 - To provide total water solutions at appropriate prices and with quality assurance (Total Water Solutions)
- Strategy 4 - To conduct projects that provide long-term returns immediately (Monetization of Customer Assets)
- Strategy 5 - To develop a standard pricing structure (Standard Pricing Structure)
- Strategy 6 - To raise customer awareness about corporate products and services in terms of total water solutions (Customer Awareness)

Sustainability Theme

- Strategy 7 - To develop good relationships with major stakeholders (Stakeholders Engagement)
- Strategy 8 - To take responsibility for society, communities and the environment as well as corporate image (CSR & Corporate Image)
- Strategy 9 - To systematically manage risks and operate business with ethics (Risk Management & Ethics)



1.2 KEY CHANGES AND DEVELOPMENTS IN 2019



● In April 2019, the Company's Board of Directors approved an investment in the project to construct the water distribution pipeline system from the Khlong Luang Reservoir in Chonburi in order to reduce the risk of water shortages in 2021. The Company had to find additional sources of water supply to accommodate the customers' rising demand for water. This was in line with the Company's master plan on the development of water sources and water distribution pipeline systems in the eastern seaboard areas of Thailand and the Eastern Economic Corridor (EEC) Development Plan for 2017-2021 of the EEC Policy Committee.



● In June 2019, TRIS Rating affirmed the company rating and the rating on the senior unsecured debentures of the Company at "A+/Stable". This reflected the Company's solid financial status and its continuously low business risk profile.

Full Score of 100

● In July 2019, the Company received a full score of 100% according to the quality evaluation of the 2019 Annual General Meeting of Shareholders by the Thai Investors Association (TIA).



● In August 2019, the Company's Board of Directors approved an interim dividend payment for the first half 2019 (1 January - 30 June 2019) in the amount of Baht 0.21 per share or at the dividend yield rate of 3.26%. The Company was scheduled to pay the dividends on 11 September 2019.



● In October 2019, the Company and its affiliated companies received a gold medal for "The Happy Retirement Company Program" to encourage employees to have enough savings for use after retirement by using the provident fund as a tool. The program was held by SEC.

● In November 2019:



The Company received a score of 96% or an "Excellent" rating according to the 2019 Corporate Governance Report of Thai Listed Companies (CGR) conducted by the Thai Institute of Directors Association (IOD).



The Company was chosen as 1 of the 98 listed companies to be on the 2019 "Thailand Sustainability Investment" or "Sustainable Stock" list by the Stock Exchange of Thailand (SET). The list was to recognize the stocks of the listed companies with outstanding environmental, social and governance (ESG) performances. The Company also won the SET Awards 2019 in the group of "Sustainability Excellence" under the category of "Rising Star Sustainability Awards" hosted by the SET. These awards were given to listed companies undertaking businesses based on the principles of sustainability and good corporate governance while taking into account all groups of stakeholders with a view to achieving a balance between economic growth and social and environmental development.

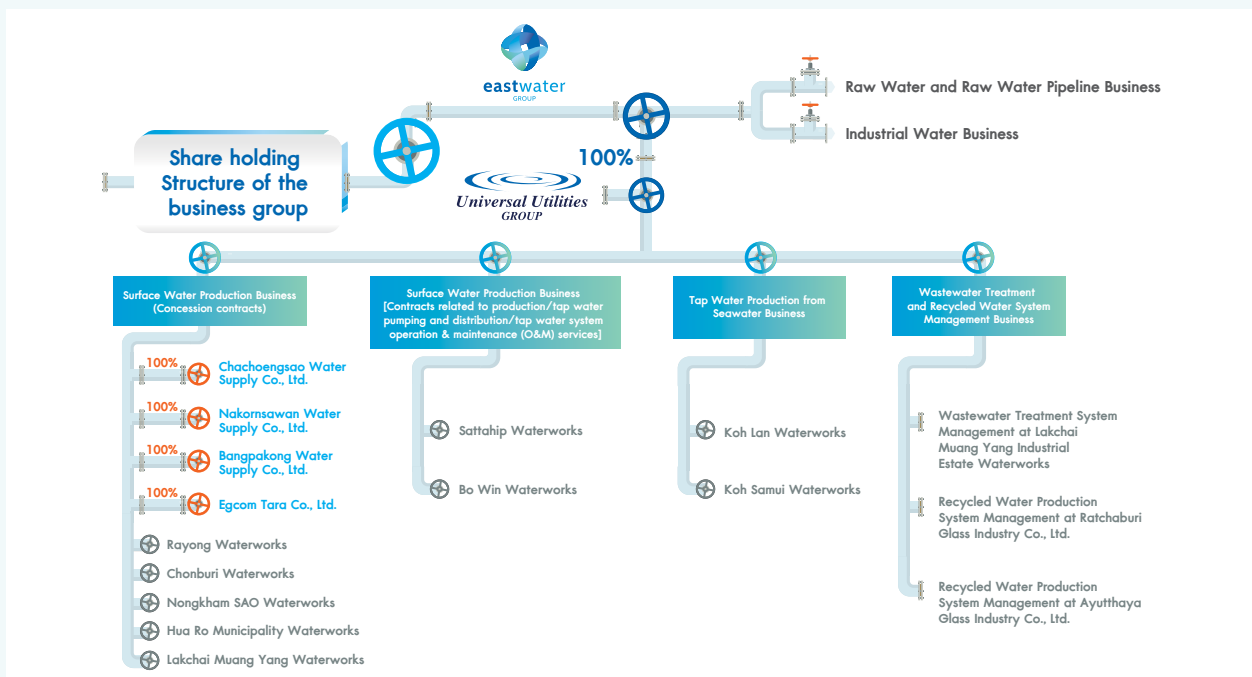
1.3 SHAREHOLDING STRUCTURE OF THE BUSINESS GROUP

Policy on Division of Operations among Business Group Companies

The Company is principally engaged in the business of supplying raw water to the industrial and consumer sectors while Universal Utilities PCL. is focused on the tap water business. In the case where the Company is required to conduct a business or related-party transaction with Universal Utilities PCL., the boards of directors of both parties will consider the necessity and reasonableness of

the transaction. The Company will ensure that such transaction is taken on an arm's length basis and in the ordinary course of business using the cost-plus pricing approach. Both the Company and Universal Utilities PCL. will strictly comply with applicable rules and regulations of the Office of the Securities and Exchange Commission (SEC) and the Stock Exchange of Thailand (SET).

The Company currently holds 510 million shares (100%) in Universal Utilities PCL., with the right to one vote per share. The shareholding structure of the business group can be summarized.



Universal Utilities PCL. provides waterworks management services through concessions with government agencies and local administrative organizations. The company has 4 subsidiaries as per details.

Registered Capital and Shareholding Proportion of Universal Utilities PCL.

Company Name	Registered Capital (Baht Million)	Shareholding Proportion (%)
1. Nakornsawan Water Supply Co., Ltd.	40	100
2. Bangpakong Water Supply Co., Ltd.	40	100
3. Chachoengsao Water Supply Co., Ltd.	100	100
4. Egcom Tara Co., Ltd.	345	90

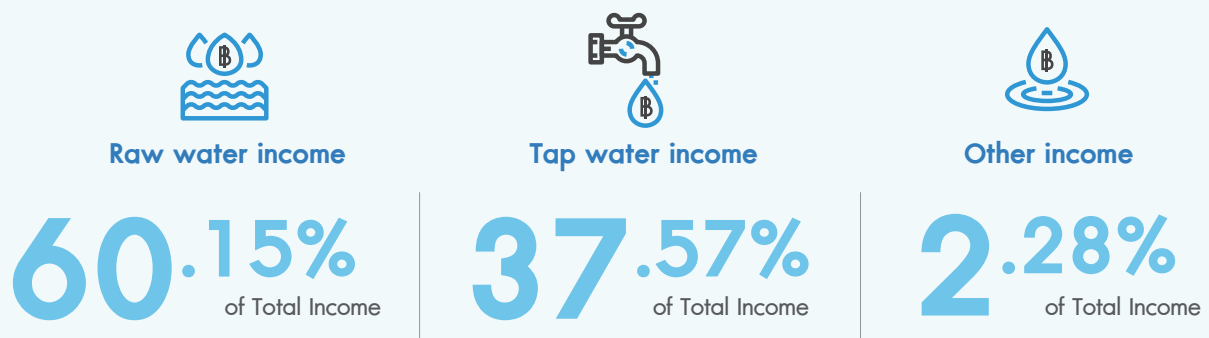
1.4 RELATIONSHIPS WITH BUSINESS GROUPS OF MAJOR SHAREHOLDERS

The Provincial Waterworks Authority of Thailand (PWA) is a major shareholder of the Company, with the shareholding proportion of 40.20%. It is also a major customer purchasing raw water the Company at approximately 26% of the total raw water sales. Three representatives from the PWA joined the Board of

Directors. At board meetings, for any agenda item that may involve a conflict of interest or be considered a related-party transaction, the Company will comply with relevant regulations of the SET for the benefit of the Company and its shareholders as a whole. Any director with a possible conflict of interest with respect to a particular agenda item will not be allowed to jointly make a decision on that agenda item.

2 NATURE OF BUSINESS

The Company's main income was from the sale of raw water, accounting for 60.15% of its total income. Its income from the sale of tap water and other income accounted for 37.57% and 2.28%, respectively. Details are as shown in Table (Reference: Note 6 to the Financial Statements.)



2.1 INCOME STRUCTURE

Breakdown of Income by Businesses for 2017 - 2019

(Unit : Baht Million)

Products / Services	Company's Shareholding (Percent)	Operated by	2017	Percent	2018	Percent	2019	Percent
1. Raw water income	-	EW	2,452.05	56.28	2,393.82	56.25	2,844.70	60.15
2. Tap water income	100.00	UU	1,767.22	40.56	1,742.36	40.95	1,776.80	37.57
3. Office rental income	-	EW	88.77	2.04	84.81	1.99	58.58	1.24
4. Other income	-	EW	48.59	1.12	34.33	0.81	49.19	1.04
Total income			4,356.63	100.00	4,255.32	100.00	4,729.27	100.00

Remarks: EW : Eastern Water Resources Development and Management Public Company Limited
UU : Universal Utilities Public Company Limited

2.2 NATURE OF PRODUCTS OR SERVICES

Raw water supply

The Company is engaged in the business of providing water utility services through the management and development of the Trunk Transmission Main system in the eastern seaboard areas. Its purposes are to support the community demand for water and household and industrial activities, and to support the development of the eastern seaboard areas to become the main industrial zones in Thailand. The Company currently supplies raw water in 3 provinces, namely Rayong, Chon Buri, and Chachoengsao through the Trunk Transmission Main system.

At present, the Company's interconnected main transmission pipelines form the most modern and

comprehensive water grid in Thailand with a total length of 491.8 kilometers as shown in Diagram. The water grid connects state major water reservoirs, major rivers, and private water sources with customers in service areas in 3 provinces. The Company invested over Baht 10 billion in the development of large-scale water transmission pipelines and pump stations under the Trunk Transmission Main system to support the continued rise in the water demand at present and in the future, and to ensure that the customers are supplied with sufficient amounts of raw water at standard quality levels.

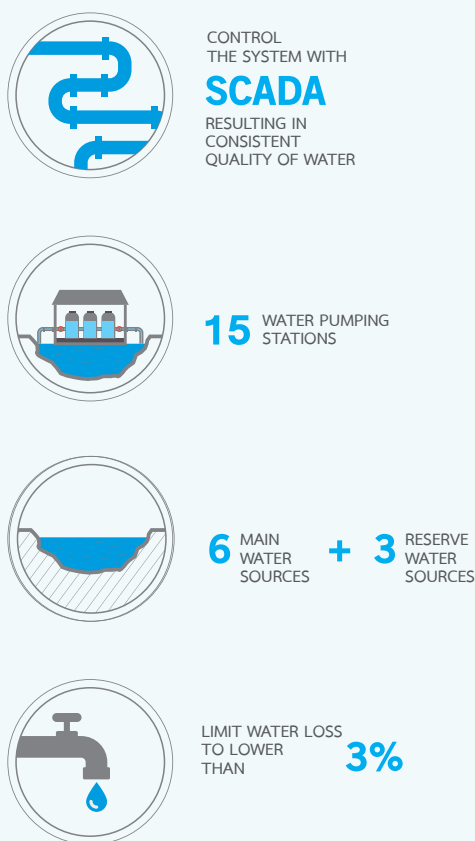


Diagram the map of the water grid in Rayong, Chon Buri, and Chachoengsao

Regarding the distribution of raw water to the customers in the 3 provinces, the Company operates as a wholesaler by entering into raw water trading contracts with its customers which can be divided into 3 groups, i.e. industrial estates¹, general industrial factories, and household consumers.

The pumping of raw water is done mainly from state major water sources (reservoirs) throughout the year. During the raining season, part of the water is pumped from major rivers for use in the raining season and as a reserve water supply in the drought season. The Company also buys additional raw water from private water sources as a measure to manage climate change risks.

The Company's raw water distribution process is as shown in Diagram. At the pump station, raw water is pumped from its source and transported to the head tank located at a higher level than the water receiving station

of a customer. The head tank controls the pressure of water flows being transmitted via pipelines to the water receiving station of the customer. Raw water is also stored in a reserve pond and is pumped intermittently to the head tank to increase the water pressure. Customers are responsible for installing their water receiving stations and linking pipelines to the Company's main water pipeline system for distribution of raw water for the production and sale of tap water or industrial water. The Company monitors raw water quality by running real-time tests on its major water sources and using the Supervisory Control and Data Acquisition (SCADA) system. The Company collects water samples from its major water sources for monthly detailed analysis conducted at a laboratory facility registered with the Department of Industrial Works in order to monitor changes in water quality and regularly inform water users of any findings.

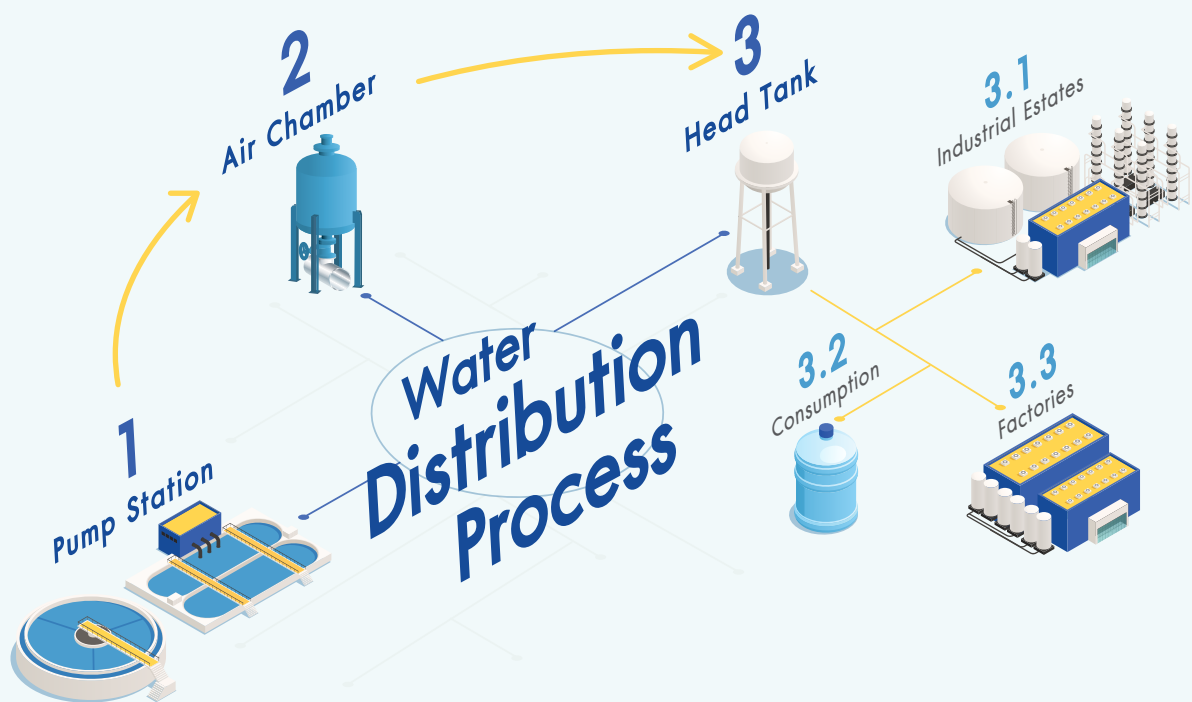


Diagram the raw water distribution process from water sources to customers

Remark: ¹Industrial estates include those owned/jointly invested in by the Industrial Estate Authority of Thailand (IEAT) and private industrial parks/zones.

2.3 MARKETING AND COMPETITION

The Company is the largest business operator in developing water pipeline systems and supplying raw water to water users in the industry and consumption sectors in the eastern seaboard areas of Thailand. The Company is equipped with the comprehensive, modern and efficient water grids and pumping systems that link a number of key water sources in the eastern region and cover the eastern coastal areas in the 3 provinces. The Company has sustainable capacity to supply raw water to sufficiently meet the current and future demand of local business operators while other business entrepreneurs still have limitations in terms of service areas, water supply volume, stability of water sources, and water distribution systems.

SERVICE AREAS, CUSTOMER GROUPS, AND RAW WATER SALES CHANNELS

The Company divided its customers into different groups in the industry and consumption sectors based on service areas. This was to enable the Company to roll out water management plans to accommodate current and future local water demand more appropriately and efficiently. The customer groups were classified based on the service areas:

- 1) Map Ta Phut,
- 2) Ban Chang and Sattahip,
- 3) Bowin - Pluak Daeng
- 4) Chonburi
- 5) Chachoengsao.

The Company operated business as a wholesaler with channels to sell raw water to the customers mentioned above. The customers bought raw water which was delivered through pipeline systems for direct sale to users in the industry and consumption sectors.

In 2019, the Company's sale of raw water totaled 313.4 million cubic meters. The overall purchase increased 25% over the last year. The Company announced its new water pricing structure, shifting from the fixed pricing scheme to the pricing structure scheme. The Company informed all of its customers about the main objective of the said change, which was to enable water users to plan and manage water usage by matching levels of water received with levels of water required by users each year. This created a balance in the overall water management and reduced the risk of water shortages, allowing the Company to manage sufficient and consistent levels of water resources, the main utilities of the industry, and to reach greater heights of competitiveness, efficiency and sustainability. Nevertheless, the Company still saw the growing directions and trends of the raw water service business in the eastern coastal areas in the future mainly due to the expansion of the industry sector in the local areas,

the government's policy to promote and propel the 3 provinces, Rayong, Chonburi and Chachoengsao, to become advanced industrial manufacturing centers and increase competitiveness of the Thai industry sector under the East Economic Corridor (EEC) project. Therefore, it could be said that the Company exhibited high competitiveness in terms of readiness, investments, water source stability, and raw water grids covering the areas earlier said.



CUSTOMER SATISFACTION LEVEL IN 2019

According to a customer satisfaction survey conducted by an external agency, in 2019 the Company received a total customer satisfaction score at 86.8% or a very high level. The areas that received the highest scores were employees' services and repair and maintenance service quality, respectively.

However, the Company realized the importance of maintaining customer satisfaction and was committed to constantly improving customer services. As such, the Company assigned customer relation officers attached to all of its service areas to monitor and coordinate with the customers closely; and established the Control Center to provide 24-hour services to respond to water distribution requests. The Company also upgraded other services by, for example, improving formats of installation services for water users through expanding its scope of services to reduce costs and expenses of maintaining water distribution pipeline systems for the customers. The Company also enhanced types of information and news services by, for example, revamping its online metering system and launching a mobile application to facilitate convenience for water users in monitoring the levels of water received in a consistent and timely manner.

2.4 PRODUCTS AND SERVICES

The Company currently manages its main water pipelines in the eastern seaboard areas of Thailand. In 2019, the Company's total pipeline was 491.8 kilometers with an average water supply capacity of 675 million cubic meters per year as per details shown in Table.

 In 2019 the total pipeline length was **491.8** km.

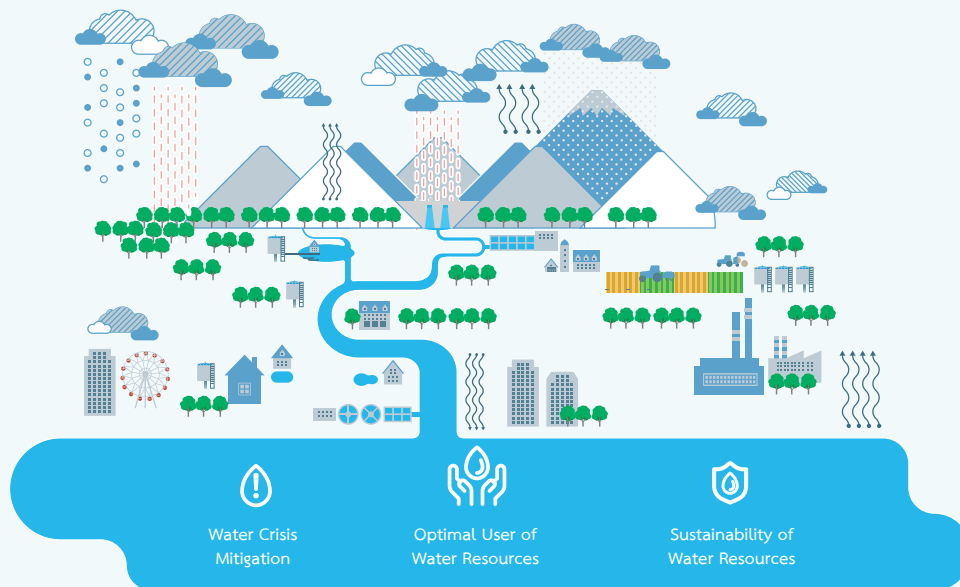
 Average water supply capacity **675** million cubic meters per year



Details of the Company's pipeline network

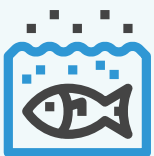
Water Pipeline System	Water Pipeline Diameter (mm.)	Water Pipeline Length (km.)	Average Water Supply Capacity (million cubic meters per year)
• Prasae-Nongplalai-Dokkrai-Map Ta Phut-Sattahip	700 - 1,600	202.68	316
• Nongkho-Laem Chabang-Pattaya-Bangpra	600 - 1,200	74.70	110
• Nongplalai-Nongkho	700 - 1,350	73.61	134
• Chachoengsao-Bangpakong	600 - 1,500	60.10	65
• Bangpakong-Chonburi	700 - 1,400	80.71	50
Total		491.80	675

why U R D is needed?



2.5 ONGOING PROJECTS

1. The Thap Ma Raw Water Reserve Pond Development Project is to increase the amount of water supply and to accommodate future water usage needs. The project has capacity to store 12 million cubic meters of water and help divert up to more than 40 million cubic meters of water in the flooding season. After a pause of project operations between 2016 and 2018, negotiations were made with the contractor to continue the project operations from December 2018 under the trilateral agreement between the Company, the contractor, and the financial institution financing the project. The project is currently under construction and is set to be completed within October 2020.



Thap Ma Raw Water
Reserve Pond
development project

Storage Capacity

12 million cubic meters

Water diversion capacity
in high water season more than

40 million cubic meters

2. The Nongplalai-Nongkho Raw Water Pipeline Construction Project-Route 2 (Pumping Station Works) is to renovate the pumping system of the Nongplalai pumping station to have capacity to distribute water to users in the Pluak Daeng-Bowin area and accommodate water usage needs of independent power producers (IPP). The project is currently under construction and is set to be completed within 2020.

3. The Bangkok River Water Pumping Efficiency Improvement Project is to increase the capacity of water pumping and electricity systems to pump water from the Bangkok River from a maximum of 200,000 cubic meters per day to 300,000 cubic meters per day. The project is also intended to increase the amount of pumped water from an average of 27 million cubic meters per year to 50 million cubic meters per year or an average increase of 23 million cubic meters per year. The water will be deposited into the Samnakhok Raw Water Reserve Pond and the Bangpra Reservoir during 5 months of the rainy season. The benefits of the project include an alternative way to manage water supply sources in the areas in Chachoengsao and Chonburi; less reliance on water supply sources from Rayong; and reduced costs of electricity from water pumping. The project is currently under construction and is set to be completed within 2020.



An average increase in water volume
is 23 million cubic meters per year.



Pumping and electricity systems are upgraded.

4. The Industrial Water Production System

Construction Project-Phase 1 (Amata City Industrial Estate)

is to provide industrial water services to the areas in the Amata City Industrial Estate, Rayong, to increase the capacity of the provision of services to customers in the industrial estate areas, build water source security, and establish confidence among customers in the long run. The industrial water distribution capacity will be at 15,000 cubic meters per day. The project is currently under construction and is set to be completed within 2020.

The industrial water distribution capacity

 **15,000**
cubic meters per day

5. The Industrial Water Production System

Construction Project-Phase 2 (Gulf Power Plant)

is to provide industrial water services to the Gulf Power Plant, Pluak Daeng District, Rayong. The plant is owned by a Gulf Group company with the power generating capacity of 2,500 megawatts, located in the Rojana Industrial Park Rayong 2. The project is aimed at improving water utility system security and stability as a key driver of advancing the electricity power production and distribution business for the way ahead. The industrial water distribution capacity will be at 60,000 cubic meters per day. The project is currently under construction and is set to be completed within 2021.

The industrial water distribution capacity

60,000 cubic meters per day



6. The Khlong Luang-Chonburi Reservoir Raw Water

Pipeline System Construction Project

is a project to install a raw water pipeline together with a pumping system and a supporting platform. The project is aimed at adding the Khlong Luang-Chonburi Reservoir to the list of water supply sources of the Company and supporting future water demand in the areas in Chonburi and Pluak Daeng-Bowin. The maximum water distribution capacity will be at 40 million cubic meters per year. The project is currently under construction and is set to be completed within 2021.

The Maximum water distribution capacity

40 million cubic
meters per year



Water is Our responsibility

URD

U

Useful

To make best use of water
and reduce non-revenue loss of water

R

Reserve

To allocate and predict reserve water
resources to ensure self-reliance
and sufficiency

D

Detect

To detect and observe
water usage behaviors consistently

3 RISK FACTORS

Risk management is a key process that supports the Company in attaining its goals and objectives and ultimately adds value to the organization, shareholders and stakeholders as it will help the Company to achieve sustainable growth. The Company has stipulated risk management strategies to create a risk management system that aligns with the quality management system requirements. In so doing, the Company must understand its organizational context, consider internal and external conditions related to corporate goals, study wants and expectations of its stakeholders, and take such issues into consideration when assessing risks and business opportunities.

RISK MANAGEMENT STRUCTURE

Amid rapid changes where it was harder to predict risks in advance and with the Company's policy to expand its investment in the total water solution business, it was necessary to assess impacts and potential risks in a prudent manner and raise risk assessment frequencies. In 2018, the Company's organizational restructuring led to the establishment of a risk management function serving as a central point of the risk management system. The function is responsible for supervising, monitoring, and reporting risk management activities at all levels according to the structure. The Company continued developing its risk management structure. In 2019, the Company assigned a risk coordinator to supervise risk management at a functional level, an effort to cultivate a risk management culture.

RISK MANAGEMENT PROCESS

1. Enterprise Risk Management

refers to a risk management process that takes into account any wide-scale, significant impacts on the business undertakings. Under the process, it is required to assess any possible risks that may cause a failure to achieve the corporate vision. When formulating strategies and conducting annual strategy reviews, the organizational context and the stakeholders' wants and needs shall be used to assess any potential risks that may lead to failures to achieve goals. Also, risk management measures must be established to mitigate risks to acceptable levels.

2. Risk Management at a Functional Level

This job is to perform duties according to the line of command as per the organizational structure. The job is aimed at propelling the organization towards its goals. The risk management at a functional level is to assess any risks that mainly affect the work processes of that particular function. In 2019, the risk management at a functional level was improved to be more stringent and comprehensive by using the quality management system standards as guidelines for the assessment as follows:

- 1) The quality management system for work processes (ISO 9001:2015) requires that an assessment be conducted on issues that may lead to fraud or corruption according to the internal anti-corruption policy.
- 2) The environmental management system (ISO 14001:2015)
- 3) The occupational health and safety management system (ISO 45001:2018)

The risk management process was implemented according to the "Enterprise Risk Management" manual used as a guideline for operations and for creating mutual understanding among all relevant parties.

SIGNIFICANT ENTERPRISE RISKS AND RISK MANAGEMENT MEASURES

In 2019, there were 4 key risks in doing business as follows:

1. Strategic/economic risk is referred to a risk mainly related to the corporate goals or vision. There were key risk factors as follows:

- Global economy uncertainties
- Competition among rivals in the same industry
- Thailand 4.0 Strategic Plan - Eastern Economic Corridor (EEC)

2. Operational risk is referred to a risk from a work process or an operation under the organization's rules and guidelines. There were key risk factors as follows:

- Restructuring to support the total water solution business
- Occupational safety
- Human resource management and personnel capacity building to support advancement

3. Compliance risk is referred to a risk of failure to fully comply with applicable laws.

4. Environmental risk is referred to a risk from natural disasters or climate change. A key risk factor was the drought situation.

STRATEGIC/ECONOMIC RISK

Risk from infrastructure development in the eastern region in terms of transportation and road expansion along water pipelines

Economic factors under the Thailand 4.0 Strategic Plan posed both opportunities and risks in the EEC. The impacts started to be felt in 2018 and were expected to continue until 2021. The infrastructure development projects in relation to transportation and road expansion in the areas attached to the Department of Highways or the Department of Rural Roads affected the water pipeline routes and might affect the distribution of water to service users.

The corrective measures currently implemented included the relocation of pipeline routes in order of urgency which progressed well according to plan. Hence, there was no delay in the pumping and distribution of water to the service users. The preventive measures included the preparation for systematic relocation of the pipeline routes, the hiring of consultants, the joint assessment of the situation with the private entities who also suffered the impacts, and the joint consultation with the relevant government agencies for advanced planning.

OPERATIONAL RISK

Risk of organizational restructuring impacts on work processes and personnel development to support the total water solution business

The vision of “To be the leader in total water solution of the country” was a factor that led to the organizational restructuring. This affected the work processes and assignment of duties as well as personnel development to support the total water solution business.

In 2019, the Company required that the whole internal work process and system be developed and improved through using the ISO standards of the quality management system as criteria. The newly developed work system covered 3 standards, namely 1) ISO 9001:2015, 2) ISO 14001:2015, and 3) ISO 45001:2018, which were linked to each other. Also, the knowledge management system of the organization was established in order to formulate personnel development plans and effectively manage corporate knowledge resources. The Company also set up a goal to achieve an ISO 45001:2018 certificate within 2021.

COMPLIANCE RISK

Risk from failure to fully comply with applicable requirements and laws

The current laws and changes in relevant government policies, laws, rules, and regulations might affect the business operations.

The Company established a compliance function to act as a focal point to supervise the laws of different agencies and monitor the issuance of new draft legislations or bills to ensure that the business operations complied with the new laws coming into force in the future. However, it was found that certain provisions or laws might not be fully complied with. Thus, the work process of the compliance function was improved to enable analysis of relevancy and impacts of amended or new laws together with the agencies related to such laws. This was to ensure that the work process became more stringent and comprehensive and was able to conduct cross-checks and identify rectification guidelines in a timely manner when detecting deviations from laws.

ENVIRONMENTAL RISK

Risk from climate change and natural disasters affecting the water supply sources

Based on the assessment of the risks facing the world in 2019 conducted by the World Economic Forum, there were top 3 global risks, namely more extreme climate change situations, climate change mitigation failures, and natural disasters. The global trends were in line with the situations in Thailand including the dry spell and the low levels of water caused by the El Niño phenomenon leading to the drought conditions. The said crisis inevitably affected the Company’s water supply sources and was its first-priority risk. Hence, a dedicated working group was set up to solve the drought problem.

The working group stipulated a number of measures to solve the drought problem, surveyed the capacity of private ground water wells for water use planning, and expedited the construction projects to be completed sooner than originally planned as well as enhanced the capacity of the pumping stations.

4 GENERAL AND OTHER IMPORTANT INFORMATION

General Information

Company name:	Eastern Water Resources Development and Management Public Company Limited
Business type:	Development and management of raw water pipeline systems in the eastern coast areas of Thailand
Head office address:	East Water Building, 23 rd -26 th Floors, 1 Vipavadeerangsit 5, Vipavadeerangsit Road, Jomphol, Jatujak, Bangkok 10900
Registration number:	0107539000316 (formerly, BorMorJor.632)
Website:	www.eastwater.com
Telephone:	(662) 272-1600
Facsimile:	(662) 272-1601-3, (662) 272-1692
Registered capital:	Baht 1,663,725,149 divided into 1,663,725,149 ordinary shares, each with a par value of Baht 1 (As at 31 December 2019)
Paid-up capital:	Baht 1,663,725,149 divided into 1,663,725,149 ordinary shares, each with a par value of Baht 1 (As at 31 December 2019)

List of companies in which the Company holds 10% or more of shares:

Company name:	Universal Utilities Public Company Limited
Business type:	Management of tap water supply and wastewater treatment systems through concession contracts, management service contracts, and rental management contracts
Head office address:	East Water Building, 18 th Floor, 1 Vipavadeerangsit 5, Vipavadeerangsit Road, Jomphol, Jatujak, Bangkok 10900
Telephone:	(662) 272-1688
Facsimile:	(662) 272-1691
Registered capital:	Baht 930,000,000 divided into 930,000,000 ordinary shares, each with a par value of Baht 1 (As at 31 December 2019)
Paid-up capital:	Baht 510,000,000 divided into 510,000,000 ordinary shares, each with a par value of Baht 1 (As at 31 December 2019)

References:

Securities Registrar:	Thailand Securities Depository Co., Ltd.
(Ordinary Shares)	93 Ratchadaphisek Road, Dindaeng Subdistrict, Dindaeng District, Bangkok 10400
Telephone:	(662) 009-9383
Facsimile:	(662) 009-9001 Ext. 9383
Auditor:	PricewaterhouseCoopers ABAS Company Limited
	179/74-80, Bangkok City Tower, 15th Floor, South Sathorn Road, Tungmahamek Subdistrict, Sathorn District, Bangkok 10120
Telephone:	(662) 844-1000
Facsimile:	(662) 286-0500

Other Important Information: None

5 SECURITIES AND SHAREHOLDERS

1. REGISTERED AND PAID-UP CAPITAL

The Company's registered and paid-up capital totaled Baht 1,663.73 million comprising 1,663.73 ordinary shares with the par value of Baht 1 each.

2. SHAREHOLDERS

The Company's top 10 major shareholders as at the book-closing date of 30 December 2019 were as follows:

Rank	Shareholders' Name	Number of Shares	Proportion (%)
1	Provincial Waterworks Authority	668,800,000	40.20%
2	Manila Water (Thailand) Company Limited	311,443,190	18.72%
3	Industrial Estate Authority of Thailand	76,000,000	4.57%
4	Mr. Min Tienworn	33,000,000	1.98%
5	Thai NVDR Company Limited	31,821,325	1.91%
6	BNP Paribas Securities Services, London Branch	28,550,300	1.72%
7	Aberdeen Standard Growth Fund	24,320,600	1.46%
8	Aberdeen Standard Long-Term Equity Fund	24,260,200	1.46%
9	Aberdeen Standard Small Cap Fund	22,709,200	1.36%
10	Thanachart Prime Low Beta Fund	20,784,400	1.25%
	Other shareholders	422,035,934	25.37%
Other shareholders		1,663,725,149	100.00

Source: Thailand Securities Depository Company Limited

Remark: The first and the third shareholders were the major shareholders from the government sector while the second shareholder was a juristic person. All these 3 shareholders had a role in determining management policies and their representatives were proposed for appointment as directors at the Company's shareholders' meeting.

3. ISSUANCE OF OTHER SECURITIES

As at 31 December 2019, the Company's total value of unredeemed debentures (2 series) was Baht 2,400 million. The debenture issue history was as follows:

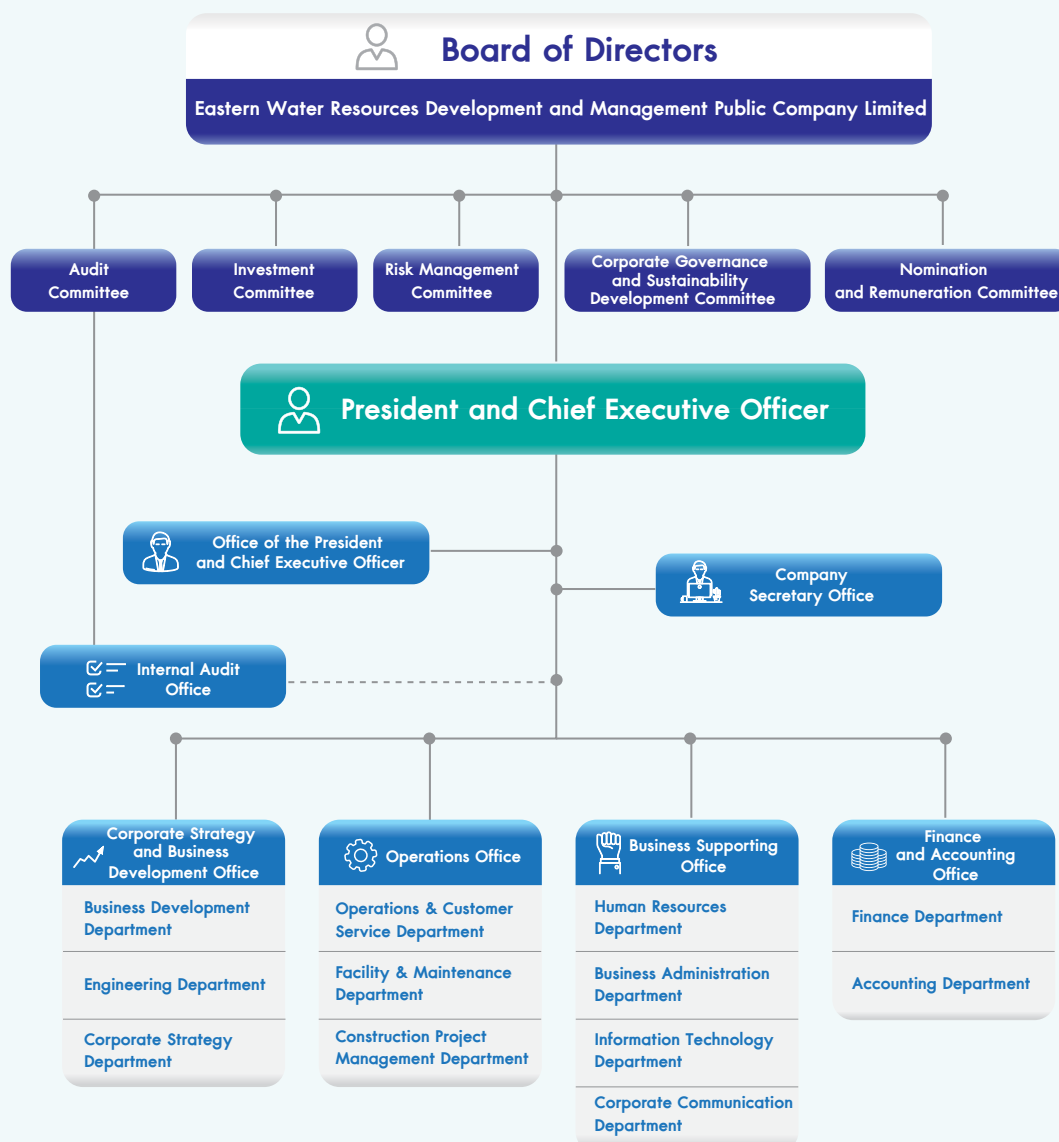
Series No.	Type of Debenture	Value (Baht Million)	Tenure (Years)	Maturity Date	Interest Rate (% p.a.)	Balance as at 31 Dec. 2019 (Baht Million)	Credit Rating
1/2015 Series 1	Unsubordinated and Unsecured Debentures without a Debentureholder's Representative in the Name-Registered Certificate	1,200	7	16 June 2022	3.84	1,200	A+/Stable
1/2015 Series 2	Unsubordinated and Unsecured Debentures without a Debentureholder's Representative in the Name-Registered Certificate	1,200	10	16 June 2025	4.18	1,200	A+/Stable

6 DIVIDEND POLICY

The Board of Directors had a policy to propose to the shareholders' meeting, a dividend payout ratio of at least 30% of the Group's consolidated net profit after deductions of statutory reserves, for consideration and approval. Dividends shall be paid based on necessity and other considerations as deemed appropriate by the Company.

7 MANAGEMENT STRUCTURE

The Company's management structure consists of the Board of Directors which shall be responsible for complying with laws, the Company's objectives and Articles of Association, and resolutions of the shareholders' meetings. The Board of Directors shall have authority to take any actions as specified in the Company's Memorandum of Association and applicable laws. The Board of Directors established 5 subcommittees to consider and review important matters, i.e. 1) The Audit Committee, 2) The Investment Committee, 3) The Risk Management Committee, 4) The Corporate Governance and Sustainability Development Committee, and 5) The Nomination and Remuneration Committee. The President and Chief Executive Officer is the top executive and responsible for supervising 4 divisions, namely 1) The Corporate Strategy and Business Development Division, 2) The Operations Division, 3) The Business Supporting Division and 4) The Finance and Accounting Division. The Company has 12 departments and 3 offices.



7.1 BOARD OF DIRECTORS

The Board of Directors consists of at least 5 but not more than 12 members. The appointment or removal of directors shall be approved by an annual general meeting of shareholders of the Company. The Board of Directors must have members with knowledge in water resources or other fields relating to the business operations. At least one board member must have knowledge and expertise in accounting and finance.

The current Board of Directors comprises a total of 12 members, with 6 members being independent directors, representing one-half of the total board members. The Audit Committee comprises 3 independent directors, two of whom, Mrs. Tatchada Jitmahawong and Mrs. Asvini Tailanga, are knowledgeable and experienced in accounting and finance and are capable of reviewing reliability of financial statements.

The nomination and appointment of directors and independent directors shall be based upon consideration of knowledge and capabilities according to the director selection criteria. The Nomination and Remuneration Committee will shall consider and review the candidates' qualifications before submission to the Board of Directors for consideration and approval. The director skills matrix shall be prepared, containing details of the persons with diversified qualifications in terms of skills, experience, capabilities, and specific characteristics required for the business operations. Five of the Company's directors represent the shareholders, with three from the Provincial Waterworks Authority of Thailand (PWA), one from the Industrial Estate Authority of Thailand (IEAT), and one from Manila Water (Thailand) Co., Ltd. They possess knowledge regarding water management and exercise prudence and caution in providing useful opinions for the Company's operational planning. The profiles of the directors are as shown in Pages 22-27 of this report.

DIRECTORS' QUALIFICATIONS AND TERM OF OFFICE

According to the Company's principles of good corporate governance, the directors shall meet legal age requirements and shall not be older than 70 years. They shall exhibit proper qualifications, not possessing prohibited characteristics as per the requirements of the Board of Directors, the securities and exchange law, the public limited company law, the anti-corruption law, and other concerned laws. The term of office of the directors shall be as follows:

1. At every annual general meeting of shareholders, at least one-third of the directors shall vacate the office. If the number of the directors is not a multiple of three, the number nearest to one-third shall retire from the office. The directors retiring by rotation may be re-elected.
2. An independent director shall hold the office for a maximum of 9 consecutive years from the date of first appointment to the position. In the case where that independent director will be re-appointed for another

term, the Board of Directors shall consider the reasons for such matter.

3. In case of a vacancy in the Board of Directors for other reason than the expiration of the director's term of office, the Board of Directors shall select a person with suitable qualifications and having no prohibited characteristics under relevant laws to fill the vacancy at the next meeting of the Board of Directors, except in the case where the remaining term of office of such director is less than 2 months. The Board of Directors' resolution for the matter shall be passed by at least three-fourths of the remaining directors. The replacement director shall hold the office for the remaining term of the director whom he/she replaces.

Any director wishing to resign from office shall submit a resignation letter to the Company. The resignation shall be effective from the date on which the resignation letter reaches the Company.

The shareholders' meeting may pass a resolution to remove a particular director prior to the expiration of his/her term of office with at least three-fourths of the total votes of the shareholders present at the meeting and having the right to vote, provided that the combined number of the shares shall not be less than one-half of the total shares held by the shareholders present at the meeting and having the right to vote.

ROLE AND DUTIES OF THE CHAIRMAN OF THE BOARD OF DIRECTORS

1. To supervise, monitor, and ensure that the performance of duties of the Board of Directors is efficient and meets the Company's main objectives and goals
2. To ensure that all directors contribute to the promotion of a corporate culture of ethics and good corporate governance
3. To convene and chair meetings of the Board of Directors as well as determine meeting agenda through discussions with the President and CEO; to have measures to ensure that important matters are incorporated into the meeting agenda; and to cast a decisive vote in case of equal voting
4. To allocate enough time for the management to conduct presentation and for the directors to discuss key issues in a prudent and comprehensive manner; and to encourage the directors to exercise discretion prudently in performing duties and to express opinions freely
5. To promote good relationships between the executive and the non-executive directors and between the Board of Directors and the management team

SEGREGATION OF DUTIES BETWEEN THE BOARD OF DIRECTORS AND THE MANAGEMENT

The duties of the Board of Directors and the management are clearly separated from each other. The Board of Directors shall not be involved in the duties of the management to create checks and balances between

management and supervision; and shall monitor the performance of the management to ensure that appropriate policies and processes are implemented in an effective manner.

According to the East Water Group's principles of good corporate governance, **"Matters of which proper implementation should be ensured"** shall refer to the matters of which the Board of Directors is mainly responsible for ensuring appropriate implementation. The Board of Directors must thoroughly understand and consider such matters as follows:

- 1) To determine the Company's main objectives and goals
- 2) To cultivate a corporate culture of adhering to professional ethics and to lead by example
- 3) To supervise the structure and performance of duties of the Board of Directors to ensure effective and efficient achievement of the Company's main objectives and goals
- 4) To nominate, develop and determine remuneration and evaluate performance of the President and CEO
- 5) To determine a compensation structure that encourages employees to perform work in alignment with the organization's objectives and goals

In considering and implementing such matters, the Board of Directors may assign the management to propose relevant information to the board for consideration.

"Matters to be jointly conducted with the management" shall refer to the matters to be jointly considered by the Board of Directors, the President and CEO, and the management. In this regard, the management shall present relevant information to the Board of Directors for endorsement. The Board of Directors shall supervise and ensure that the overall policy is in alignment with the Company's main business objectives and goals. The management shall be assigned to take relevant actions and their work shall be monitored by the Board of Directors. The management shall report the results of operations to the Board of Directors for acknowledgement on a regular basis as appropriate.

- 1) To determine and review annual strategies, goals, and action plans
- 2) To ensure appropriateness and sufficiency of the risk management system and internal controls
- 3) To determine the scope of authority to take actions to be commensurate with the management's responsibilities
- 4) To determine frameworks for resources allocation, development schemes, and budgets such as personnel management plan and policy and information technology policy
- 5) To follow up and evaluate the results of operations
- 6) To ensure that financial and non-financial disclosure is reliable

"Matters that should not be conducted by the Board of Directors" shall refer to the matters to be supervised by the Board of Directors at the policy level. The President and CEO and the management shall be assigned to be mainly responsible for implementing such matters as follows:

- 1) To take relevant actions to ensure compliance with the strategies, policies, and action plans approved by the Board of Directors
- 2) Matters subject to prohibitions such as granting approval for transactions in which directors have beneficial interests

SEGREGATION OF DUTIES BETWEEN THE CHAIRMAN OF THE BOARD OF DIRECTORS AND THE PRESIDENT AND CEO

The Chairman of the Board of Directors and the President and CEO shall have appropriate knowledge, capabilities, experience, and appropriate qualifications. They shall not be the same person in order to secure checks and balances. Their respective duties of supervision and management shall be separated from each other.

MEETINGS OF THE BOARD OF DIRECTORS

The Company shall determine dates and times of meetings of the Board of Directors for the whole year in advance. The Board of Directors' meeting is held once a month so that the directors can allocate their time to attend the meeting. The company secretary shall send a meeting invitation letter, meeting agenda, and supporting documents to the directors at least 5 working days in advance of the meeting so that the directors will have enough time to study the relevant information. An exception applies to urgent cases in which the Chairman of the Board of Directors endorses a particular matter as part of the meeting agenda and, to facilitate operations, any director who has a beneficial interest or any potential conflict of interest with regard to any agenda item shall abstain from providing opinions and voting or shall depart the meeting.

MEETINGS OF NON-EXECUTIVE DIRECTORS

On 24 May 2019, the Company held the Board of Directors' meeting with only non-executive directors present at the meeting to allow them to discuss issues relating to the Company's operations, exchange ideas and opinions, and consider matters that were of their interest, such as increasing income and securing sustainable growth for the Company, water resources laws, and water management technology and innovation.

On 13 December 2019, the Board of Directors' meeting was held with only non-executive directors present at the meeting to consider the Company's operating results based on specified KPIs.

List of directors and their meeting attendance in 2019 can be summarized as follows:

Name-Surname	Position	Attendance (Times)
1. Mr. Veerasak Kositpaisal	- Independent Director - Chairman of the Board of Directors	13/13
2. Mr. Amorn Laohamontri	- Independent Director - Chairman of the Corporate Governance and Sustainability Development Committee	13/13
3. Mr. Surachai Kanasa	- Independent Director - Chairman of the Investment Committee - Member of the Nomination and Remuneration Committee	12/13
4. Mrs. Tatchada Jitmahawong	- Independent Director - Chairman of the Audit Committee - Member of the Corporate Governance and Sustainability Development Committee	13/13
5. Mr. Kritsada Sunkhamani	- Director - Member of the Investment Committee	12/13
6. Mr. Virgilio Cervantes Rivera, Jr.	- Director - Member of the Investment Committee	9/13
7. Mrs. Asvini Tailanga	- Independent Director - Chairman of the Risk Management Committee - Member of the Audit Committee - Member of the Corporate Governance and Sustainability Development Committee	11/13
8. Miss Somchint Pilouk	- Director - Member of the Nomination and Remuneration Committee	11/13
9. Mr. Pisit Hongvanishkul ¹	- Director - Member of the Risk Management Committee	9/9
10. Mr. Bumrungsak Chingwangtakor ²	- Director - Member of the Nomination and Remuneration Committee	8/9
11. Admiral Sucheep Whoungmaitree ³	- Independent Director - Chairman of the Nomination and Remuneration Committee - Member of the Audit Committee	5/6
12. Mr. Jirayut Rungsritthong	- Director, and President and CEO - Member of the Investment Committee - Member of the Risk Management Committee	13/13

Remarks: ¹ The AGM of 2019 resolved to appoint Mr. Pisit Hongvanishkul to replace Mr. Oran Vongsuraphichet who retired by rotation.
² The AGM of 2019 resolved to appoint Mr. Bumrungsak Chingwangtakor to replace Colonel Premjirat Tanathaipakdee who retired by rotation.
³ The Board of Directors, at its meeting No.7/2019 held on 21 June 2019, resolved to appoint Admiral Sucheep Whoungmaitree to replace Admiral Sophon Wattanamongkol who resigned.

SCOPE OF AUTHORITY AND DUTIES OF THE BOARD OF DIRECTORS

According to the East Water Group's principles of good corporate governance, the Office of the Securities and Exchange Commission (SEC)'s Corporate Governance Code was adopted, containing details of the scope of duties of the Board of Directors in the following 8 aspects:

- 1) To realize the role and responsibilities of the Board of Directors as a leader who creates long-term values for the organization,
- 2) To determine the Company's main objectives and goals towards sustainability,
- 3) To promote efficiency of the Board of Directors,
- 4) To nominate and develop high-level executives and manage personnel,

- 5) To foster innovation and socially responsible business undertakings,
- 6) To ensure appropriate risk management systems and internal controls,
- 7) To maintain reliability of financial statements and information disclosure, and
- 8) To support engagement and communication with the shareholders.

AUTHORIZED SIGNATORY DIRECTORS

According to the Company's Articles of Association, two authorized signatory directors are required to jointly affix signatures and the Company's seal so as to be binding on the Company. The Board of Directors may stipulate a list of authorized signatory directors.

PERFORMANCE EVALUATION OF THE BOARD OF DIRECTORS / SUBCOMMITTEES

The Company conducts performance evaluation for the entire Board of Directors and for individual directors once per year. In this regard, the directors will jointly consider their achievements, problems, and challenges they experienced throughout the year. There are 3 different performance evaluation forms:

- 1) Self-evaluation form for the Board of Directors,
- 2) Self-evaluation form for each respective subcommittee, and
- 3) Self-evaluation form for an individual director.

All subcommittee charters require that subcommittee members report their performance and any problems or challenges that caused them to fail to comply with the specified scope, authority and duties to the Board of Directors for acknowledgement once per year. After that, the Board of Directors shall analyze the summary of the performance evaluation results for further improvement of operational efficiency to ensure appropriateness and alignment with the good corporate governance principles.

The self-evaluation form for the Board of Directors contains the following 6 questions:

- 1) Structure and qualifications of the Board of Directors
- 2) Role, duties and responsibilities of the Board of Directors
- 3) Meetings of the Board of Directors
- 4) Performance of duties as a director
- 5) Relationships with the management
- 6) Self-development of directors and development of executives

In conclusion, the average performance rating of the Board of Director was 96.37%.

The self-evaluation form for each respective subcommittee contains the following 3 questions:

- 1) Structure and qualifications of the respective subcommittee
- 2) Meetings of the respective subcommittee
- 3) Compliance with the scope of authority, duties and responsibilities

The performance ratings of the respective subcommittees are as follows:

The Company's subcommittees	Ratings (%)
1. Audit Committee	97.67
2. Investment Committee	98.51
3. Risk Management Committee	95.10
4. Corporate Governance and Sustainability Development Committee	97.92
5. Nomination and Remuneration Committee	98.99

The self-evaluation form for an individual director contains the following 3 questions:

- 1) Structure and qualifications of the Board of Directors
- 2) Meetings of the Board of Directors
- 3) Role, duties and responsibilities of the Board of Directors

In conclusion, the average performance rating of all individual directors was 96.78%.

7.2 EXECUTIVES

As at 31 December 2019, the Company had a total of 6 executives according to the list of executives as defined by the Notification of the Capital Market Supervisory Board No. TorChor.23/2551. The executives of the Company and its subsidiaries are knowledgeable and experienced as shown in the profiles the executives in Page 32-34. Such 6 executives are as follows:

Name	Position
1. Mr. Jirayut Rungsritthong	President & Chief Executive Officer (CEO)
2. Mr. Cherdchai Pitiwacharakul	Senior Executive Vice President assigned to serve as Managing Director of Universal Utilities Public Company Limited
3. Mr. Charin Sony	Senior Executive Vice President and Chief Corporate Strategy and Business Development Officer (CSBDO)
4. Mr. Bordin Udol	Senior Executive Vice President and Chief Operating Officer (COO) and Acting Vice President, Construction Project Management Department
5. Miss Chinda Mahaisawariya	Senior Executive Vice President and Chief Supporting Officer (CSO)
6. Mr. Sombat Yusamart	Senior Executive Vice President and Chief Financial Officer (CFO)

7.3 COMPANY SECRETARY

The Board of Directors appointed Mrs. Namphon Rassadanukul as company secretary with authority and duties according to the Securities and Exchange Act B.E. 2535 (A.D. 1992). She shall be responsible for holding meetings of the Board of Directors and annual general meetings of shareholders as well as providing recommendations on compliance with applicable laws, rules and regulations to the Company's directors. Also, she shall be responsible for preparing and retaining a register of directors, annual reports, beneficial interest reports, and securities holding reports of directors or executives. Moreover, she shall be responsible for supporting activities relating to the Board of Directors to ensure that they perform duties efficiently and effectively such as new director orientations and training sessions; as well as disclosing data and information to relevant supervisory bodies within specified timeframes.

The Company encouraged the company secretary to attend trainings and improve knowledge in laws and other relevant fields on a continuous basis from both the Thai Institute of Directors Association (IOD) and the Thai Listed Companies Association (TLCA), such as Corporate Governance for Executives Course and Ethical Leadership Program. Her profile and experience are as shown in Page 35 of the Annual Report.

7.4 DIRECTORS' AND EXECUTIVE REMUNERATION

Directors' Remuneration

The Nomination and Remuneration Committee shall be responsible for considering remuneration for the Board of Directors and respective subcommittees at the initial stage before submission to the Board of Directors for consideration and endorsement and the shareholders' meeting for approval. The Company specified rates of remuneration for directors and respective subcommittee members in monetary forms including monthly remuneration, meeting allowance, and remuneration based on corporate performance such as bonuses which were linked to the values created for the shareholders. However, the Company did not have any other non-monetary forms of remuneration.

In determining the criteria for paying remuneration, other appropriate considerations and factors were also taken into account, i.e. 1) Industrial practice, 2) Operating results and business size, 3) Directors' knowledge, capabilities and experiences, 4) Directors' role, duties and responsibilities and 5) Directors' individual performances. The directors' remuneration rates were determined at appropriate levels and fair and were designed to motivate and retain directors with required qualities. In addition, bonus payments to the directors had to be in line with dividend payments to the shareholders and should not be too high that the directors were not independent.

The Nomination and Remuneration Committee shall be responsible for considering and determining forms of remuneration for the President and CEO before submission to the Board of Directors for approval. The Nomination and Remuneration Committee shall also consider bonus ranges and annual salary increment rates for the employees based on consideration of the corporate performance, economic situation, and competitiveness.

The 2019 Annual General Meeting of Shareholders held on 23 April 2019 passed a resolution to approve the directors' remuneration as follows:

1. Monthly Remuneration and Meeting Attendance for the Board of Directors and the Subcommittees

1.1 Remuneration for Directors

- Monthly remuneration of Baht 30,000/person
- Meeting allowance of Baht 10,000/person/meeting paid according to the individual's attendance record

The Chairman of the Board of Directors shall be entitled to a monthly remuneration of Baht 45,000/month and a meeting allowance of Baht 15,000/meeting according to the individual's attendance record.

1.2 Remuneration for Members of the Audit Committee

- Monthly remuneration of Baht 10,000/person/month
- Meeting allowance of Baht 10,000/person/meeting paid according to the individual's attendance record

1.3 Remuneration for Members of Other Subcommittees

- No monthly remuneration
- Meeting allowance of Baht 10,000/person/meeting paid according to the individual's attendance record

2. Bonus for Directors

The 2018 bonus rate shall still apply at 0.80% of the shareholders' dividends. The total bonus shall not exceed Baht 6 million and shall be distributed among the board members with the Chairman receiving an additional 50%. The rate of bonus shall be calculated on a pro rata basis according to the length of time each director has served.

Details of the Board of Directors' and the subcommittees' remuneration for 2019 can be summarized as follows:

Unit : Baht

Name	Meeting Allowance and Monthly Remuneration						Bonus paid from 2018 business performance	Total
	Board of Directors	Audit Committee	Investment Committee	Risk Management Committee	Corporate Governance and Sustainability Development Committee	Nomination and Remuneration Committee		
1. Mr. Veerasak Kositpaisal	735,000.00	-	-	-	-	-	551,866.00	1,286,866.00
2. Mr. Amorn Laohamontri	490,000.00	44,666.67	-	-	30,000.00	-	612,943.00	1,177,609.67
3. Mr. Surachai Kanasa	480,000.00	-	60,000.00	-	-	70,000.00	530,780.00	1,140,780.00
4. Mrs. Tatchada Jitmahawong	490,000.00	280,000.00	-	-	50,000.00	30,000.00	530,780.00	1,380,780.00
5. Mrs. Asvini Tailanga	470,000.00	290,000.00	-	40,000.00	40,000.00	-	367,911.00	1,207,911.00
6. Mr. Kritsada Sunkhamani	480,000.00	-	60,000.00	10,000.00	-	-	530,780.00	1,080,780.00
7. Mr. Virgilio Cervantes Rivera, Jr.	450,000.00	-	30,000.00	-	-	-	426,079.00	906,079.00
8. Miss Somchint Pilouk	470,000.00	-	-	-	-	50,000.00	30,538.00	550,538.00
9. Mr. Pisit Hongvanishkul ¹	338,000.00	-	-	30,000.00	-	-	-	368,000.00
10. Mr. Bumrungsak Chingwangtakor ²	328,000.00	-	-	-	-	60,000.00	-	388,000.00
11. Admiral Sucheep Whoungmaitree ³	240,000.00	153,333.33	-	-	-	30,000.00	-	423,333.33
12. Mr. Jirayut Rungsritthong	490,000.00	-	60,000.00	30,000.00	-	-	-	580,000.00

Remarks: ¹ Mr. Pisit Hongvanishkul assumed the position of director on 23 April 2019.

² Mr. Bumrungsak Chingwangtakor assumed the position of director on 23 April 2019.

³ Admiral Sucheep Whoungmaitree assumed the position of director on 21 June 2019.

Remuneration for Directors Leaving the Board during 2019

Unit : Baht

Name	Meeting Allowance and Monthly Remuneration						Bonus paid from 2018 business performance	Total
	Board of Directors	Audit Committee	Investment Committee	Risk Management Committee	Corporate Governance and Sustainability Development Committee	Nomination and Remuneration Committee		
1. Police Major General Vichai Sangprapai (1 Jan. - 25 Feb. 2019)	76,785.71	48,928.57	-	-	10,000.00	10,000.00	530,780.00	676,494.28
2. Mr. Oran Vongsuraphichet (1 Jan. - 23 Apr. 2019)	143,000.00	15,666.66	20,000.00	-	-	20,000.00	530,780.00	729,446.66
3. Colonel Premjirat Tanathaipakdee (1 Jan. - 23 Apr. 2019)	143,000.00	-	-	-	20,000.00	20,000.00	530,780.00	713,780.00

EXECUTIVE REMUNERATION

The Company put in place the policy to pay remuneration to all levels of employees as appropriate through both short- and long- term planning to ensure alignment with each year's business performance and remuneration rates of industry peers. The Company surveyed wages and compensation payments to employees of other organizations to ensure that the Company's compensation structure was appropriate and competitive. Moreover, consumer price indices of the government agencies such as the Ministry of Commerce and the Bank of Thailand were used in support of the payments of wages and compensation to the executives and employees.

The Company focused on payments of compensation based on performance. Key Performance Indicator (KPIs) were used to support the performance evaluation of all levels of employees. KPIs at organizational, functional, and individual levels were aligned to ensure that the mutual work goals were formed in the same direction and in line with the corporate vision and missions. Executive remuneration was considered based directly on individual performance and the achievement of the strategic goals of the Company.

EXECUTIVE REMUNERATION STRUCTURE

The remuneration paid to the President and CEO and the first five executives consisted of the following elements:

1. Fixed remuneration and benefits: The Company focuses on the long-term payments to encourage its executives to create its sustainable growth as follows:

- **Salary:** The salary is paid based on the scope of duties, responsibilities, experiences, skills, and expertise. It is paid on a monthly basis and is subject to review every year. Salary increments are considered based on performance ratings and salary adjustment rates of the labor market.
- **Other forms of benefits** are paid as a guarantee of security for employees and as a form of assistance to senior employees facing health problems, disability, or death. Such benefits include the provident fund, health insurance, and other fringe benefits which are in line with the general practice of the labor market and higher than minimum legal requirements.

2. Performance-based remuneration: This comes as a reward which is varied according to a short-term success as compared to a specific annual plan, such as an annual bonus which is paid based on annual corporate KPIs as approved by the Board of Directors. The performance is driven by a combination of many factors in terms of finance, process management, stakeholders, and organizational learning and development. Weights are given to those factors according to their levels of importance each year.

Details of remuneration for the President and CEO as well as other executives¹ in 2019 can be summarized as follows:

Remuneration	Amount (Baht)
Total salary	22,636,524.00
Bonus paid from 2018 business performance	5,998,744.00
Provident Fund (contributions) and others	2,561,112.54
Total	31,196,380.54

Remarks : ¹ This is based on the total 6 executives, namely 1) President and CEO, 2) SEVP assigned to supervise the operations of the subsidiaries, 3) SEVP and Chief Corporate Strategy and Business Development Officer, 4) SEVP and Chief Operating Officer, 5) SEVP and Chief Supporting Officer, and 6) SEVP and Chief Financial Officer.

Shareholding by Directors as at 31 December 2019

No.	Name	Position	Number of Shares		
			31 December 2018	31 December 2019	+/- during 2019
1.	Mr. Veerasak Kositpaisal Spouse and minor child	Chairman	- -	- -	- -
2.	Mr. Amorn Laohamontri Spouse and minor child	Independent Director	- -	- -	- -
3.	Mr. Surachai Kanasa Spouse and minor child	Independent Director	- -	- -	- -
4.	Mrs. Tatchada Jitmahawong Spouse and minor child	Independent Director	- -	- -	- -
5.	Mr. Kritsada Sunkhamani Spouse and minor child	Director	- -	- -	- -
6.	Mr. Virgilio Cervantes Rivera, Jr. Spouse and minor child	Director	- -	- -	- -
7.	Mrs. Asvini Tailanga Spouse and minor child	Independent Director	- -	- -	- -
8.	Miss Somchint Pilouk Spouse and minor child	Director	- -	- -	- -
9.	Mr. Pisit Hongvanishkul Spouse and minor child	Director	N/A N/A	- -	- -
10.	Mr. Bumrungsak Chingwangtakor Spouse and minor child	Director	N/A N/A	20 -	- -
11.	Admiral Sucheep Whoungmaitree Spouse and minor child	Independent Director	N/A N/A	- -	- -
12.	Mr. Jirayut Rungsrithong Spouse and minor child	Director	- -	- -	- -

Remark: N/A refers to “no information available” as the particular director was appointed during 2019.

Shareholding by Directors Leaving the Board during 2019

No.	Name	Position	Number of Shares			Effective Date of Resignation
			31 December 2018	31 December 2019	+/-	
1.	Police Major General Vichai Sangprapai Spouse and minor child	Independent Director	- -	- -	- -	25 February 2019
2.	Mr. Oran Vongsuraphichet Spouse and minor child	Independent Director	- -	- -	- -	23 April 2019
3.	Colonel Premjiras Tanathaipakdee Spouse and minor child	Independent Director	- -	- -	- -	23 April 2019
4.	Admiral Sophon Watanamongkol Spouse and minor child	Independent Director	N/A N/A	- -	- -	3 May 2019

Remark: N/A refers to “no information available” as the particular director was appointed during 2019.

Shareholding by High-Level Executives as at 31 December 2019

No.	Name	Position	Number of Shares		
			31 December 2018	31 December 2019	+/- during 2019
1.	Mr. Jirayut Rungsrithong	President & Chief Executive Officer (CEO)	-	-	-
	Spouse and minor child		-	-	-
2.	Mr. Cherdchai Pitiwacharakul	Senior Executive Vice President (Assigned to serve as Managing Director of Universal Utilities PCL.)	-	-	-
	Spouse and minor child		-	-	-
3.	Mr. Charin Sony	Senior Executive Vice President and Chief Strategy and Business Development Officer (CSBDO)	-	-	-
	Spouse and minor child		-	-	-
4.	Mr. Bordin Udol	Senior Executive Vice President and Chief Operating Officer (COO) and Acting Vice President, Construction Project Management Department	-	-	-
	Spouse and minor child		-	-	-
5.	Miss Chinda Mahaisawariya	Senior Executive Vice President and Chief Supporting Officer (CSO)	-	-	-
	Spouse and minor child		-	-	-
6.	Mr. Sombat Yusamart	Senior Executive Vice President and Chief Financial Officer (CFO)	-	-	-
	Spouse and minor child		-	-	-
7.	Mrs. Namphon Rassadanukul	Executive Vice President, President & CEO Office	2,000	2,000	0
	Spouse and minor child		-	-	-

7.5 PERSONNEL

As at 31 December 2019, the Company had a total of 229 employees. Of this, 227 were permanent employees and 2 were contractual employees. Details can be summarized as follows:

Office / Division	Number (Person)
President and CEO Office	5
Company Secretary Office	19
Internal Audit Office	7
Corporate Strategy and Business Development Office	33
Operations Office	77
Business Supporting Office	47
Finance and Accounting Office	41
Total	229

In 2019, the Company reviewed its strategic plans covering human resources. The Company took actions according to the HR Master Plan and prepared additional strategies in line with the corporate vision. The Company focused on preparing itself to be ready for the expansion of its fully total water solution business. Its efforts included selecting employees with proper knowledge and experiences total fields of business, implementing employee development plans to ensure that the employees had suitable knowledge for their work, and acquiring additional knowledge for future business expansion through the development of an expert system, systematic knowledge management, and the holding of contests and applying the output from the contests for further innovation development.

With regards to the human resources strategic plan for 2020-2022, the main focus is on the creation of a happy workplace and a work-life balance to cater to the modern lifestyles, the different generations of the workforce, and the diversified work patterns. With an aim to promote efficient work performance, the Company planned to study appropriate work methods as well as apply new technologies to maximize operational efficiency. The Company's key goals are to create employee engagement, to become an employer of choice for new generations, and to be a high-performance organization.

REMUNERATION POLICY

The Company put in place the policy to pay remuneration and benefits including salary, bonus, provident funds, and other benefits to all levels of employees as appropriate to ensure alignment with each year's business performance and remuneration rates of industry peers.

In paying wages and remuneration to its employees, the Company focused on payments of compensation based on performance (Pay for Performance). Key Performance Indicators (KPIs) were used to support the performance evaluation of all levels of employees. KPIs at organizational, functional, and individual levels were aligned to ensure that the mutual work goals were formed in the same direction and in line with the corporate vision and missions. Regarding long-term remuneration, the Company put in place the system to evaluate the employees' performance and capabilities and made compensation payments according to the employees' capabilities, knowledge, and skills. The Company also paid attention to developing employees for their career path advancement.

Apart from remuneration payments, the Company also ensured that various forms of benefits were paid to its employees on a regular basis through the meetings of the Workplace Welfare Committee consisting of representatives from the employee side. At such meetings, employees were allowed to share opinions and suggestions regarding the welfare for the employees of the entire organization to ensure alignment with changing economic and social circumstances.

The administration of the employee welfare is as follows:

1. The Workplace Welfare Committee

As currently there is no labor union established by the Company, the Workplace Welfare Committee was established and operated by the employees. The members of the committee shall be elected every 2 years according to Section 97 of the Labour Protection Act B.E. 2541 (A.D.1998). All permanent employees have the right to apply for and elect a member of the committee. The election shall be held by the election committee to ensure transparency.

At present, the Company has two welfare committees, one at the head office and another at the Operational Center, with the total 10 members. Those committee members are representatives from all levels from the head office and from the Operational Center. They shall have the duty of supervising and discussing with the Company about the provision of welfare for the employees as well as giving useful advice and opinions to the Company and its employees.

2. Welfare and benefits for employees

The Company reviewed the policy on welfare schemes for its employees through the Workplace Welfare Committee to ensure appropriate welfare schemes provided for the employees who are considered as a stakeholder, for example:

- (1) Basic welfare schemes to which all employees are entitled, such as annual physical check-up program, child delivery medical expenses, health insurance, group life insurance, compensation for loss of income due to injuries or illnesses/disability/death, and natural disaster relief
- (2) Flexible benefits which employees can claim according to each person's necessity and specified limit
- (3) The provident fund scheme which is designed to promote employees' savings

Summary of all kinds of remuneration for the employees in 2019:

Remuneration	Amount (Baht)
Total salary	148,864,919.38
Bonus paid from 2018 business performance	46,094,787.00
Provident Fund (contributions) and others	35,238,826.17
Total	230,198,532.55

PERSONNEL DEVELOPMENT

As the Company plays a major role in managing Thailand's water resources with a view to enhancing the national economy and society in the eastern region through the provision of full-scale water services to the industrial and consumer sectors; personnel skills are a key engine to drive the organization's growth. One of the Company's challenges is to develop personnel capabilities and skills required for meeting the demands of the water users in a quick and diversified manner in order to achieve the corporate vision of "To be a leading total water solution provider of Thailand."

The Company's overall development plan still placed importance on the growth and development opportunities for its people of all groups and levels equitably and continuously through individual development plan (IDP). Such plan allows employees and their supervisors to jointly set up annual goals and individual development plans. In this regard, the competency-based development model was adopted, and the following courses were covered:

1. Core Courses: These mandatory courses are for all employees within the organization. They must complete these courses for their development. The courses are designed to encourage behaviors that enable the Company's achievement of its goals and vision. The courses are also to ensure that all functions of the organization comply with applicable laws, rules, and regulations.

2. Managerial Courses: These courses promote management skills and leadership for executives at all levels. The courses are designed to help drive the implementation of the business strategies and the achievement of the specific goals. The courses are also to prepare people with talents to achieve the next supervisory levels.

3. Functional Courses: These courses are to enhance knowledge, skills, and attitudes required for the performance of duties as required by respective job positions to meet specific goals.

4. Elective Courses: These courses are to enhance other skills for employees' own development at present and in the future.

KEY PERSONNEL DEVELOPMENT EFFORTS IN 2019

In 2019, there were a wide range of personnel development programs available for different fields of profession in the forms of trainings, seminars, real practices, and visitor programs in Thailand and overseas. Only trainings were also available to promote self-learning. Those programs helped forge people to become an expert in all dimensions relating to water; to be ready to take on new or changing missions upon business expansion; and to achieve career path advancement according to the business direction. This year, the Company focused on fixing and building up its foundation

for further development to keep up with the transformation in the digital world and to be ready for internal restructuring. Regarding the individual development plan (IDP) for 2019, the HR Department held discussions with the supervisors of the relevant functional units to analyze the skills required for the performance of duties and the career growth. The IDP for each employee was adjusted based on the employee's life cycle, starting from becoming a new hire and moving to the operations group, the management group, and the retirement group. In conclusion, the key personnel development efforts are as follows:

- 1) To prepare new hires to be ready for their work
- 2) To instill basic knowledge about sustainable growth through universal standards
- 3) To build capacity as a leader and a skilled worker
- 4) To promote a culture of self-learning
- 5) To retain personnel with desirable qualities through Talent & Succession Management
- 6) To exchange knowledge with external agencies
- 7) To manage internal knowledge systematically
- 8) To evaluate capabilities and performance in a fair manner

Further details are available in the Sustainability Report of 2019.

TALENT & SUCCESSION MANAGEMENT

In 2019, the Company conducted the succession management plan by stipulating mission critical positions that could have impact on the Company in the future if without the preparation of relevant successors. The key positions requiring successors were mainly managerial positions. Success profiles were determined, covering, for example, the objectives, main duties, expected competencies, and experiences of the position holders. The success profile was used as a guideline for selecting a successor from potential employees. The qualifications of each employee would be compared to the success profile of that particular position. The personal profile of each successor was also prepared and contained various information including general details of the employee and his/her knowledge, work experience, and past achievements. This profile provides each person's information and status of readiness.

Furthermore, to ensure that the assessment of the successor took into consideration a wider range of factors; the Company has additional assessment tools such as the tool for assessing attitudes, the 360-degree assessment tool, etc. Then, the results of the assessment would be used in developing the succession plan for each person to ensure alignment with the areas for improvement such that the successor would be ready for taking the position as specified in the succession plan in the future.

8 CORPORATE GOVERNANCE

8.1 CORPORATE GOVERNANCE POLICY

The Board of Directors formulated the Corporate Governance (CG) policy in writing on 1 August 2003 and, later in 2018, revised the CG policy according to the Office of the Securities and Exchange Commission (SEC)'s Corporate Governance (CG) Code for Listed Companies 2017. The Board of Directors assigned the Corporate Governance and Sustainability Development Committee to screen the policy and guidelines on policy implementation on an annual basis to ensure compliance with changing laws, regulations, and rules as well as recommendations by applicable institutions and international standards. The Company's Code of Conduct was set up as best business practices to be complied with by the directors, executives and employees. The Board of Directors and the executives must, as leaders, lead by example by performing duties with honesty, integrity, fairness, transparency, and auditability. This is to promote a corporate culture of good corporate governance in a sustainable manner.

The CG policy and the Code of Conduct of the East Water Group currently effective were considered and approved by the Board of Directors' meeting No. 10/2562 held on 13 September 2019. The documents were posted in the Company's website at www.eastwater.com and internal web for easy search. Also, the documents were presented to the Board of Directors and all employees for use as guidelines for their operations.

Moreover, all employees are required to conduct a knowledge test regarding business ethics and anti-corruption within the organization every year. The test results are used for measuring levels of knowledge and understanding of the employees. This is to bring better communications and enhance the employees' knowledge on a continuous basis to promote their awareness about duties and responsibilities.



8.2 SUBCOMMITTEES

The Board of Directors resolved to appoint the following 5 subcommittees: 1) Audit Committee 2) Investment Committee 3) Risk Management Committee 4) Corporate Governance and Sustainability Development Committee, and 5) Nomination and Remuneration Committee.

1. The Audit Committee consists of 3 independent directors who perform duties with independence, knowledge, capabilities, and experiences in reviewing financial reports, internal controls, and auditing. They also have insights into the Company's business and possess qualifications according to the Capital Market Supervisory Board's Notification and the Stock Exchange of Thailand (SET)'s Notification Re: Qualifications and Scope of Operations of the Audit Committee B.E. 2558 (A.D. 2015). The list of the committee members is as follows:

- | | |
|----------------------------------|----------|
| 1) Mrs. Tatchada Jitmahawong | Chairman |
| 2) Mrs. Asvini Tailanga | Member |
| 3) Admiral Sucheep Whoungmaitree | Member |

Mrs. Thidarut Kraiprasit, Executive Vice President of the Internal Audit Office, acts as Secretary to the Audit Committee.

Duties and Responsibilities of the Audit Committee

The Audit Committee shall be responsible for reviewing financial reports of the Company and adequacy of its financial control and risk management systems. Also, the committee shall review the compliance with laws, rules, regulations, and procedures relating to securities and exchange; and related party transactions or transactions that may involve a conflict of interest to ensure correctness, completeness, and transparency. Furthermore, the committee shall review the anti-corruption process to ensure alignment with the guidelines of relevant supervisory bodies; and the internal process regarding receiving and supervising the receiving of leads or tips and handling of complaints; and the consideration and selection of an external auditor and the determination of an audit fee. Details of the Audit Committee's Charter are available in the Company's website.

The Company already put the annual operating results in the Report of the Audit Committee.

2. Investment Committee The of 4 directors who have knowledge, capabilities and experiences in investment, project management, and economics and finance as follows:

- | | |
|---------------------------------------|----------|
| 1) Mr. Surachai Kanasa | Chairman |
| 2) Mr. Kritsada Sunkhamani | Member |
| 3) Mr. Virgilio Cervantes Rivera, Jr. | Member |
| 4) Mr. Jirayut Rungsritthong | Member |

Mr. Charin Sony, Senior Executive Vice President and Chief Strategy and Business Development Officer, acts as Secretary to the Investment Committee.

Duties and Responsibilities of the Investment Committee

The Investment Committee shall be responsible for considering the Company's investment policy, determining clear investment criteria, providing investment-related advice or recommendations to the management and the Board of Directors, and considering and screening investment issues and providing opinions to the Board of Directors as well as monitoring progress updates on key investment projects. In addition, the committee has authority to approve procurement requests for investment projects according to the procurement procedures of the Company and within specified limits. Details of the Investment Committee's Charter are available in the Company's website.

The Company already put the annual operating results in the Report of the Investment Committee.

3. The Risk Management Committee consists of 3 directors who have knowledge, capabilities, experiences and understanding about the Company's business as well as expertise in the water business, finance, engineering, and technology and information which are key drivers of the Company's achievement of its objectives as follows:

- | | |
|----------------------------|----------|
| 1) Mrs. Asvini Tailanga | Chairman |
| 2) Mr. Pisit Hongvanishkul | Member |
| 3) Mr. Jirayut Rungsithong | Member |

Mr. Charin Sony, Senior Executive Vice President and Chief Strategy and Business Development Officer, acts as Secretary to the Risk Management Committee.

Duties and Responsibilities of the Risk Management Committee

The Risk Management Committee shall be responsible for determining and reviewing the risk management policy to ensure alignment with the objectives, goals and strategies as well as risk appetite. The committee shall be responsible for supervising and supporting risk management operations that are in line with the risk management policy. Also, the committee shall provide recommendations on and consider and endorse risk management plans; monitor and review risk factors; and communicate and provide advice on risk management to ensure consistent practices organization-wide. Details of the Risk Management Committee's Charter are available in the Company's website.

The Company already put the annual operating results in the Report of the Risk Management Committee.

4. The Corporate Governance and Sustainability Development Committee consists of 3 independent directors who have knowledge, capabilities, experiences and understanding about the Company's business as well as knowledge about compliance supervision, corporate governance, and sustainability development as follows:

- | | |
|------------------------------|----------|
| 1) Mr. Amorn Laohamontri | Chairman |
| 2) Mrs. Tatchada Jitmahawong | Member |
| 3) Mrs. Asvini Tailanga | Member |

Mrs. Namphon Rassadanukul, Executive Vice President and Company Secretary, acts as Secretary to the Corporate Governance and Sustainability Development Committee.

Duties and Responsibilities of the Corporate Governance and Sustainability Development Committee

The Corporate Governance and Sustainability Development Committee shall have 2 main duties as follows:

1) Corporate Governance: To consider policies and practices regarding good corporate governance, anti-corruption and code of conduct of the business group to ensure alignment with requirements of the SET, the SEC or applicable supervisory bodies. The committee shall review such policies and practices at least once per year and monitor the implementation thereof.

2) Sustainability Development: To determine policies, strategies and action plans on sustainability through managing water supply based on sharing water resources with communities and maintaining balances in ecosystems; to build confidence of the stakeholders through transparent and auditable work processes according to the framework of the Global Reporting Initiative (GRI); and to ensure that the management operates business with social and environmental responsibility and reflects such concept in its action plans to ensure that all functions comply with the key objectives, goals and strategies of the Company. Details of the Corporate Governance and Sustainability Development Committee's Charter are available in the Company's website.

The Company already put the annual operating results in the Report of the Corporate Governance and Sustainability Development Committee.

5. The Nomination and Remuneration Committee consists of 4 independent directors who have knowledge, capabilities and experiences in nomination and consideration of qualified persons, finance, and performance evaluation as follows:

- | | |
|----------------------------------|----------|
| 1) Admiral Sucheep Whoungmaitree | Chairman |
| 2) Mr. Surachai Kanasa | Member |
| 3) Mr. Bumrungsak Chingwangtakor | Member |
| 4) Miss Somchint Pilouk | Member |

Miss Chinda Mahaisawariya, Senior Executive Vice President and Chief Supporting Officer, acts as Secretary to the Nomination and Remuneration Committee.

Duties and Responsibilities of the Nomination and Remuneration

The Nomination and Remuneration Committee shall have 3 main duties as follows:

1) **Nomination:** The committee shall consider structures and compositions of the boards of directors of the group companies and consider qualifications of directors to ensure alignment with criteria of applicable supervisory bodies. The committee shall prepare the directors skills matrix and determine criteria and methods for nominating candidates for directors and committee members of the group companies, the President & CEO, and top executives of the affiliated companies. Also, the committee shall prepare and review individual development plans of high-level executives of the Company and its group companies as well as succession plans.

2) **Corporate Performance Evaluation:** The committee shall consider criteria for evaluating the Company's annual performance to ensure alignment with policies and missions assigned by the Board of Directors; monitor and evaluate the performance comparable to evaluation criteria and recommend guidelines and measures to improve operational efficiency; and consider performance evaluation criteria of the President & CEO.

3) **Remuneration:** The committee shall determine formats and criteria for paying remuneration of the Board of Directors, respective subcommittees, and the President & CEO; and consider policy frameworks on remuneration and other benefits, limits of bonus rates and annual salary increase rates

of the employees of the business group. Details of the Nomination and Remuneration Committee's Charter are available in the Company's website.

The Company already put the annual operating results in the Report of the Nomination and Remuneration Committee.

8.3 NOMINATION AND APPOINTMENT OF DIRECTORS AND TOP EXECUTIVES

Nomination and Appointment of Directors

In appointing directors, the Nomination and Remuneration Committee consisting of independent directors shall consider qualifications of candidates for directors of the business group and those proposed by the shareholders to ensure that they are suitable for the nature of the Company's business. The committee shall also consider the candidates' diversified skills, knowledge and expertise by preparing the director skills matrix to ensure compliance with regulations specified by applicable supervisory bodies. Furthermore, the committee shall consider and review criteria for independent directors' qualifications in accordance with the definition of an independent director specified by the Company and requirements of the SEC and the SET.

Summary of attendance of subcommittees' meetings for 2019

Name-Surname	Number of attended meetings / Number of meetings				
	Audit Committee	Investment Committee	Risk Management Committee	Corporate Governance (CG) and Sustainability Development (SD) Committee	Nomination and Remuneration Committee
1. Mr. Amorn Laohamontri ¹	3/3	-	-	3/3	-
2. Mr. Surachai Kanasa	-	6/6	-	-	7/8
3. Mrs. Tatchada Jitmahawong ²	16/17	-	-	5/5	3/3
4. Mr. Kritsada Sunkhamani ³	-	6/6	1/1	-	-
5. Mr. Virgilio Cervantes Rivera, Jr.	-	3/6	-	-	-
6. Mrs. Asvini Tailanga ⁴	17/17	-	4/4	4/4	-
7. Miss Somchint Pilouk ⁵	-	-	-	-	5/6
8. Mr. Pisit Hongvanishkul ⁶	-	-	3/3	-	-
9. Mr. Bumrungsak Chingwangtakor ⁷	-	-	-	-	6/6
10. Admiral Sucheep Whoungmaitree ⁸	9/9	-	-	-	3/3
11. Mr. Jirayut Rungsrithong	-	6/6	3/4	-	-

Remarks : ¹ Mr. Amorn Laohamontri

² Mrs. Tatchada Jitmahawong

³ Mr. Kritsada Sunkhamani

⁴ Mrs. Asvini Tailanga

⁵ Miss Somchint Pilouk

⁶ Mr. Pisit Hongvanishkul

⁷ Mr. Bumrungsak Chingwangtakor

⁸ Admiral Sucheep Whoungmaitree

was appointed as a member of the Audit Committee and a member of the CG and SD Committee from 7 May 2019 through 21 June 2019. He was then appointed as Chairman of the CG and SD Committee on 21 June 2019. was appointed as Chairman of the Audit Committee on 8 March 2019 and a member of the Nomination and Remuneration Committee from 7 May 2019 through 21 June 2019.

was appointed as a member of the Risk Management Committee from 10 May 2018 through 7 May 2019. was appointed as a member of the CG and SD Committee on 8 March 2019.

was appointed as a member of the Nomination and Remuneration Committee on 7 May 2019.

was appointed as a member of the Risk Management Committee on 7 May 2019.

was appointed as a member of the Nomination and Remuneration Committee on 7 May 2019.

was appointed as Chairman of the Nomination and Remuneration Committee and a member of the Audit Committee on 21 June 2019.

Criteria and methods for nominating candidates for directors

1) The Company shall allow the shareholders to propose the names of the candidates for election as directors for submission to the shareholders' meeting in advance between October and December of each year. Every shareholder shall have the equal right to propose the names of the candidates for directors at the shareholders' meeting.

2) The Nomination and Remuneration Committee shall consider and screen the names of the persons with appropriate qualifications and those proposed by the shareholders (if any) before submission thereof to the Board of Directors for consideration and further submission thereof to the shareholders' meeting for approval.

3) The Board of Directors, excluding any director with any beneficial interest, shall consider the qualifications of each candidate nominated for a director carefully and submit the list of appropriate director candidates to replace the directors retiring for rotation to the respective annual general meeting of shareholders for election.

4) At the shareholders' meeting, the election of each director shall be voted separately. The shareholders shall have the right to elect the nominated candidates for directors according to the number of directors to be elected at that particular meeting. Vote splitting is not allowed.

5) The candidates with the highest number of votes shall be elected. However, the number of elected candidates must not exceed the number of directors to be elected at that particular meeting. In the case where the two lower ranking candidates get a tie vote and this may cause the number of the elected candidates to exceed the number of directors to be elected at that particular meeting; the Chairman of the Meeting shall cast an additional vote to break the tie.

6) In the case where a director resigns or there is a vacancy in the Board of Directors for other reason than retiring by rotation, the Nomination and Remuneration Committee shall nominate a new candidate with appropriate qualifications to the Board of Directors' meeting for consideration and approval. The Board of Directors' resolution for this matter shall be passed by votes of no less than three-fourths of the remaining number of the directors.

Criteria for nominating candidates for top executives

The Nomination and Remuneration Committee stipulated criteria for nominating candidates for the top executive position of President & Chief Executive Officer. Generally, the Company shall select and appoint a person to the top executive position based on both internal and external pools of candidates. The high-level executive candidates with qualifications according to the criteria shall be proposed to the Nomination and Remuneration Committee for preliminary consideration, screening and endorsement before submission thereof to the Board of Directors for approval. In addition, the Nomination and Remuneration Committee shall nominate candidates for

the top executive positions of its group companies by considering the Company's executives with knowledge, capabilities and experiences beneficial to the operations of the Company and its group companies. Then, the nominated candidates shall be proposed to the Board of Directors of the Company and the boards of the group companies for consideration and appointment.

8.4 SUPERVISION OF SUBSIDIARIES AND ASSOCIATES

The Company's Board of Directors has a supervisory mechanism allowing them to take control of the management and responsibility for the subsidiaries' operations to safeguard the Company's investment interests. In so doing, the Company's high-level executives have been appointed as directors or executives in the subsidiaries to co-manage the business both at policy-making and operational levels. The aforesaid appointment of the Company's high-level executives must be endorsed as per the resolution of the Company's Board of Directors' meeting.

The Company set out policies to manage its subsidiaries, gist as follows:

(1) Investment Policy

1) The subsidiaries must perform their duties with responsibility by upholding the interests of the Company and its shareholders, considering investments with appropriate and fair returns, and maintaining the stable financial status to secure a going concern and business growth as priorities.

2) Once the boards of directors of the subsidiaries have considered and approved any business undertakings, they must always report the matters to the Company's Board of Directors for acknowledgement.

3) If a subsidiary has any business considered to be a related party transaction or an acquisition/disposition of any significant asset or any other significant transaction such as approval for a capital increase/decrease or a dissolution of a subsidiary, in order to comply with the SEC's Notification, it must seek prior consideration and approval from the Company's Board of Directors. Any major investment project by a subsidiary must first be approved by its board of directors with a representative of the Company joining the board to consider the project before submission thereof to the Company's Board of Directors for further consideration.

4) The subsidiaries must provide reports of their operating results and key business operations including business sensitivity analysis and performance evaluation as compared to targets. The reports should contain management comments or suggestions for use as guidelines to support formulation of policies or improvement of business operations of the subsidiaries to achieve continued development and growth.

(2) Central Administration Policy

1) The Company will appoint its high-level executives to jointly manage the subsidiaries at policy and operational levels to ensure that the business operations are in the direction of the core business for the utmost benefit of the

whole group, that the policies and strategies are consistent, and that the subsidiaries can make profits in the future.

2) Regarding internal controls, the subsidiaries must place importance on managing risks and solving problems identified from the examination and assessment of effectiveness and efficiency of internal controls by the Internal Audit Office in a timely manner. Regular reviews on work systems must be done to mitigate risks to acceptable levels. Additionally, employee regulations and procurement procedures must be carried out with efficiency, speed, flexibility and consistent standards. The budget limits for human resources management and employee welfare schemes must be consistent with and proportionate to the corporate performance of the subsidiaries.

(3) Finance and Accounting Policy for Subsidiaries

1) Financial Management and Administration

1.1 In financial sourcing, the subsidiaries must provide information about their loan needs by presenting the sources of needs in terms of investment projects to the Finance and Accounting Department of the Company at least 6 months prior to the beginning of the said projects. This is to be useful for considering options of funding sources with appropriate offers.

1.2 Announced dividend payments shall not be less than 30% of a net profit posted for each accounting period, except for when there is an appropriate reason to use a portion of the cash dividends.

1.3 Key financial ratios must be maintained in strict compliance with the loan contract conditions and reported to the Finance and Accounting Department for acknowledgement on a monthly basis.

2) Budgeting

2.1 Investment budget preparation and relevant actions must be undertaken according to each company's budgeting procedures and in line with the Company's budgeting regulations.

2.2 Budget preparation and review must be done according to specified time frames and information submission must be in line with the Company's operations.

2.3 Investment and operational budget spending shall be monitored and evaluated appropriately.

3) Accounting

3.1 Accounting practices must be in accordance with the accounting policies as per Thailand's accounting standards and under the regulation of a subsidiary of a parent company (the Company) which is listed on the SET.

3.2 The subsidiaries' financial statements to be submitted to prepare the consolidated financial statements must be reviewed by the business group's external auditor as appointed and endorsed by the Company's Board of Directors and approved by the annual general meeting of shareholders' resolution.

3.3 Submission of the subsidiaries' financial statements to the Company to prepare the consolidated financial statements must be done according to the timeline

specified by the Finance and Accounting Department for each quarter.

3.4 Preparation of the books of accounts of the subsidiaries must be based on the chart of accounts in the general ledger system and the accounting software system of the Company.

4) Taxation

4.1 Tax preparation and filing shall be according to law.

4.2 In the case where there is any significant tax risk issue, that subsidiary shall submit relevant information to the Finance and Accounting Department of the Company for acknowledgement immediately should an emergency arise. Summary reports on progress updates on relevant actions shall be prepared on a quarterly basis.

4.3 The Company has taxation plans which are under direct responsibility of the Finance and Accounting Department. This is to ensure proper and complete tax filing as required by law. New tax-related laws are also monitored regularly.

The Company does not have a shareholders' agreement to manage its subsidiaries and does not operate business as a holding company.

8.5 SUPERVISION OF INTERNAL INFORMATION USE

The Company developed a policy on prevention against use of internal information. The policy is part of the good corporate governance principles of the business group and shall be complied with by all directors, executives and employees. Details of the policy can be summarized as follows:

(1) Policy on prevention against use of internal information

Directors, executives and permanent employees of the Company as well as their spouses and minor children shall be prohibited from using non-public information of the organization for trading of securities for personal gain or for the benefit of any individual or any particular group of individuals.

(2) Policy on trading of the Company's securities

Directors, executives and permanent employees of the Company as well as their spouses and minor children shall refrain from buying, selling or transferring the Company's shares during the one-month period prior to the disclosure of the financial statements to the SET and during the three-day period after the disclosure of the financial statements to the SET. This is to allow the shareholders and the investors to have enough time to access and understand key contents of the Company's information and news or financial statements disclosed to the SET.

The directors and high-level executives must report their trading of the Company's shares at least 1 day before the trading transaction to the Board of Directors or its designated person.

The directors are required to report all of their purchases-sales of the Company's shares to the Board of Directors' meetings for acknowledgement.

(3) Policy on business information of the group companies

Directors, executives, employees, supporting officers, and outsourced staff of the group companies or subsidiaries shall be obliged by laws and professional ethics not to disclose any confidential information and documents or trade secrets.

8.6 AUDITOR'S FEE

1. Audit fee

The Company and its subsidiaries paid an audit fee of Baht 3,157,000 to the external auditor of the Company and its subsidiaries for the past year. The audit fee for the Company only was Baht 1,165,000 and the out of package expense was paid to the external auditor of the Company and its subsidiaries at the rate of no more than 2% of the audit fee.

2. Non-audit fee

The Company and its subsidiaries paid a non-audit fee consisting of a consultation fee on financial reporting standards No. 9, 15 and 16 amounting to Baht 500,000 and a consultation fee for a capacity assessment project amounting to Baht 2,300,000.

8.7 ADOPTION OF THE SEC'S CG CODE FOR LISTED COMPANIES 2017

The Company complies with its CG Code which contains the following 8 principles:

Principle 1 To realize the roles and responsibilities of the Board of Directors as a leader to create long-term value for the organization

The Board of Directors shall ensure that all directors and executives perform duties with responsibility, prudence, honesty, and integrity for the Company. Also, the board shall ensure the compliance with laws, rules, and resolutions of the shareholders' meeting. In addition, the board shall supervise any instruction, approval, and formulation of strategies and operational policies as well as allocation of key resources to achieve specific objectives and goals. The board shall monitor and supervise risk mitigation and financial security control. The Company has established its board structure in terms of size, composition, and proportion of independent directors as appropriate and with qualifications necessary to bring the Company towards achievement of its objectives and goals under the good corporate governance principles. The details of scope, authority, duties and responsibilities of the board are available in the Management Structure section, Page 52

Principle 2 To define key objectives and goals in support of business sustainability

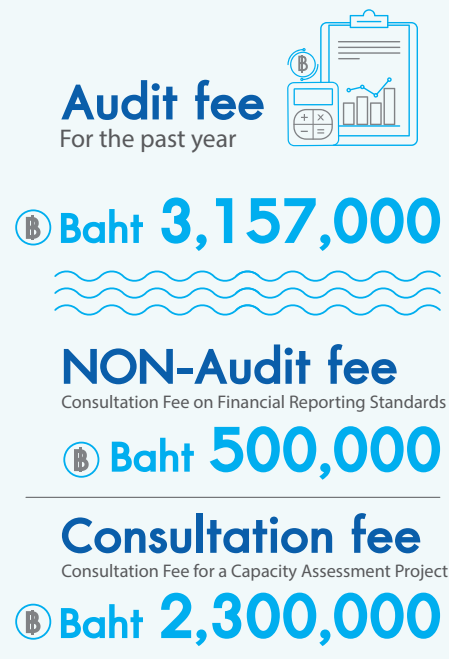
The Board of Directors shall oversee and ensure that the management prepares a corporate vision and strategies subject to annual reviews. In July 2019, the executives of the business group participated in a workshop to review the corporate vision and missions and prepare the strategic plan for 2020-2022 for submission to the Board of Directors for

approval at its meeting No.10/2562 held on 13 September 2019. Moreover, the Company launched additional strategies such as Human Capital, Information Capital, and Organization Capital, in order to support the execution of all strategies to achieve the missions and vision of the Company in a more efficient manner. Then, the management prepared annual action plans and budget plans and submitted them to the Board of Directors for approval. In monitoring the implementation of the said strategies and annual action plans, the Corporate Strategy Department shall be responsible for overseeing and monitoring the reporting of operating results to the management team on a monthly basis.

Principle 3 To enhance effectiveness of the Board of Directors

The Company established the structure of its Board of Directors in alignment with requirements of the Office of the SEC and the SET, especially in terms of size, composition and proportion of independent directors. The independent directors shall have no role in the management and shall not be the Company's shareholders. The Chairman of the Board of Directors shall be an independent director and shall not be a chairman or a member of any subcommittee, with the duties of supervising, monitoring, and considering and stipulating meeting agenda items of the Board of Directors together with the President & CEO. This is to ensure that the performance of duties of the Board of Directors and the management is efficient and meets the Company's main objectives and goals.

The Board of Directors consists of directors with diversified qualifications in terms of skills, experiences, capabilities and expertise. Details of the director skills matrix are shown below.



Directors' Names	Private Sector Management	Government Sector Management	Water Management	Engineering	Economics / Finance / Accounting	Laws	Auditing	Public Policy / CG / CSR	Information Technology
1. Mr. Veerasak Kositpaisal	•			•			•	•	
2. Mr. Amorn Laohamontri		•				•	•		
3. Mrs. Tatchada Jitmahawong		•			•		•		
4. Mr. Surachai Kanasa		•						•	
5. Mr. Kritsada Sunkhamani		•	•	•					
6. Mrs. Asvini Tailanga	•				•		•		
7. Mr. Virgilio Cervantes Rivera, Jr.	•	•	•		•				
8. Mr. Pisit Hongvanishkul		•	•	•	•				
9. Mr. Bumrungsak Chingwangtakor		•	•		•	•			
10. Miss Somchint Pilouk		•		•					
11. Admiral Sucheep Whoungmaitree	•	•							
12. Mr. Jirayut Rungsrihong	•	•	•	•	•				•
Advisors to the Board of Directors									
1. General Trairat Pangaratna		•							
2. Mr. Siwa Sangmanee	•	•					•		
3. Mr. Vicha Nilpetploy		•				•			

The Company laid down a set of practices to enhance effectiveness of the Board of Directors. For example, each director shall be allowed to assume a position in up to 5 listed companies; the Board of Directors' meeting schedule shall be determined in advance for the entire year so that all directors can allocate time to attend the meetings together; and according to the Company's Articles of Association, at each Board of Directors' meeting, there must be at least two-thirds of the total directors attending the meeting to constitute a quorum. In 2019, most directors attended at least 75% of the total meetings of the year.

The Company provides orientations for new-hire directors so that they understand the business nature and guidelines of the Company as well as other relevant information such as shareholding structure, management structure, past operating results, key construction projects of the Company, and practices regarding corporate governance, laws, rules, and regulations concerned, for the benefit of their performance of duties as directors.

The President & CEO and the EVPs are lecturers, providing summaries of such information while the Company Secretary prepares important documents including the Company's Articles of Association, rules and procedures, CG Code, subcommittees' charters, previous Board of Directors' meetings minutes, annual reports, etc. Also, the Company arranged the directors' trips to visit the operational centers in Royong and Chonburi, the reservoirs, the pumping stations, and the projects under construction.

Additionally, the Company supports its directors to continuously attend trainings and develop necessary knowledge in various fields, such as corporate governance, risk management, internal control, water technology, and relevant laws, so as to gain understanding about the business and abilities to perform duties and supervise the Company's operations efficiently. The directors are encouraged to attend useful training courses hosted by the Thai Institute of Directors (IOD) Association and other reputable institutes.

In 2019, the directors also attended the following trainings and seminars:

Directors' names	Trainings / seminars	Institutes
Mr. Veerasak Kositpaisal Mr. Amorn Laohamontri Mr. Surachai Kanasa Mr. Bumrungsak Chingwangtakor Mr. Jirayut Rungsritthong	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	Bangkok Global Law Office Limited
Mrs. Tatchada Jitmahawong	"How to Develop a Risk Management Plan (HRP)" Class 22/2019	The Thai Institute of Directors Association (IOD)
	"Board Nomination & Compensation Program (BNCP)" Class 7/2019	
	Audit Committee Forum 2019: "Strategic Audit Committee: Beyond Figure and Compliance"	
	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	
Mr. Kritsada Sunkhamani	"Director Certification Program (DCP)" Class 281/2019	The Thai Institute of Directors Association (IOD)
	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	Bangkok Global Law Office Limited
Mr. Virgilio Cervantes Rivera, Jr.	"Director Accreditation Program (DAP) English" Class 158/2019	The Thai Institute of Directors Association (IOD)
	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	Bangkok Global Law Office Limited
Miss Somchint Pilouk	"Director Certification Program (DCP)" Class 283/2019	The Thai Institute of Directors Association (IOD)
	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	Bangkok Global Law Office Limited
Mr. Pisit Hongvanishkul	"Director Certification Program (DCP)" Class 277/2019	The Thai Institute of Directors Association (IOD)
	Lunch Talk: "The new business laws including the Public Private Partnership Act, the Ratchaphatsadu Land (State Land) Act, and the Private Data Protection Act"	Bangkok Global Law Office Limited

Principle 4 To recruit and develop high-level executives and manage human resources

The Board of Directors assigned the Nomination and Remuneration Committee (NRC) to be responsible for determining criteria and methods for nominating persons with suitable qualifications to the positions of President and Chief Executive Officer, top executives of affiliated companies, and chief officers of different divisions. This is to ensure that high-level executives have knowledge, skills, experiences and characteristics required for propelling the organization towards its goals. Also, the NRC shall be responsible for determining formats and criteria for paying remuneration and considering criteria for evaluating performance of the President & CEO according to his responsibilities in order to motivate him to lead the organization's operations to achieve specific targets. The NRC shall supervise succession plans for the President & CEO and high-level executives. The results of the implementation of the said plans shall be reported to the Board of Directors for acknowledgement at least once per year. The Company promotes and supports the President & CEO and the high-level executives to attend training and gain more knowledge and experience beneficial to the operations.

Principle 5 To promote innovation and conducting business with responsibility

One of the Company's missions is to pay attention to the enhancement of competitiveness in terms of technology and innovation by using technology to reduce rates of electricity consumption for pumping and distributing water which is the Company's main asset and to reduce rates of water loss in the pipeline system. In addition, employees are encouraged to create innovations at work. The Company operates business with responsibility for communities, society, and the environment and with the commitment to establish good relationships with the stakeholders with transparency and according to the corporate governance principles. The Company's policy on sustainability management is as follows:

1. Good Corporate Governance

The Company shall operate business according to the good corporate governance principles, laws, and best practices at organizational, national, and international levels, with the commitment to transparency, auditability, anti-corruption, and the benefit of all stakeholders in a fair manner.

2. Responsibility for Changes in Water Source Quality

The Company shall control its business undertakings to mitigate impacts on the activities throughout the value chain. It shall maintain and preserve upstream areas as well as planning and managing water sources. It shall also control risks of possible impacts from climate change. It shall provide collaboration with local organizations in managing environmental problems to conserve natural resources. The management has used the ISO9001:2015 standard system, the ISO14001:2018 quality management system, the environmental management system, and the ISO45001:2018 occupational management and safety system as mechanisms to support operational planning and integrated problem solutions.

3. Innovation Management

The Company shall consistently develop business strategies and business processes, promote creation of innovations for water and energy source management to the highest benefit. This is to create added value for the Company's products and growth in the long-run by taking into account customer and stakeholder satisfaction for sustainable economy, society and environment.

4. Human Rights and Employment to Drive Economy towards Sustainability

The Company shall treat its employees equally and fairly and shall promote the hiring of local workforce, the disadvantaged, and the disabled without discrimination, despite the differences in terms of race, religion, gender, age, education, etc. The Company shall provide welfare and benefits as well as occupational safety, health and environment. The Company shall support building of capacity and expertise in different work fields as well as raise employees' awareness and participation in creating good works with efficiency and effectiveness for the organization, society, and the environment.

5. Participation in Community and Social Development and Learning Promotion

The Company shall promote sustainable water management approaches based on the sharing of usage of water resources with the communities and maintaining a balance in the eco-system by adopting the sciences of the King "Understanding, Connecting, and Development" for sustainable development of the communities. In addition, the Company prepared and announced the use of the "Code of Conduct of the East Water Group" in 2003, which has been subject to annual reviews. The Company also announced the use of the Anti-Corruption policy in line with assessment guidelines of the Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). The Company was re-certified by the CAC in November 2018.

The Code of Conduct of the East Water Group consists of the following 14 topics:

- 1) Human Rights and Labour
- 2) Occupational Health, Environment, and Safety
- 3) Anti Corruption
- 4) Giving or Receiving Gifts or Assets or Other Benefits
- 5) Ethics on Procurement and Treatment of Trading Partners
- 6) Conflicts of Interest
- 7) Related Party Transaction
- 8) Political Actions
- 9) Treatment of Information and Properties
- 10) Disclosure of Information and Communication
- 11) East Water Group (EWG) Transactions
- 12) Operating Business Overseas
- 13) Trading Competition
- 14) Prevention of Money Laundering

Principle 6 To ensure that appropriate risk management and internal control systems are in place

The Board of Directors assigned the Risk Management Committee (RMC) be responsible for determining and reviewing the risk management policy once per year to

ensure alignment with the corporate objectives, goals, strategies, and acceptable risk levels. The RMC shall supervise and consider risk management plans and provide recommendations to risk management functions under the Corporate Strategy Department. The RMC shall work together with the Internal Audit Office who independently performs work. The RMC shall be responsible for developing and reviewing efficiency and adequacy of the risk management and internal control systems; and submit reports of the review results to the Audit Committee and disclose the review reports in the annual reports. Further details are available in the “Internal Control and Risk Management” section on Page 78

The revised Code of Conduct of the East Water Group of 2019 included the practice regarding trading of securities and use of internal information. It is stipulated that “Directors, executives, and permanent employees of the Company as well as their spouses and minor children shall be prohibited from using non-public information of the organization for trading of securities for personal gain or for the benefit of any individual or any particular group of individuals. In addition, they shall refrain from buying, selling or transferring the Company’s shares during the one-month period prior to the disclosure of the financial statements to the SET and during the three-day period after the disclosure of the financial statements to the SET.” The directors and high-level executives must report their trading of the Company’s shares at least 1 day before the trading transaction to the Board of Directors or its designated person. The directors are required to report all of their purchases-sales of the Company’s shares to the Board of Directors’ meetings for acknowledgement. Besides, the directors, the high-level executives, the first 4 executives next to the top executives, or the holders of the positions equivalent to the fourth-ranking executive positions shall report the shareholding status of themselves and related parties at the time of assuming the positions to the SEC within 30 days from the dates of first assuming the positions. They shall also report any change to the shareholding status within 3 days from the date of such change.

The Company has measures to prevent a conflict of interest which shall be referred to as an event or action from which the employee has person gain to the level that affects his/her decision making or performance of duties in his/her respective position, and directly or indirectly affects the benefit of the whole business group. As such, the employees are required to disclose their possible conflicts of interest to their supervisors by filling out the conflict of interest disclosure form of the business group. They shall also submit the completed form to the Human Resources Department, the Internal Audit Office, and the Company Secretary Office for acknowledgement.

In 2019, the Board of Directors endorsed an amendment to the complaint handling process. In this regard, the Secretary of the Corporate Governance and Sustainability Development Committee shall collect original complaints. The investigation committee shall be set up to investigate into the complaints. The disciplinary action committee

shall be set up also. Timeframes for different steps during the process shall be more clearly established. Summary reports of the operations shall be submitted to the President & CEO, the Corporate Governance and Sustainability Development Committee, and the Audit Committee for acknowledgement on a quarterly basis.

The Company has a number of communications channels through which complainants can send complaints as follows:

- (1) The Company’s website: www.eastwater.com
- (2) E-mails:
 - Audit Committee: AC_EW@eastwater.com
 - President and CEO: CEO@eastwater.com
 - Corporate Secretary: Corporate_secretary@eastwater.com

- (3) Regular mails:

Audit Committee

Eastern Water Resources Development and Management Public Company Limited

East Water Building, 25th Floor,

1, Soi Vibhavadi Rangsit 5, Vibhavadi Rangsit Road

Chom Phon Subdistrict, Chatuchak District, Bangkok 10900

- (4) Opinion Box: Human Resources Department

Apart from the aforesaid channels, the Company established an investor relations function to receive opinions and complaints from its shareholders and investors. There is also a mechanism to protect the whistleblowers as they participate in monitoring and preserving the interests of the Company.

Principle 7 To maintain reliability of financial information and disclosure

The boards of directors of the Company and its affiliated companies shall ensure that the management disseminates the Company’s key information in a comprehensive, correct, sufficient, and timely manner and according to applicable rules, regulations, standards and practices. Such key information includes financial reports and management discussion and analysis (MD&A) to support the disclosure of quarterly financial statements. All information will be published through the SET’s system and via the Company’s website www.eastwater.com and www.uu.co.th in both Thai and English. The management always presents most up-to-date information and provides contents to the Company’s investor relations function. The Company published its first Sustainability Report according to the Global Reporting Initiative (GRI) in 2011, and such practice has been continued since then.

The Company established a financial analysis and investor relations function to disseminate its financial and general information to its shareholders, investors, securities analysts, and investment credit rating agencies, in the section of “Investor Relations Information” in the Company’s website for ease of access and research by interested persons. If shareholders, investors and relevant parties have any inquiries, they can contact the financial analysis and investor relations function at Tel. 0-2272-1600, Ext. 2438/2411 or Email: IR@eastwater.com or the Company’s website.

In 2019, the Company held a number of activities to disseminate information and give explanation and allow participants to ask questions. The activities were joined by the high-level executives to help answer the questions. The details can be summarized as follows:

Type of Activities	No. of Activities
Roadshow to meet with domestic investors	1
Analysis meeting with analysts/fund managers	1
Press meeting	1
Credit rating review	1
Company visits to meet up with executives and ask about management guidelines and progress updates on different projects	6
Tele-conference calls	15
“SET meets retail investors” (Opportunity Day)	1
Site visits	2

Principle 8 To support engagement and communication with the shareholders

The Company realizes its shareholders’ basic rights and always facilitates convenience to their exercising rights, for example, the rights to buy, sell or transfer shares, the rights to dividend payments, the rights to receive sufficient news and information through and at appropriate channels and times, the rights to attend and vote at shareholders’ meetings, the rights to elect or remove directors, and the rights to receive updates on changes in the Company to support decision making.

It is the Company’s policy to encourage all shareholders to attend shareholders’ meetings to equally exercise their rights at the meetings. The Company requires that an annual general meeting of shareholders be held once per year within 4 months from the last day of the accounting period of the Company. In the case where it is urgent to propose a special meeting agenda item which is affecting or relevant to the shareholders’ interests or is required by a particular condition or rule or regulation or law to seek approval from the shareholders; the Company may convene an extraordinary general meeting of shareholders on a case by case basis.

In 2019, the Company held its annual general meeting of shareholders on Tuesday, 23 April 2019 at Centara Grand at Central Plaza Ladprao. The Company had not convened any extraordinary general meeting of shareholders. The Company gave due care to its AGM and facilitated convenience to the shareholders prior to the meeting date, for example:

1) Allowing the shareholders to propose meeting agenda items to the AGM and propose candidates for election as directors 3 months in advance from 1 October to 31 December 2019 through the SET’s information system and the Company’s website.

2) Providing information of the date and agenda of the AGM 2019 to the shareholders through the SET’s

information system and the Company’s website at least 30 days prior to the meeting date.

3) Submitting AGM invitation letters and agenda details to the shareholders together with proxy forms for those unable to attend the AGM in Thai and English; providing meeting documents to the shareholders at least 28 days prior to the meeting date; and publishing relevant information in the newspaper for 3 consecutive days, at least 3 days before the meeting date. The Company disclosed its AGM invitation letter and supporting documents in its website 30 days before the meeting date.

On the date of AGM 2019, the Company facilitated convenience to its shareholders as follows:

1) The e-voting program was adopted and the barcode system was used for the vote counting process.

2) Three representatives from the legal firm and the shareholders at the meeting were asked to inspect the vote counting process at the meeting.

3) Before the meeting started, the chairman of the meeting informed about the voting and counting procedures for each agenda item. Before the meeting passed a resolution for any agenda item, the chairman would allow all shareholders to ask any question or give any comment about the Company’s operations and advise the shareholders to discuss a particular matter within an appropriate time frame. The shareholders also had the equal rights to provide suggestions. The directors and executives gave clear answers to all questions before the meeting was asked to vote. Regarding the agenda item on the election of directors, the Chairman asked the shareholders to vote in a separate ballot for each individual director.

4) The chairman informed the meeting of the voting results for each agenda item before proceeding with the next agenda item and before the end of the meeting. The Chairman conducted the meeting according to the Company’s Articles of Association and in order of the

agenda items specified in the invitation letter. An exception applies in the case where the meeting resolves to change the order of the agenda items with a vote of not less than two-thirds of the number of the shareholders present at the meeting. There was no change to the order of the agenda items specified in the AGM invitation letter. After the meeting considered all agenda items, the Chairman informed the shareholders that the shareholders representing at least one-third of the total shares issued may ask the meeting to consider other business.

After the end of the AGM 2019, the Company published the AGM resolutions through the SET's information system immediately on the same day of the meeting. The Company also prepared the AGM minutes with important and comprehensive contents including the clearly specified resolutions of the meeting and the voting results in the categories of approval, disapproval and abstention. The said AGM minutes were posted in the Company's website and submitted to the SET within 14 days from the meeting date.

8.8 COMPLIANCE WITH THE GOOD CORPORATE GOVERNANCE PRINCIPLES – OTHER MATTERS

Countering Corruption

Since 2014, the Company has announced its anti-corruption policy. Its membership of the Thailand's Private Sector Collective Action Coalition Against Corruption (CAC) was re-certified on 5 November 2018. The said certificate shall be valid for another 3 years. The Company has reviewed its anti-corruption policy every year to keep up with the changing situation. The policy includes the definitions about anti-corruption; role, duties and responsibilities; and best practices for the directors, subcommittee members, executives, and employees of the business group as well as their spouses; and specialists, advisors, and representatives of the business group for their acknowledgement and use as key guidelines in their operations.

The Company implemented its policy, guidelines and measures about anti-corruption in a concrete manner as follows:

1. The Company stipulated best practices regarding anti-corruption as part of the Code of Conduct of the East Water Group, such as giving and receiving gifts or assets or other benefits; ethics on procurement and treatment of trading partners; conflicts of interest; political actions; etc. The Code of Conduct was presented to all directors, executives and employees of the business group and was posted in the Company's website.

2. The Company conducted communications, participated in a number of activities, and held inside and outside trainings as follows:

On 6 September 2019, the Company joined the Anti-Corruption Day activities under the concept of "Fighting Corruption Together." The activities were held by the

Anti-Corruption Organization of Thailand to raise awareness about the corruption problem with destructive impacts on the economy and society and the country development opportunities. Under the event concept, efforts were mobilized in order to fight against corruption as Thai people were invited to show synergies to protect the country by playing their role in suppressing and clearing all corrupt people out of the country.

On 10 September 2019, the Company hosted a training in the topic of "Ethics and Organizational Sustainable Development" with the guest speaker, Mr. Thanakrit Permpoonsantisuk, to promote understanding of an organization's role and participation in the anti-corruption effort.

On 16 October 2019, the Company organized an event "EWG Love CG: Employees with SHARP Hearts – The Smart Fight against Corruption" on the occasion of the 27th anniversary of the East Water Group. The event featured a campaign against corruption and a movie "Bad Genius" regarding tricky games with corruption. The moral of the story was the ability to remain committed to the path of integrity and unshaken even when affected by tempting conditions.

On 28 October 2019, the executives joined a training in the topic of "Corruption Risk & Control: Technical Update" hosted by the Thai Institute of Directors Association (IOD).

On 29 October 2019, the Company hosted a seminar and a lecture in the topic of "Achieving Success with Dhamma Guidance" with the guest speaker, Phra Maha Sompong Talaputto, for the participants including trading partners, building tenants, and employees of the Company.

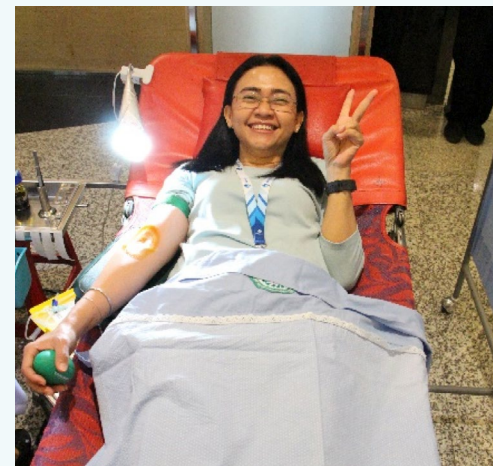
On 21-22 November 2019, the Company hosted a new-hire orientation session. During the session, the Company provided an e-learning video clip to communicate and promote its employees' understanding about the compliance with business ethics and anti-corruption measures as well as the Company's expectations and punishments.

On 12-26 December 2019, all employees were required to conduct a knowledge test about the East Water Group's Code of Conduct and Anti-Corruption to assess their levels of knowledge and understanding and ensure their proper use of such policies as guidance.

3. The Company established an enterprise risk management function responsible for managing risks covering strategic planning, investment, and other aspects of operations. In addition, a step of risks assessment was added to each work process or step of any function that may have possible corruption risk factors.

4. The Company established an internal audit function responsible for auditing the operations of different functions and financial activities to ensure compliance with applicable procedures, rules, and best practices.

9 CORPORATE SOCIAL RESPONSIBILITY (CSR)



Over the past 27 years, the Company has been conducting its business alongside the key industry areas of Thailand as well as improving the well-being of communities with the belief that business sustainability can be achieved through providing services with transparency and corporate governance, creating security and stability of water sources to respond to users' needs in the long term, and expanding investments in total water solutions. Moreover, the Company paid attention to the management of natural resources and environment while realizing the impacts arising from the business operations throughout the Company's supply chain process, taking into consideration the environmental, social and governance (ESG) issues, and occupational health and workplace safety. The Company has established management guidelines to prevent, resolve and mitigate potential consequences as well as safeguarded the interests of all groups of stakeholders fairly and equally. The CSR principles and practices were stipulated in the code of conduct of the Company's business group.

Apart from conducting business with internal CSR practice, the Company also strived to build recognition, build security, and build shared values towards sustainable development. Such concept was used as a guideline for networking with surrounding alliances including local government agencies and communities along the Company's water grid areas with a total length of over 491.8 kilometers. The Company utilized the principle of "Understanding, Reaching Out, and Developing" through community relations activities for the communities to receive news and information and better understand the given contexts as well as the Company's missions. Through such activities, the Company was also able to understand the wishes expectations of the communities in order to develop strategic activities for their improvement and sustainable growth together with the Company. Furthermore, the Company organized religious, sports and blood donation activities together with the building tenants and nearby communities on a regular basis.



The Company disclosed its environmental, social and governance (ESG) performance in the 2019 Sustainability Report. The report contained details according to the framework of the Global Reporting Initiative Standards (GRI Standards) including the sections of analysis and selection of material aspects as well as stakeholder analysis. The report also showed how the Company incorporated stakeholders' interests and expectations in its operations. The report explained the Company's operations encompassing economic, social and environmental issues for the readers to understand the Company's direction of business development towards sustainability in the future. In 2019, the Company was on the 2019 "Sustainable Stock" list by the Stock Exchange of Thailand (SET); and won the SET Awards 2019 in the group of "Sustainability Excellence" under the category of "Rising Star Sustainability Awards." More details can be found in the Company's Sustainability Report available in the website www.eastwater.com.

10 INTERNAL CONTROL AND RISK MANAGEMENT

Assessment of Adequacy of Internal Control System 2019

The Audit Committee endorsed the internal control system assessment report of the management. Five components of the Company's internal control system were assessed, i.e. control environment, risk assessment, control activities, information and communication, and monitoring activities. Details are as follows:

Control Environment

The Company conducted reviews and revisions and announced the adoption of the latest version of the "Good Corporate Governance Principles (Corporate Governance Code) of the Business Group of Eastern Water Resources Development and Management Public Company Limited" to ensure alignment with the Office of Securities and Exchange Commission (SEC)'s 2017 Corporate Governance Code for Listed Companies as well as the "Code of Conduct of the East Water Group" to ensure compliance with the organizational anti-corruption policy and the guidelines of Thailand's Private Sector Collective Action Coalition Against Corruption (CAC). The aforesaid policies and disciplines must be regularly acknowledged, understood and adhered to by employees of the Group and shall be used as guidelines for conducting daily duties, making decisions, and treating trading partners, customers and outside parties. The work rules state that "The Group's Code of Conduct shall be regarded as part of the work rules. Any violation of the Code of Conduct shall be considered a disciplinary offence and shall be subjected to relevant disciplinary actions according to the Company's procedures or regulations. In addition, if such disciplinary offence is illegal, relevant legal actions shall be undertaken." Relevant provisions and punishments are explained to the executives and employees for their understanding. The Code of Conduct handbook is given to all employees and they shall sign to acknowledge the relevant requirements every year. E-Learning courses are available to provide knowledge about the Code of Conduct and countering corruption. This is to ensure that everyone strictly acknowledges and adopts such guidelines in their operations. The information is also available in the internal web and the official website of the Company.

The Company requires clear segregation of duties between the Board of Directors and the management. The Board of Directors shall not be involved in management duties in order to create a balance between management

and supervision. Management activities shall be monitored to ensure that appropriate policies and procedures have been implemented efficiently and effectively. The Board of Directors has considered, nominated and appointed appropriate persons to the positions of high-level executives and set up subcommittees to perform duties according to the Corporate Governance Code of the Business Group of Eastern Water Resources Development and Management Public Company Limited and requirements of the Stock Exchange of Thailand (SET). The Board of Directors plays a major role in determining the corporate vision and 3-year strategies as well as annual action plans. The management shall prepare annual action plans in line with the long-term strategies for implementation, containing objectives, budgets, risk factors, main activities for each period of time, and expected results which can be measured in a concrete manner in order to meet overall goals.

The Company has a clear organizational structure to support achievement of its objectives and to ensure efficient internal control. There is segregation of duties between main business functions and supporting functions. The Internal Audit Department was established, directly reporting to the Audit Committee. The Executive Committee was set up to consider important issues before submission to the Board of Directors. Progress updates have been monitored through monthly meetings. Also, an emphasis was put on checks and balances between the Board of Directors, management and shareholders. The Company has communications with investors and publishes and shares its information to the general public on a regular basis.

Apart from the above, the Company is committed to motivating, developing and retaining knowledgeable and capable people; and therefore has in place individual development plans (IDPs) and adopts an approach to evaluate behaviors through core competency and managerial competency to improve employees' performance. The Company also has career path management policies and succession plans, especially for executive positions in key business functions. There are criteria for personal development and performance evaluation of talents to support succession plans of key positions to ensure business continuity and achievement of the corporate vision. Performances of the executives and employees at all levels are also measured against key performance indicators (KPIs) of the Company.

Risk Assessment

The Audit Committee shall be responsible for reviewing financial reports together with the external and the internal auditors to ensure correctness and compliance with generally accepted accounting standards and adequacy of information disclosure.

The Risk Management Committee shall consider and screen organizational risk management plans and supervise risk management results on a quarterly basis according to its charter and the risk management manual. The committee shall promote the participation of the executives and employees in managing risks relevant to themselves through annual organizational strategy preparation and review and functional risk assessment in alignment with the quality management system. The executives shall participate in an activity to identify risks and analyze risk factors with the current control measures to determine additional control measures necessary for mitigating risks to acceptable levels. The risk management activity shall be included as part of the annual action plan. The Corporate Strategy Department's risk management function shall gather all information and communicate relevant matters to all employees. Risk management results shall be monitored and reported to the Risk Management Committee and the Board of Directors for consideration and advice on a quarterly basis. This is to ensure that the risk management process of the Company takes place on an ongoing basis. Furthermore, in formulating annual internal audit plans, the Internal Audit Department shall evaluate significant changes that may affect risk management and internal control systems to determine audit scope.

The Company communicates its risk management policy and manual to all employees for acknowledgement and compliance in order to cultivate a corporate culture of everyone playing a part in taking care of the organization through the agreed upon risk management process. Besides, the Company has a business continuity plan (BCP) and tests the plan annually in order to assure that the Company is able to operate business on a continuous basis and without any interruption should an emergency arise.

Control Activities

The Company announced a number of regulations and practices in various aspects such as procurement, budgeting, accounting and finance, investment and project management, contract management, and authority to take actions internally, in line with the principles of good internal control. There is segregation of duties and operations are cross-checked. Duties relating to granting approval,

recording accounting transactions, information systems, and safeguarding of assets are separated from each other. The Company was certified to meet quality standards "ISO9001: 2015" and "ISO 14001: 2015" whereby it is required to develop manuals and operating procedures for use as references in operations as well as to provide trainings for employees so that they can understand such standards and perform duties correctly in accordance with the operating procedures and methods.

Any related party transactions between the Company and its subsidiaries and other stakeholders shall be considered and approved properly. Should any significant related party transaction take place, the Internal Audit Department, the Audit Committee, the management and the auditor shall consider the transaction prudently and take actions according to requirements of the SET. Such related party information shall be disclosed in a note to the financial statements and reported to the Office of the SEC for acknowledgement. In voting on any related party transaction, any director with a conflict of interest shall abstain from voting on that particular matter. Moreover, the Company stipulated conflict of interest guidelines as part of its Code of Conduct. In this regard, all directors, executives and employees of the business group shall avoid having a stake or being involved in any activity that may lead to a conflict of interest.

The Company supervises the operations of its subsidiaries consistently and regularly by assigning its people to be directors or executives in the subsidiaries to coordinate policies and ensure that all group companies operate in the same direction and according to the policies of the Board of Directors. The reports on progress updates on operations of each subsidiary shall be submitted to the Board of Directors for acknowledgement.

Additionally, the Company assigns the Company Secretary to be in charge of legal affairs and corporate compliance to ensure that the Company operates according to rules, regulations and the Articles of Association of the Company as well as applicable laws, procedures and requirements.

Information & Communication

The Company provides sufficient key information and submits it in advance through various kinds of communications devices for the Board of Directors to support their decisions prior to their meetings. At meetings, the executives who are responsible issue owners shall attend meetings to present details and answer questions of the Board of Directors.

The Company set up a process to communicate information with its stakeholders outside of the organization

through its website at www.eastwater.com and through online platforms such as Facebook. The Company also has the corporate communications function (mass media/communities/government agencies), the investor relations function (shareholders/investors), the customer relations function (customers), and the Corporate Secretary Office (supervisory bodies). The Company also has dedicated communication channels available for employees and outside parties to file reports, complaints, or tips or leads regarding corruption or fraud (whistle-blower hotline) with the Company as follows:

Company's website	: www.eastwater.com
E-mail	: AC_EW@eastwater.com : CEO@eastwater.com : Corporate_secretary@eastwater.com
Opinion Box	: Human Resources Department
Mail	: Audit Committee Eastern Water Resources Development and Management Public Company Limited East Water Building, 25th Floor, 1 Soi Vibhavadi Rangsit 5, Vibhavadi Rangsit Road, Chom Phon Subdistrict, Chatuchak District, Bangkok 10900

The Company has been constantly developing its IT systems and internal database systems constantly. The policy regarding the use of information technology and communication is included in the Corporate Governance Code of the Group. This is to ensure that the employees have true understanding about the use of internal media under the sound internal control environment such as Internet, Intranet, emails, and telecommunications devices including telephones, facsimiles, signal receivers of the communication system between the head office and its branches, etc. The Company has also educated its people about the compliance with laws relating to information to prevent any violation of laws and damage to the organization, such as the Computer Crime Act B.E. 2550 (A.D. 2007) and its amendment (No. 2) B.E. 2560 (A.D. 2017).

The Company's policy regarding corporate business information is also included in the Corporate Governance Code of the Group. According to the policy, the directors, executives and employees of the Group and employees of the Group's contractors shall not disclose any confidential information and documents of the Group.

Monitoring Activities

The Company requires that there shall be a system to monitor and report operating results, progress updates, and problems and challenges of the projects according to

corporate strategies to the Board of Directors for consideration and advice. The Internal Audit office shall be responsible for monitoring the project performances as compared to specific strategies to ensure that the set targets are met; and monitor the management's corrective actions as per recommendations by the Internal Audit Department. The results of the monitoring activities shall be submitted to the Audit Committee on a monthly basis and to the Board of Directors on a quarterly basis.

The Company places importance on internal audit to add value to the organization through its internal audit procedures. The Internal Audit Department shall design an audit plan using the risk-based audit; use such plan to review the internal control system of every work process; and report the review results to the Audit Committee on a quarterly basis for the Company to have confidence in the efficiency and effectiveness of the internal control system, and reliability of information including financial information and information to support operations. The Company was certified for its compliance with quality management system standards (ISO 9001: 2015) and environmental management standards (ISO 14001: 2015) by relevant certification bodies relating to said international standards.

After considering the essence of internal control adequacy assessment as aforesaid, the Board of Directors agreed with the Audit Committee and the auditor that the Company's internal control system was sufficient and suitable for its business; and that the Company had enough manpower to implement its internal control system and its system to monitor the group companies' operations to ensure efficiency, effectiveness, and sustainable business growth.

Head of Internal Audit

According to the organizational structure, the Internal Audit Department reports directly to the Audit Committee. The Audit Committee together with the President & CEO shall evaluate the performance of the head of internal audit. According to the Audit Committee's Charter, it is required that any appointment, transfer, termination of employment, or merit-based considerations of the head of internal audit be endorsed by the Audit Committee. The current head of internal audit is Mrs. Thidarut Kraiprasit, Executive Vice President of the Internal Audit Office. According to the performance evaluation results, it can be concluded that the said person is appropriate for the position of the head of internal audit.

INTERNAL AUDIT OFFICE

Details of Head of Internal Audit

Name - Surname	Mrs. Thidarut Kraiprasit
Ages	56 Years
Position	Executive Vice President, Internal Audit Department
Education	• Master of Business Administration (MBA), Kasetsart University • Bachelor of Accounting, Thammasat University • Certified Public Accountant (CPA)
Training	• Board Reporting Program (BRP), Thai Institute of Directors Association (IOD) (2017) • Strategic CFO in Capital Markets Program, Stock Exchange of Thailand (SET) (2015) • Director Certification Program (DCP), Thai Institute of Directors Association (IOD) (2014) • Leadership Development Workshop by Executive Coaching Institute (Module 2), Berkeley USA (2013) • Leadership Development Workshop by Executive Coaching Institute (Module 1), Berkeley USA (2012) • Audit Committee Program (ACP), Thai Institute of Directors Association (IOD) (2009) • Executive Development Program (EDP), Thai Listed Companies Association (TLCA) • Advanced Certificate Course in Public Economics Management for Executives, King Prajadhipok's Institute (KPI)
Work Experience	Eastern Water Resources Development and Management Public Company Limited 2017 - Present Executive Vice President, Internal Audit Department 2015 - 2017 Senior Vice President, Finance and Accounting Department 2009 - 2015 Senior Vice President, Internal Audit Department 2007 - 2008 Senior Vice President, Finance and Accounting Department 2004 - 2007 Senior Vice President, Finance and Human Resources Department

Details of Company Secretary and Head of Compliance

Name - Surname	Mrs. Namphon Rassadanukul
Ages	57 Years
Position	Executive Vice President and Company Secretary
Education	• Master of Political Science (Politics and Governance), Sukhothai Thammathirat University • M.A. in Public Administration, Glasgow College of Technology, UK • Certificate in Computer Programming and Information Processing, London School, UK • Bachelor of Arts in Political Science (Public Administration), Thammasat University
Training in 2019	• Corporate Governance For Executives (CGE), Thai Institute of Directors Association (IOD) (2019) • Ethical Leadership Program (ELP), Thai Institute of Directors Association (IOD) (2019)
Work Experience	Eastern Water Resources Development and Management Public Company Limited March 2019 - Present Executive Vice President and Company Secretary January - February 2019 Company Secretary, President and CEO Office May - December 2018 Senior Vice President, President and CEO Office 2017 - May 2018 Senior Vice President, Corporate Strategy Department and Acting Executive Vice President, Corporate Strategy Office 2015 - 2017 Senior Vice President, Business Development Department February 2015 - June 2015 Senior Vice President, Human Resources Department 2007 - 2015 Senior Vice President, President and CEO Office and Company Secretary 2004 - 2007 Senior Vice President, Internal Audit Department and Company Secretary 2001 - 2004 Vice President, Internal Audit Department March - October 2001 Vice President, President and CEO Office 1995 - 2001 Vice President, Management Department and Acting Vice President, Internal Audit Department

11 RELATED PARTY TRANSACTIONS

DETAILS OF RELATED PARTY TRANSACTIONS

The Company and its subsidiaries undertook a number of related party transactions with the parties with possible conflicts of interest. The auditor provided details in Table to the financial statements the year ended 31 December 2019. Details of the transactions are as follows:

Raw water and tap water sales income between the business group and its major shareholders, trading volume, and pricing policy

Juristic Person with Possible Conflicts of Interest	Nature of Relationship	Nature of Transaction	Transaction Volume and Value	Necessity / Remark	Pricing Policy
1. Provincial Waterworks Authority (PWA)	- PWA was a majority shareholder of the Company as at 31 December 2019 with the shareholding proportion of 40.20% of the Company's registered and paid-up share capital.	Transaction volume Raw water sales volume (million cubic meters) Sales value (Baht million))	81.50 624.38	The Company sold raw water to PWA in Nongkho-Laem Chabang-Pattaya-Bangpra areas and Dokkrai-Map Ta Phut-Sattahip areas.	- The Company sold raw water to PWA at the same price rates as those applicable to other consumers. There were clear written contracts. Any director with possible conflicts of interest shall not have the right to vote on water price rates.

- Mr. Kraitsada Sunkhamani was Deputy Governor (Technical Affairs) of PWA and a director of the Company.

- Mr. Pisit Hongvanishkul was Deputy Governor (Corporate Strategy) of PWA and a director of the Company.

- Mr. Bumrungrak Chingwangtakor was Deputy Governor (Administration) of PWA and a director of the Company.

Juristic Person with Possible Conflicts of Interest	Nature of Relationship	Nature of Transaction	Transaction Volume and Value	Necessity / Remark	Pricing Policy
2. Provincial Waterworks Authority (PWA)	- PWA was a majority shareholder of the Company as at 31 December 2019 with the shareholding proportion of 40.20% of the Company's registered and paid-up share capital.	Transaction volume Tap water sales volume (million cubic meters) Tap water sales value (Baht million)	0.96 58.65	The Company sold tap water to PWA in the Samui Island.	The Company sold tap water to PWA at the agreed upon rates. Water price rate adjustments were according to the conditions in the concession agreements.
	- Mr. Kritsada Sunkhamani was Deputy Governor (Technical Affairs) of PWA and a director of the Company.	Tap water sales volume (million cubic meters) Tap water sales value (Baht million)	8.32 132.76	The Company sold tap water to PWA in Pattaya.	
	- Mr. Pisit Hongvanishkul was Deputy Governor (Corporate Strategy) of PWA and a director of the Company.				
	- Mr. Bumrungsak Chingwangtakor was Deputy Governor (Administration) of PWA and a director of the Company.				

Juristic Person with Possible Conflicts of Interest	Nature of Relationship	Nature of Transaction	Transaction Volume and Value	Necessity / Remark	Pricing Policy
3. Industrial Estate Authority of Thailand (IEAT)	- IEAT was a shareholder of the Company as at 31 December 2019 with the shareholding proportion of 4.57% of the Company's registered and paid-up capital. - Dr. Somchint Pilouk was Governor of IEAT and a director of the Company.	Transaction volume Raw water sales volume (million cubic meters) Sales value (Baht million)	89.17 980.83	The Company sold raw water to IEAT in Nongkho-Laem Chabang-Pattaya-Bangpra areas and Dokkrai-Map Ta Phut-Sattahip areas.	The Company sold raw water to IEAT at the same price rates as those applicable to other water users being state-owned industrial estates. There were clear written contracts. Any director with possible conflicts of interest shall not have the right to vote on water price rates and changes of water price rates applicable to IEAT.
4. Universal Utilities PCL.	The Company held 100% shares in Universal Utilities PCL. and both parties shared the directors.	Transaction volume Raw water sales volume (million cubic meters) Sales value (Baht million)	6.70 40.17	The Company sold raw water to Universal Utilities PCL. (Chonburi Project) in Chachoengsao-Chonburi areas.	The Company sold raw water to Universal Utilities PCL. (UU) at the same price rates as those applicable to other consumers. There were clear written contracts. Any director with possible conflicts of interest shall not have the right to vote on water price rates and changes of water price rates applicable to UU.

Related Party Transactions with Shareholders and Subsidiaries for 2019

Company	Relationship	Related Party Transaction	As at 31 December 2019 (Baht)
PWA	Major shareholder	- Construction Revenue - Rental and Service Income - Sales and Service Costs - Administrative Expense - Accounts Receivable - Other Receivable - Accounts Payable - Other Payable	194,435,066 36,026,493 20,793,071 - 252,082,251 19,449 1,785,541 171,100,794
IEAT	Major shareholder	- Accounts Receivable	90,603,389
Universal Utilities PCL.	Subsidiary (The Company held 100% shares in UU and shared the directors with UU.)	- Interest Income - Rental and Service Income - Dividends - Other Revenue - Sales and Service Costs - Accounts Receivable - Other Receivable - Accounts Payable - Security Deposit	42,800,000 55,385,298 120,359,983 11,488,713 238,100,424 6,423,697 10,483,261 22,877,964 58,000
Egcom Tara Co., Ltd.	Subsidiary of UU with the shareholding of 90.07% (An indirect subsidiary of the Company)	- Administrative Expense - Other Payable	283,373 124,120

Remark: This summary is based on the financial statements for the year 2019 as per Notes 35.1 and 35.2 to the financial statements.

12 KEY FINANCIAL INFORMATION

FINANCIAL STATEMENTS

SUMMARY OF AUDIT REPORTS

1. Summary of the independent auditor's report from the last three consecutive years.

Independent auditors viewed that the consolidated and separated financial statements represent consolidated and separated financial positions, operational performance and cash flows comprehensively and accurately in accordance with Thai Financial Reporting Standards (TFRS).

2. Summary table of the financial position and comparative operation performance for 3 consecutive years (2017-2019)

Since the Company is a public company listed in the Thai Stock Exchange of Thailand, financial statements of the Company is available for investors at the website of the Securities and Exchange Commission (www.sec.or.th), the Stock Exchange of Thailand (www.set.or.th) and the Company's official website (www.eastwater.com).

Summary of the financial position and operational performance are shown in the following tables

Financial Statement

A) Comparative statement of Financial position for three consecutive years	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Assets						
Current assets						
Cash and cash equivalents	58,211	0.27	578,213	2.87	37,478	0.19
Short-term investments	510,684	2.41	404,277	2.00	393,039	2.02
Trade and other receivables	502,202	2.37	444,237	2.21	407,424	2.09
Inventories	25,632	0.12	13,344	0.07	13,069	0.07
Other current assets	53,591	0.26	29,206	0.15	38,127	0.19
Total current assets	1,150,320	5.43	1,469,277	7.30	889,137	4.56
Non-current assets						
Investment property - net	171,564	0.81	177,633	0.88	185,929	0.95
Property, plant and equipment - net	15,260,947	72.05	14,382,227	71.41	14,228,392	73.03
Goodwill	103,283	0.49	103,283	0.51	103,283	0.53
Intangible assets - net	3,531,073	16.67	3,643,974	18.09	3,702,734	19.01
Deferred tax assets	24,066	0.11	21,936	0.11	22,234	0.11
Other non-current assets	939,626	4.44	342,572	1.70	350,907	1.80
Total non-current assets	20,030,559	94.57	18,671,625	92.70	18,593,479	95.44
Total assets	21,180,879	100.00	20,140,902	100.00	19,482,616	100.00

A) Comparative statement of Financial position for three consecutive years (Continue)	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Liabilities and equity						
Current liabilities						
Short-term borrowings from financial institutions	305,000	1.44	814,000	4.04	83,000	0.43
Trade and other payables	317,336	1.50	147,205	0.73	139,728	0.72
Payable for purchase of fixed assets	1,319,365	6.23	98,782	0.49	82,433	0.42
Current portion of finance lease liabilities	1,899	0.01	2,121	0.01	1,600	0.01
Current portion of long-term borrowings from financial institutions	826,200	3.90	826,200	4.10	808,200	4.15
Income tax payable	103,707	0.49	118,460	0.59	131,181	0.67
Accrued expenses	190,795	0.90	163,187	0.81	176,013	0.90
Other current liabilities	66,125	0.31	59,404	0.29	70,767	0.36
Total current liabilities	3,130,427	14.78	2,229,359	11.06	1,492,922	7.66
Non-current liabilities						
Finance lease liabilities	1,252	0.01	1,785	0.01	2,637	0.01
Long-term borrowings from financial institutions	3,830,000	18.08	3,166,200	15.72	3,992,400	20.49
Debentures	2,398,363	11.32	2,397,955	11.91	2,397,562	12.31
Payable for purchase of fixed assets	-	-	862,204	4.28	-	-
Deferred tax liabilities	341,297	1.61	364,611	1.81	385,210	1.98
Employee benefit obligations	209,848	0.99	150,461	0.75	135,062	0.70
Long-term provisions	29,353	0.14	20,786	0.10	33,188	0.17
Other non-current liabilities	226,524	1.07	142,391	0.71	613,729	3.15
Total non-current liabilities	7,036,637	33.22	7,106,393	35.29	7,559,788	38.81
Total liabilities	10,167,064	48.00	9,335,752	46.35	9,052,710	46.47

A) Comparative statement of Financial position for three consecutive years (Continue)	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Shareholder's equity						
Registered share capital	1,663,725	7.85	1,663,725	8.26	1,663,725	8.54
Issued and paid-up share capital	1,663,725	7.85	1,663,725	8.26	1,663,725	8.54
Ordinary shares, 1,663,725,149 shares of par Baht 1 each	2,138,522	10.10	2,138,522	10.62	2,138,522	10.98
Share premium						
Retained earnings						
Appropriated						
- legal reserve	166,500	0.79	166,500	0.83	166,500	0.85
- concession reserve	393,729	1.86	351,481	1.75	298,762	1.53
Unappropriated	6,469,124	30.54	6,293,040	31.25	5,960,276	30.59
Other components of equity	8,002	0.04	11,388	0.05	14,774	0.08
Non-controlling interests	174,213	0.82	180,494	0.89	187,347	0.96
Total equity	11,013,815	52.00	10,805,150	53.65	10,429,906	53.53
Total liabilities and equity	21,180,879	100.00	20,140,902	100.00	19,482,616	100.00
Book Value (Baht/share) **	6.52		6.39		6.16	
Par value (Baht/share)	1.00		1.00		1.00	
Total Ordinary shares at the end of year (share)	1,663,725,149		1,663,725,149		1,663,725,149	

Note: **The calculation of the Book Value was based on the Equity holders of the parent company

B) Comparative statement of comprehensive income for three consecutive years

B) Comparative statement of comprehensive income for three consecutive years	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Revenues						
Sales - raw water	2,844,696	60.15	2,393,820	56.25	2,452,053	56.28
Sales - tap water	1,503,160	31.78	1,438,402	33.80	1,422,746	32.66
Construction revenue under concession agreements	203,125	4.30	232,571	5.47	275,652	6.33
Rental and service income	129,096	2.73	156,196	3.67	157,591	3.62
Other income	49,193	1.04	34,335	0.81	48,592	1.11
Total revenues	4,729,270	100.00	4,255,324	100.00	4,356,634	100.00
Expenses						
Cost of sales - raw water	1,396,160	29.52	944,244	22.19	935,250	21.47
Cost of sales - tap water	985,438	20.84	912,597	21.45	879,017	20.18
Construction cost under concession agreements	203,125	4.30	232,571	5.47	275,652	6.33
Cost of rental and services	121,712	2.57	135,211	3.18	134,629	3.09
Selling and administration expenses	538,520	11.38	482,528	11.33	457,569	10.50
Finance costs	166,052	3.51	157,212	3.69	140,848	3.23
Income tax	262,358	5.55	261,187	6.14	301,654	6.92
Total expenses	3,673,365	77.67	3,125,550	73.45	3,124,619	71.72
Net profit for the year	1,055,905	22.33	1,129,774	26.55	1,232,015	28.28

B) Comparative statement of comprehensive income for three consecutive years (Continue)	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Other comprehensive income :						
<u>Item that will not be reclassified subsequently to profit or loss</u>						
Remeasurements of post-employment benefit obligations	(34,842)		-		3,371	
Income tax on item that will not be reclassified subsequently to profit or loss	6,968		-		(674)	
Total item that will not be reclassified subsequently to profit or loss	(27,874)		-		2,697	
<u>Item that will be reclassified subsequently to profit or loss</u>						
Asset transferred from customers	(3,386)		(3,386)		(3,390)	
Change in fair value of available for sale investment	-		-		(664)	
Income tax relating to items that will be reclassified subsequently to profit or loss	-		-		133	
Total items that will be reclassified subsequently to profit or loss	(3,386)		(3,386)		(3,921)	
Other comprehensive income for the year, net of tax	(31,260)		(3,386)		(1,224)	
Total comprehensive income for the year	1,024,645		1,126,388		1,230,791	
Profit attributable to						
Owners of the parent	1,044,793		1,117,522		1,221,179	
Non-controlling interests	11,112		12,252		10,836	
Net profit for the year	1,055,905		1,129,774		1,232,015	
Total comprehensive income attributable to						
Owners of the parent	1,013,533		1,114,135		1,219,955	
Non-controlling interest	11,112		12,253		10,836	
Net profit for the year	1,024,645		1,126,388		1,230,791	

B) Comparative statement of comprehensive income for three consecutive years (Continue)	As of 31 st December 2019		As of 31 st December 2018		As of 31 st December 2017	
	Audited		Audited		Audited	
	THB Thousand	%	THB Thousand	%	THB Thousand	%
Unappropriated retain earning	6,293,040		5,960,276		5,630,700	
<u>Less</u> Impacts from changes in accounting policy	(798,588)		(732,039)		(831,862)	
<u>Add</u> Comprehensive income of the year	1,016,920		1,117,522		1,223,877	
<u>Less</u> Appropriation of concession reserve for the year	(42,248)		(52,719)		(62,439)	
Unappropriated retain earning	6,469,124		6,293,040		5,960,276	
Appropriated - legal reserve	166,500		166,500		166,500	
Appropriated - concession reserve	393,729		351,481		298,762	
Retain Earnings	7,029,353		6,811,021		6,425,538	
Earnings per share	0.63		0.67		0.73	
Par value (Baht/share)	1.00		1.00		1.00	
Total ordinary shares (share)	1,663,725,149		1,663,725,149		1,663,725,149	

C) Comparative Statement of Cash Flows for 3 consecutive years (audited) (Continue)

Unit : Thousand

C) Comparative Statement of Cash Flows for 3 consecutive years (audited)	2019	2018	2017
Cash flows from operating activities			
Profit before income tax	1,318,263	1,390,961	1,533,669
Adjustments to reconcile profit before income tax to net cash received (paid) from operating activities			
Depreciation	504,403	432,019	393,619
Amortisation of intangible assets	323,744	304,108	282,588
Income from amortisation of assets transferred from customers	(3,386)	(3,386)	(3,390)
(Gain) loss on disposal/write-off fixed assets	(1,247)	513	1,441
Impairment loss on concession right	-	860	1,960
Gain on sales of available-for-sale investments	-	(128)	(1,863)
Long-term provisions	18,906	(589)	21,491
Employee benefit obligations	53,076	18,186	16,643
Interest income	(8,824)	(6,989)	(6,938)
Interest expenses	164,895	155,970	139,811
Profit from operating activities before changes in operating assets and liabilities	2,369,830	2,291,525	2,379,031

Unit : Thousand

C) Comparative Statement of Cash Flows for 3 consecutive years (audited) (Continue)			
	2019	2018	2017
Changes in operating assets (increase) decrease			
Trade and other receivables	(57,965)	(36,813)	13,321
Inventories	(12,288)	(275)	(2,482)
Other current assets	(3,376)	27,834	2,093
Other non-current assets	2,160	(26,336)	16,766
Changes in operating liabilities increase (decrease)t			
Trade and other payables	170,130	7,477	6,475
Accrued expenses	28,126	(16,978)	(819)
Other current liabilities	7,001	(13,252)	15,740
Employee benefit obligations - paid	(28,530)	(2,787)	(7,227)
Long-term provisions - paid	(10,339)	(11,814)	(8,972)
Other non-current liabilities	84,133	(138,372)	(23,849)
Cash provided by operation	2,548,882	2,080,209	2,390,077
Income tax paid	(315,179)	(312,057)	(332,330)
Net cash generated from operating activities	2,233,703	1,768,152	2,057,747
Cash flows from investing activities			
Payment for short-term investments	(776,588)	(1,067,580)	(1,154,426)
Proceeds from disposal of short-term investments	670,181	1,056,470	1,499,084
Interest received	7,408	5,924	6,690
Proceeds from disposal of fixed assets	2,718	18,158	2,288
Payment for intangible assets	(198,733)	(244,406)	(305,155)
Payment for development cost of water supply project	(299,000)	-	-
Payment for investment property	(2,326)	(218)	(1,265)
Payment for fixed assets and advance for construction	(1,266,726)	(480,475)	(450,499)
Cash returned from construction project	-	529,238	-
Proceeds from bank guarantee	-	-	10,079
Interest paid capitalised in qualifying assets	(59,355)	(70,421)	(92,318)
Net cash used in investing activities	(1,922,421)	(253,310)	(485,522)

Unit : Thousand

**C) Comparative Statement of Cash Flows
for 3 consecutive years (audited) (Continue)**

2019

2018

2017

Cash flows from financing activities

Proceeds from short-term borrowings from financial institutions	6,943,000	4,409,000	1,178,000
Payment for short-term borrowings from financial institutions	(7,452,000)	(3,678,000)	(2,695,000)
Proceeds from long-term borrowings from financial institutions	1,490,000	1,600,000	1,600,000
Payment for long-term borrowings from financial institutions	(826,200)	(2,408,200)	(808,200)
Payment for finance lease liabilities	(2,367)	(331)	(1,838)
Dividend paid	(815,913)	(750,973)	(853,547)
Interest paid	(167,804)	(145,603)	(139,693)

Net cash generated from (used in) financing activities

(831,284)	(974,107)	(1,720,278)
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Net increase (decrease) in cash and cash equivalents

(520,002)	540,735	(148,053)
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Cash and cash equivalents at the beginning of the year

578,213	37,478	185,531
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Cash and cash equivalents at the end of the year

58,211	578,213	37,478
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Supplemental cash flow information**Non-cash transactions:**

Purchase of fixed assets on payable	1,300,438	252,131	84,023
Purchase of intangible assets on payable	21,381	9,231	-
Purchase of assets under finance lease agreements	1,612	-	4,237

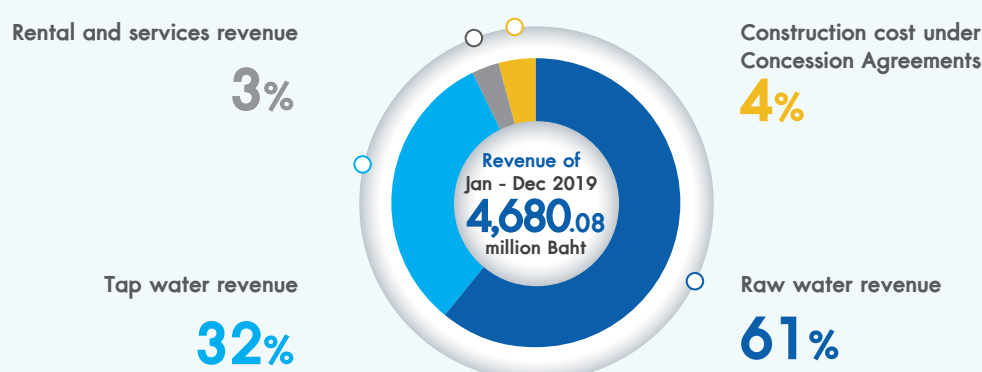
13 EASTERN WATER RESOURCES DEVELOPMENT AND MANAGEMENT PUBLIC COMPANY LIMITED MANAGEMENT DISCUSSION AND ANALYSIS FOR THE YEAR 2019

1. ANALYSIS OF FINANCIAL PERFORMANCE

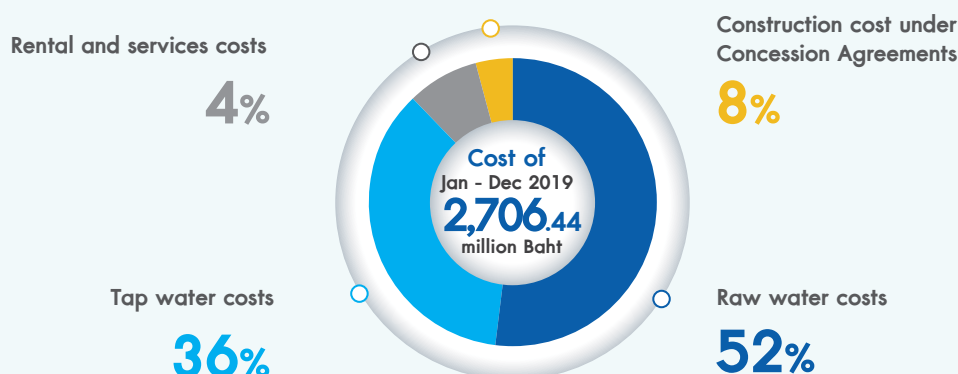
For the year 2019, East Water Group had total consolidated sales and services income of 4,680.08 million Baht, increased by 459.09 million Baht or 10.88% compared to the year 2018 as the raising in raw water sales volume. However, the costs of sales and services were totally 2,706.44 million Baht, increased by 481.81 million Baht or 21.66% mainly because of an increasing electricity cost. Net profit attributable to equity holders of the parent company of 1,044.79 million Baht, decreased by 72.73 million Baht or 6.51%.

PROPORTION OF REVENUES AND COST

Revenue of Jan - Dec 2019 = 4,680.08 million Baht



Cost of Jan - Dec 2019 = 2,706.44 million Baht



Income statement (Million Baht)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2018	YOY	%	2019	2018	%	%
Total Sales and Services revenue	1,159.83	1,050.08	109.76	10.45	4,680.08	4,220.99	459.09	10.88
Raw water revenue	707.12	588.09	119.03	20.24	2,844.70	2,393.82	450.88	18.84
Tap water revenue	372.74	361.96	10.78	2.98	1,503.16	1,438.40	64.76	4.50
Rental and services revenue	33.98	38.44	(4.47)	(11.62)	129.10	156.20	(27.10)	(17.35)
Construction revenue under Concession Agreements ¹⁾	46.00	61.59	(15.59)	(25.31)	203.13	232.57	(29.45)	(12.66)
Costs of Sales and Services	703.35	578.92	124.43	21.49	2,706.44	2,224.62	481.81	21.66
Raw water cost	387.91	245.32	142.59	58.12	1,396.16	944.24	451.92	47.86
Tap water cost	238.40	241.09	(2.69)	(1.12)	985.44	912.60	72.84	7.98
Rental and services cost	31.05	30.93	0.12	0.38	121.71	135.21	(13.50)	(9.98)
Construction cost under Concession Agreements ¹⁾	46.00	61.59	(15.59)	(25.31)	203.13	232.57	(29.45)	(12.66)
Gross profit	456.48	471.16	(14.68)	(3.11)	1,973.64	1,996.37	(22.72)	(1.14)
Other income	14.68	9.45	5.24	55.40	49.19	34.34	14.86	43.27
Selling and administrative expenses	169.04	150.34	18.71	12.44	538.52	482.53	55.99	11.60
Operating profit	302.12	330.27	(28.15)	(8.52)	1,484.32	1,548.17	(63.86)	(4.12)
Finance cost	42.08	54.83	(12.75)	(23.25)	166.05	157.21	8.84	5.62
Income tax expenses	51.07	35.20	15.87	45.10	262.36	261.19	1.17	0.45
Net profit	208.98	240.25	(31.27)	(13.02)	1,055.91	1,129.77	(73.87)	(6.54)
Net profit attributable to the parent	205.93	236.49	(30.56)	(12.92)	1,044.79	1,117.52	(72.73)	(6.51)
Earnings per share (EPS)	0.12	0.14	(0.02)	(12.92)	0.63	0.67	(0.04)	(6.51)

Note: ¹⁾ Revenue and Cost that were recognized when there is construction under concession agreements for tap water according to accounting standard TFRIC12

1. ANALYSIS OF FINANCIAL PERFORMANCE (Cont.)

EBITDA (Million Baht)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2018	YoY	%	2019	2018	Yoy	%
Operating profit	302.12	330.27	(28.15)	(8.52)	1,484.32	1,548.17	(63.86)	(4.12)
Depreciation	129.07	127.12	1.95	1.53	504.40	432.02	72.38	16.75
Amortization	81.31	76.69	4.62	6.03	320.36	300.72	19.64	6.53
EBITDA	512.50	534.08	(21.58)	(4.04)	2,309.08	2,280.92	28.16	1.23

2. ECONOMIC SITUATION

Thailand economic situation in Q4/2019 in Central and Eastern area were contracted compared to the same period of 2018 due to global economic and domestic consumption weak, that were impacted from Baht appreciation, affected to production competitiveness that manufacturers made decision to shift production base or import materials from foreign. Similarly, private investment sector and employment were slowdown followed economic recession, excluded construction sector that had bidding competition from Chinese entrepreneurs. In terms of investment and employment, there were affected from labor substitution by Automation. Substitution. For production costs, it was as value as last year, due to businesses made forward contracts with material source, and imported raw material and goods were lower value because of Baht appreciation.

Business outlook for Q1/2020 was expected that Thailand economy would be depressed compared to the same period of 2019, in line with economic and the slowdown of private investment which depending on government policies, direction of Baht currency and delay of 2020 government budget approval. Also, Coronavirus outbreak and the droughts in Thailand have been affecting to the export sector, especially the agricultural sector.

3. WATER SITUATION

As of 31 January 2020, the water supply situation in Chonburi and Rayong were in water shortage warning level. Water supply in the reservoirs was approximately lower than the average water quantity of the past 10 years as the drought impact during the last year. The weather forecast of the Department of Meteorology was expected that the total rainfall in the Eastern part of Thailand will be lower than average level about 10% during February 2020 – March 2020 and the same level as average on April 2020. The average water in the reservoirs in Chonburi and Rayong were 36% and 31% of total capacity respectively.

Water Volume (Million Cu.M)	Chonburi		Rayong			
	Bangpra	Nongkho	Dokkrai	Nongplalai	Klongyai	Prasae
Water reserve	44.08	5.19	30.14	37.62	8.13	103.22
Percentage of total capacity	38%	24%	38%	23%	20%	35%
Average (2010-2019)	72.76	12.96	56.19	137.79	29.97	213.98
Above/(below) average (2010-2019)	(28.68)	(7.77)	(26.05)	(100.17)	(21.84)	(110.76)

4. SIGNIFICANT EVENTS

As of 26 June 2019, TRIS Rating affirmed the company rating and senior unsecured debenture rating of Eastern Water Resources Development and Management PLC at “A+” with “stable” outlook, which reflects the company’s financial strength as the key raw water provider with a comprehensive pipeline network in the Eastern Seaboard area, rising of water demand in the Eastern Economic Corridor (EEC) area, its high profitability, and highly predictable cash flows.

As of 14 August 2019, the Board of Director’s meeting No. 9/2019 had a resolution on the interim dividend payment, based on the operating results of six months ended 30 June 2019, at 0.21 Baht per share, totally 349.38 million Baht. The record date which shareholders had the right to receive the interim dividend was on 28 August 2019 and the dividend paid on 11 September 2019.

As of 29 November 2019, the company has been selected as one of 98 listed companies in the list of Thailand Sustainability Investment, known as “2019 Sustainable Stocks,” as shares of registered companies that conduct environmental business, social, and outstanding governance (ESG). Stakeholders are considered both socially and environmentally, including management procedures for creating sustainability and received the 2019 Rising Star Sustainability Awards, in the Sustainability Excellence category, which is an award for listed companies that have outstanding sustainable business practices.

As of 11 December 2019, the company was awarded an honorary award of Sustainability Disclosure Recognition, from Thaipat Institute, that enables stakeholders to grow alongside the company, and in respond to Sustainable Development Goals: (SDGs) efficiently.

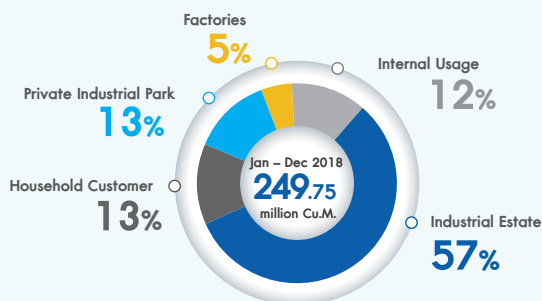
5. RAW WATER BUSINESS

Raw water revenue in 2019 was 2,844.70 million Baht, increased by 450.88 million Baht or 18.84% compared to the year 2018. Total water sales volume was 282.23 million Cu.M. (excluding internal usage for tap water production of 31.18 million Cu.M.), increased by 62.25 million Cu.M., or 28.30% due to the raising of raw water sales volume from the household customers. The average raw water tariff was at 10.08 Baht per Cu.M., decreased by 0.80 Baht per Cu.M., or 7.38%, as the rising portion of household customers, who paid lower tariffs than other customer groups and the discount for such group.

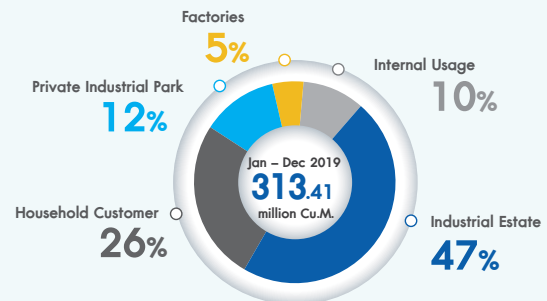
Raw Water Volume (Million Cu.M.)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2018	YoY	%	2019	2018	YoY	%
Total distribution volume	78.09	61.62	16.47	26.73	313.41	249.75	63.67	25.49
Internal usage for tap water	8.03	7.45	0.58	7.82	31.18	29.76	1.42	4.76
Net raw water sales volume	70.06	54.17	15.89	29.33	282.23	219.98	62.25	28.30

RAW WATER DISTRIBUTION BY CUSTOMER GROUP (INTERNAL USAGE FOR TAP WATER PRODUCTION IS INCLUDED)

Jan - Dec 2018 = 249.75 million Cu.M.

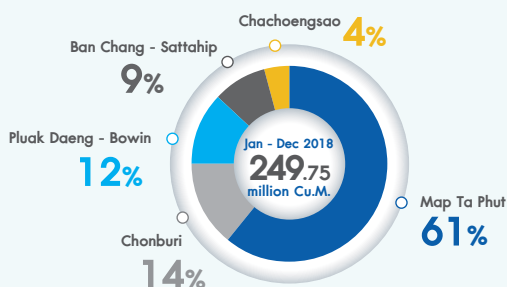


Jan - Dec 2019 = 313.41 million Cu.M.

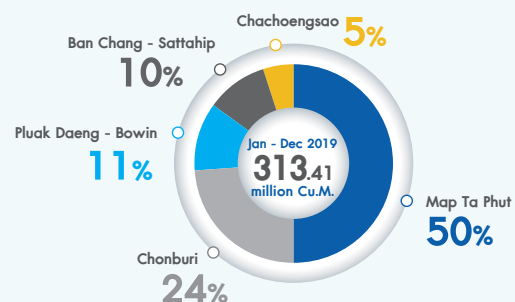


RAW WATER DISTRIBUTION BY AREA (INTERNAL USAGE FOR TAP WATER PRODUCTION IS INCLUDED)

Jan - Dec 2018 = 249.75 million Cu.M.



Jan - Dec 2019 = 313.41 million Cu.M.



Gross Profit of Raw Water Business in 2019 was 1,448.54 million Baht, decreased by 1.04 million Baht or 0.07% compared to 2018 following to the increasing sales volume of the household customer. On the other hand, cost of goods sold increased in line with the increasing sales volume and the drought situation nationwide including Eastern area. The detail is as follows:

- 1) Electricity cost increased due to the higher raw water distribution to Chonburi area. Since the water supply in Chonburi was insufficient, therefore; the company needed to transfer water from Prasae reservoir to Chonburi area.
- 2) Raw water cost increased from purchasing raw water from private source in order to remain the stability in raw water distribution system.
- 3) Maintenance cost increased because of the pipeline moving along the motorway road and the rising in pumping volume.
- 4) Rising depreciation and amortization from investment to increase raw water distribution capacity.

Furthermore, the average sales price was lower from rising demand from household customer. As a result, gross profit margin of raw water business dropped to 50.92%.

Major costs of raw water business (Million Baht)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2018	YoY	%	2019	2018	YoY	%
Raw Water Revenue	707.12	588.09	119.03	20.24	2,844.70	2,393.82	450.88	18.84
Costs of Raw Water	387.91	245.32	142.59	58.12	1,396.16	944.24	451.92	47.86
Raw Water	54.44	28.12	26.32	93.63	196.90	141.40	55.50	39.25
Electricity	132.09	64.64	67.46	104.36	515.54	268.64	246.90	91.91
Depreciation	101.44	96.65	4.79	4.95	397.28	326.09	71.19	21.83
Maintenance	56.92	17.25	39.67	230.02	114.00	59.18	54.82	92.62
Others	43.02	38.67	4.35	11.25	172.44	148.92	23.52	15.79
Gross Profit	319.21	342.77	(23.56)	(6.87)	1,448.54	1,449.58	(1.04)	(0.07)
Gross Profit Margin	45.14	58.29			50.92	60.55		

6. TAP WATER BUSINESS

Tap water revenue in 2019 was 1,503.16 million Baht, increased by 64.76 million Baht or 4.50%. Total tap water sales volume was 99.84 million Cu.M., increased by 3.29 million Cu.M. or 3.41% compared to 2018.

Tap water sales volume (Million Cu.M)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2019	Q4/2019	%	2019	2018	YoY	%
Tap water sales volume	5.27	5.18	0.09	1.79	22.36	20.96	1.39	6.65
Tap water sales volume of the subsidiaries	19.30	19.13	0.17	0.87	77.49	75.59	1.90	2.51
Total tap water sales volume	24.57	24.31	0.26	1.06	99.84	96.55	3.29	3.41

Gross Profit of Tap Water Business in 2019 was 517.72 million Baht, decreased by 8.08 million Baht or 1.54% compared to 2018. The reasons were from the rising of raw water cost since the company had purchased raw water from higher-cost sources, incurred pipeline maintenance cost, as well as the estimation replacement cost and depreciation & amortization from capacity expansion investment.

Major Costs of Tap Water Business (Million Baht)	For the three-month period				For the twelve-month period			
	Q4/2019	Q4/2019	Q4/2019	%	2019	2018	YoY	%
Tap Water Revenue	372.74	361.96	10.78	2.98	1,503.16	1,438.40	64.76	4.50
Costs of Tap Water	238.40	241.09	(2.69)	(1.12)	985.44	912.60	72.84	7.98
Raw Water	53.56	45.67	7.89	17.28	196.61	169.57	27.04	15.94
Electricity	37.85	35.85	2.01	5.60	150.95	143.82	7.14	4.96
Chemical	11.27	8.73	2.55	29.21	43.49	33.51	9.99	29.80
Payroll, Outsource Expenses & Maintenance	47.29	64.77	(17.48)	(26.98)	229.97	219.77	10.20	4.64
Depreciation	81.34	81.32	0.01	0.02	321.52	300.79	20.73	6.89
Others	7.09	4.76	2.33	48.94	42.89	45.14	(2.25)	(4.98)
Gross Profit	134.34	120.87	13.47	11.15	517.72	525.80	(8.08)	(1.54)
Gross Profit Margin	36.04	33.39			34.44	36.55		

7. FINANCIAL POSITION ANALYSIS

Financial Position (MB)	As of 31 Dec 2019	As of 31 Dec 2018	Increased (Decreased)	%
Total Assets	21,180.88	20,140.90	1,039.98	5.16
Total Liabilities	10,167.06	9,335.75	831.31	8.90
Equity	11,013.82	10,805.15	208.66	1.93
- Equity attributable to owners of the parents	10,839.60	10,624.66	214.95	2.02

1) **Assets** At the end of 31 December 2019, total assets were 21,180.88 million Baht, increased by 1,039.98 million Baht or 5.16% from the end of the year 2018 due to the changes in the following items:

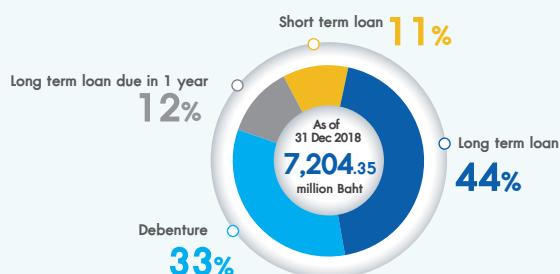
- Cash & Cash equivalents were 58.21 million Baht, decreased by 520.00 million Baht mainly from project investment in 2019 and dividend payment to the shareholder.
- Property, plant and equipment were 15,260.95 million Baht, increased by 878.72 million Baht mainly from progress of construction including clarified water & total water solution projects, Bangpakong pumping project and Tubma reservoir project; after depreciation and amortization of the completed projects.
- Other Non-current assets were 939.63 million Baht, rose by 597.05 million Baht mainly due to advance payment for construction projects and development cost of water supply, Khlong Luang Rachalothorn Reservoir Project.

2) **Liabilities** At the end of 31 December 2019, total liabilities were 10,167.06 million Baht, increased by 831.31 million Baht or 8.90% from the end of the year 2018 due to changes in the following items:

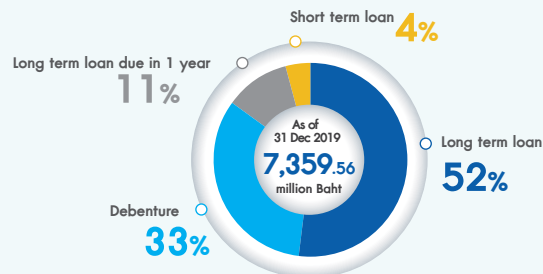
- Long-term loans from financial institutions were 4,656.20 million Baht, increased by 663.80 million Baht mainly from the drawdown of long-term loan by 1,490.00 million Baht for project construction net off with the repayment of long term loan as schedule in an amount of 826.20 million Baht.
- Short-term loans from financial institutions were 305.00 million Baht, decreased by 509.00 million Baht.
- Payable for purchase of fixed assets were 1,319.37 million Baht, increased by 358.38 million Baht from recording of account payable following to the progress of Tubma reservoir project.

PROPORTION OF INTEREST-BEARING DEBT

As of 31 Dec 2018 = 7,204.35 million Baht



As of 31 Dec 2019 = 7,359.56 million Baht



Note: According to the debentures and long-term loan agreements, the company was required to maintain its D/E ratio of not higher than 2.0 times. For the long-term loan agreements, there is additional condition to maintain DSCR of not less than 1.1 times.

3) **Shareholder's Equity** At the end of 31 December 2019, Shareholders' equity attributable to owners of the parent was 10,839.60 million Baht, increased by 214.95 million Baht or 2.02% from the end of the year 2018, basically from the net profit in 2019 net off with dividend payment.

8. LIQUIDITY ANALYSIS AND FUNDING ADIQUACY

In 2019, the company had beginning cash and cash equivalents of 578.21 million Baht, whereby during the financial period, net cash was decreased by 520.00 million Baht. This comprised of the following items:

- 1) **Net cash received from Operating Activities** totaling 2,233.70 million Baht from the net income and the changes in assets and liabilities from operations
- 2) **Net cash used in Investment Activities** amounted to 1,922.42 million Baht. This was mainly due to the investment in fixed assets, advance payment for the construction, the development of pipeline system to increase water supply, as well as the investment in concession assets in an amount of 1,764.46 million Baht and the net short-term investment by 106.41 million Baht.
- 3) **Net cash used in Financing Activities** amounted to 831.28 million Baht, mainly due to the dividend payment and the net repayment of long-term loan amounted to 815.91 and 509.00 million Baht respectively, this was net off with the long-term loan drawdown of 663.80 million Baht for project investment.

9. KEY FINANCIAL RATIOS

Key Financial Ratios	As of 31 Dec 2019	As of 31 Dec 2018
Liquidity Ratio		
Current ratio (time)	0.37	0.66
Profitability Ratio¹⁾		
Gross profit / total sales and services revenue (%)	44.08%	50.05%
Net profit / total sales and services revenue (%)	23.59%	28.33%
Performance Ratio		
Return on Equity (ROE) (%)	9.74%	10.71%
Return on Assets (ROA) (%)	5.06%	5.64%
Capital Structure and Debt Ratio		
Debt to Equity ratio (time)	0.94	0.88
Debt Service Coverage ratio (DSCR) (time)	2.20	2.19

Note: ¹⁾ Gross profit and Net profit were excluded construction revenue under concession agreement and other income.

In 2019, East Water Group reported a declining in net profit and the profit margin compared to the year 2018 because of the higher costs following to severely drought nationwide including Eastern area. Therefore; gross profit margin and net profit margin was down to 44.08% and 23.59% respectively.

Return on Equity (ROE) and Return on Asset (ROA) decreased to 9.74% and 5.06% respectively compared to the same period of the year 2018 due to the lower net profit.

For the liquidity analysis, current ratio decreased to 0.37 times because of decreasing in cash on hand and increasing in payable for purchase of fixed assets. Debt to equity ratio was at 0.94 times in-line with increasing in payable for purchase of fixed assets following to the progress of Tubma construction project and Debt service coverage ratio (DSCR) remained strong at 2.20 times.

● Report on the Board of Directors' Responsibilities for Financial Statements



The Board of Directors of Eastern Water Resources Development and Management Public Company Limited is responsible for the preparation and disclosure of financial statements of the Company and its subsidiaries for the year ended December 31, 2019 which have been prepared in accordance with financial reporting standards under the Accounting Act B.E. 2543, and financial reporting requirements of the Securities and Exchange Commission under the Securities and Exchange Act B.E. 2535.

The Board oversees and reviews corporate governance as well as establishes and maintains a proactive risk management system and internal control system to ensure that accounting records are accurate, complete and timely, and that the Company's assets are properly safeguarded against fraud, operational irregularities, and other risks.

The Board considers the accounting policies pursued to be appropriate, and that they have been applied

consistently with adequate disclosure of important information in the notes to the financial statements. The Board has appointed an Audit Committee consisting of independent directors to provide effective and efficient oversight of the financial statements, the internal control system, and the internal audit. The Audit Committee's views are reported in its report in the Company's annual report. The Company's external auditor has reviewed and audited the financial statements and expressed an unqualified opinion in the auditor's report.

The Board is confident that the internal control system and the internal audit of Eastern Water Resources Development and Management Public Company Limited and its subsidiaries for the year ended December 31, 2019 represent the financial position, results of operations, and cash flows that give a true and fair view in accordance with Thai Financial Reporting Standards.

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Mr. Veerasak Kositpaisal
Chairman

A stylized handwritten signature in black ink.

Mr. Jirayut Rungsritthong
President & Chief Executive Officer

CONSOLIDATED AND SEPARATE FINANCIAL STATEMENTS

**EASTERN WATER RESOURCES DEVELOPMENT
AND MANAGEMENT PUBLIC COMPANY LIMITED**

31 DECEMBER 2019

Independent Auditor's Report

To the shareholders of Eastern Water Resources Development and Management Public Company Limited

My opinion

In my opinion, the consolidated financial statements of Eastern Water Resources Development and Management Public Company Limited (the Company) and its subsidiaries (the Group) and the separate financial statements of the Company present fairly, in all material respects, the consolidated and separate financial position of the Group and of the Company as at 31 December 2019, and consolidated and separate financial performance and consolidated and separate cash flows for the year then ended in accordance with Thai Financial Reporting Standards (TFRS).

What I have audited

The consolidated financial statements and the separate financial statements comprise:

- the consolidated and separate statements of financial position as at 31 December 2019;
- the consolidated and separate statements of comprehensive income for the year then ended;
- the consolidated and separate statements of changes in equity for the year then ended;
- the consolidated and separate statements of cash flows for the year then ended; and
- the notes to the consolidated and separate financial statements, which include a summary of significant accounting policies.

Basis for opinion

I conducted my audit in accordance with Thai Standards on Auditing (TSAs). My responsibilities under those standards are further described in the Auditor's responsibilities for the audit of the consolidated and separate financial statements section of my report. I am independent of the Group and the Company in accordance with the Federation of Accounting Professions under the Royal Patronage of his Majesty the King's Code of Ethics for Professional Accountants together with the ethical requirements that are relevant to my audit of the consolidated and separate financial statements, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Emphasis of matter

I draw your attention to Note 38 to the financial statements regarding compensation for the Company's pipeline connecting projects. Currently, the Company pays compensation at a preliminary rate because the government agency is considering a deal in which the Company will rent or manage the connecting projects. As a result, the government agency is reviewing the compensation rate and it may be subject to change. My opinion is not qualified in respect of this matter.

Key audit matters

Key audit matters are those matters that, in my professional judgment, were of most significance in my audit of the consolidated and separate financial statements of the current period. I determine one key audit matter: the assessment of the recoverable amount of goodwill. The matter was addressed in the context of my audit of the consolidated and separate financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on this matter.

Key audit matter	How my audit addressed the key audit matter
Assessment of the recoverable amount of goodwill As at 31 December 2019, the Group has recognised goodwill in the consolidated financial statements in the amount of Baht 103.3 million. The goodwill relates to an acquired equity interest in a private company in 2015 by a subsidiary of the Company. The goodwill is primarily attributed to the operating agreement of the acquired company in achieving its operating results. Therefore, future operating results and the remaining agreement period have a direct impact on the impairment of the goodwill. The Group is required to assess goodwill for impairment annually according to the relevant financial reporting standard. The management assessed the recoverable amount of goodwill by calculating the value in use which involves an estimation of future cash flows. The assessment of the recoverable amount of goodwill was determined as a key audit matter because the amount of goodwill is material to the financial statements. The recoverable amount depends on assumptions which involve significant management judgement, such as an estimate of the future cash flows the Group expects to derive from the asset, expectations about possible variations in the amount or timing of future cash flows, the time value of money, and the appropriate discount rates. The key assumptions of the estimate of future cash flows are the selling price, sales volumes and discount rates as disclosed in Note 15, Goodwill.	I tested the calculation of value in use prepared by management. I inquired with management about the future operation plans and tested the reasonableness of the estimate of future cash flows by testing the assumptions as follows: • compared the forecast of operating results against actual historical data. • compared the selling price and sales volumes with information specified in the operating agreement and checked the reasonableness of the future selling price adjustment. • analysed whether related costs and expenses were in line with sales and consistent with actual historical amounts. • used my firm's valuation expert to evaluate the discount rate applied in the cash flows model. • performed a sensitivity analysis on key assumptions. Based on the procedures above, I found that the assumptions used by the management in the assessment of the recoverable amount of goodwill were reasonable.

Other information

The directors are responsible for the other information. The other information comprises the information included in the annual report, but does not include the consolidated and separate financial statements and my auditor's report thereon. The annual report is expected to be made available to me after the date of this auditor's report.

My opinion on the consolidated and separate financial statements does not cover the other information and I will not express any form of assurance conclusion thereon.

In connection with my audit of the consolidated and separate financial statements, my responsibility is to read the other information identified above when it becomes available and, in doing so, consider whether the other information is materially inconsistent with the consolidated and separate financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the annual report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to the audit committee.

Responsibilities of the directors for the consolidated and separate financial statements

The directors are responsible for the preparation and fair presentation of the consolidated and separate financial statements in accordance with TFRS, and for such internal control as the directors determine is necessary to enable the preparation of consolidated and separate financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated and separate financial statements, the directors are responsible for assessing the Group and the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group and the Company or to cease operations, or has no realistic alternative but to do so.

The audit committee assists the directors in discharging their responsibilities for overseeing the Group and the Company's financial reporting process.

Auditor's responsibilities for the audit of the consolidated and separate financial statements

My objectives are to obtain reasonable assurance about whether the consolidated and separate 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 TSAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated and separate financial statements.

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

- Identify and assess the risks of material misstatement of the consolidated and separate 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 and the Company's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group and the Company'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 consolidated and separate 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 and the Company to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated and separate financial statements, including the disclosures, and whether the consolidated and separate 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 the audit committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide the audit committee 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 the audit committee, I determine those matters that were of most significance in the audit of the consolidated and separate financial statements of the current period and are therefore the key audit matters. I describe these matters 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.

PricewaterhouseCoopers ABAS Ltd.



Sukhumaporn Wong-ariyaporn
Certified Public Accountant (Thailand) No. 4843
Bangkok
27 February 2020

Eastern Water Resources Development and Management Public Company Limited

Statement of Financial Position

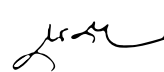
As at 31 December 2019

(Unit: Baht)

	Notes	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Assets					
Current assets					
Cash and cash equivalents	7	58,211,264	578,213,162	15,710,367	540,945,900
Short-term investments	8	510,683,539	404,276,814	64,151,866	55,053,467
Trade and other receivables	9	502,201,865	444,237,325	358,663,795	299,579,642
Inventories	10	25,632,024	13,343,706	8,806,562	-
Other current assets	11	53,590,965	29,206,528	20,624,014	16,196,275
Total current assets		1,150,319,657	1,469,277,535	467,956,604	911,775,284
Non-current assets					
Investment in a subsidiary	12	-	-	510,000,000	510,000,000
Long-term loan to a subsidiary	35.4	-	-	1,600,000,000	1,600,000,000
Investment property - net	13	171,563,875	177,633,381	183,868,514	190,426,863
Property, plant and equipment - net	14	15,260,947,303	14,382,226,848	15,003,101,135	14,106,295,465
Goodwill	15	103,283,004	103,283,004	-	-
Intangible assets - net	16	3,531,073,066	3,643,973,788	52,308,271	54,184,108
Deferred tax assets	17	24,066,442	21,935,597	-	-
Other non-current assets	18	939,626,134	342,571,735	896,039,675	289,062,198
Total non-current assets		20,030,559,824	18,671,624,353	18,245,317,595	16,749,968,634
Total assets		21,180,879,481	20,140,901,888	18,713,274,199	17,661,743,918



(Mr. Jirayut Rungsithong)
President & Chief Executive Officer



(Mr. Sombat Yusamart)
Senior Executive Vice President
and Chief Financial Officer (CFO)

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited
Statement of Financial Position (continued)
As at 31 December 2019

		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
	Notes	2019	2018	2019	2018
Liabilities and equity					
Current liabilities					
Short-term borrowings from					
financial institutions	19.1	305,000,000	814,000,000	-	580,000,000
Trade and other payables	20	317,335,733	147,205,473	251,936,202	101,460,062
Payable for purchase of fixed assets		1,319,365,043	98,782,240	1,295,938,218	89,186,017
Current portion of finance lease liabilities	21	1,899,442	2,120,878	1,899,442	2,120,878
Current portion of long-term borrowings					
from financial institutions	19.2	826,200,000	826,200,000	634,000,000	634,000,000
Income tax payable		103,707,151	118,460,134	71,959,841	98,430,668
Accrued expenses	23	190,794,795	163,187,352	148,028,260	113,407,971
Other current liabilities	24	66,125,076	59,403,122	40,833,812	37,114,058
Total current liabilities		3,130,427,240	2,229,359,199	2,444,595,775	1,655,719,654
Non-current liabilities					
Finance lease liabilities	21	1,251,792	1,785,186	1,251,792	1,785,186
Long-term borrowings from					
financial institutions	19.2	3,830,000,000	3,166,200,000	3,830,000,000	2,974,000,000
Debentures	19.3	2,398,362,741	2,397,954,566	2,398,362,741	2,397,954,566
Payable for purchase of fixed assets		-	862,203,611	-	862,203,611
Deferred tax liabilities	17	341,296,654	364,610,967	47,953,455	45,005,082
Employee benefit obligations	25	209,847,913	150,460,939	154,884,483	107,575,717
Long-term provisions	26	29,353,211	20,786,080	-	-
Other non-current liabilities	27	226,524,407	142,390,816	183,673,743	103,663,855
Total non-current liabilities		7,036,636,718	7,106,392,165	6,616,126,214	6,492,188,017
Total liabilities		10,167,063,958	9,335,751,364	9,060,721,989	8,147,907,671

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited**Statement of Financial Position (continued)****As at 31 December 2019****(Unit: Baht)**

	Notes	Consolidated		Separate	
		financial statements		financial statements	
		2019	2018	2019	2018
Liabilities and equity (continued)					
Equity					
Share capital					
Registered share capital					
Ordinary shares, 1,663,725,149 shares					
of par Baht 1 each		1,663,725,149	1,663,725,149	1,663,725,149	1,663,725,149
Issued and paid-up share capital					
Ordinary shares, 1,663,725,149 shares					
of par Baht 1 each		1,663,725,149	1,663,725,149	1,663,725,149	1,663,725,149
Share premium		2,138,522,279	2,138,522,279	2,138,522,279	2,138,522,279
Retained earnings					
Appropriated - legal reserve	28	166,500,000	166,500,000	166,500,000	166,500,000
- concession reserve	28	393,729,177	351,481,143	61,515,707	52,222,751
Unappropriated		6,469,124,482	6,293,040,408	5,614,287,355	5,481,478,094
Other components of equity	29	8,001,720	11,387,974	8,001,720	11,387,974
Equity attributable to owners of the parent		10,839,602,807	10,624,656,953	9,652,552,210	9,513,836,247
Non-controlling interests		174,212,716	180,493,571	-	-
Total equity		11,013,815,523	10,805,150,524	9,652,552,210	9,513,836,247
Total liabilities and equity		21,180,879,481	20,140,901,888	18,713,274,199	17,661,743,918

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited
Statement of Comprehensive Income
For the year ended 31 December 2019

					(Unit: Baht)	
	Notes	Consolidated financial statements		Separate financial statements		
		2019	2018	2019	2018	
Revenues	35					
Sales - raw water		2,844,696,384	2,393,819,753	2,884,870,146	2,434,127,657	
Sales - tap water		1,503,160,203	1,438,401,964	404,257,647	376,608,687	
Construction revenue under concession agreements		203,125,375	232,570,908	-	-	
Rental and service income		129,096,397	156,196,427	120,448,415	142,034,069	
Total sales and service income		4,680,078,359	4,220,989,052	3,409,576,208	2,952,770,413	
Other income	31	49,192,818	34,335,133	196,691,211	167,282,997	
Total revenues		4,729,271,177	4,255,324,185	3,606,267,419	3,120,053,410	
Expenses	35					
Cost of sales - raw water		1,396,159,513	944,243,793	1,429,281,441	973,079,878	
Cost of sales - tap water		985,438,250	912,597,462	356,787,695	312,904,810	
Construction cost under concession agreements		203,125,375	232,570,908	-	-	
Cost of rental and services		121,712,085	135,211,039	101,288,702	106,860,741	
Total cost of sales and services		2,706,435,223	2,224,623,202	1,887,357,838	1,392,845,429	
Selling expenses		15,374,124	10,097,242	13,465,265	7,840,004	
Administrative expenses		523,146,042	472,430,465	374,414,430	329,365,948	
Finance costs		166,052,431	157,212,055	151,066,468	117,185,312	
Total expenses		3,411,007,820	2,864,362,964	2,426,304,001	1,847,236,693	
Profit before income tax		1,318,263,357	1,390,961,221	1,179,963,418	1,272,816,717	
Income tax	33	(262,357,904)	(261,187,123)	(218,122,983)	(228,096,859)	
Net profit for the year		1,055,905,453	1,129,774,098	961,840,435	1,044,719,858	
Other comprehensive income :						
<i>Item that will not be reclassified subsequently to profit or loss</i>						
Remeasurements of post-employment benefit obligations	25	(34,841,588)	-	(26,437,683)	-	
Income tax on item that will not be reclassified subsequently to profit or loss	33	6,968,318	-	5,287,537	-	
Total item that will not be reclassified subsequently to profit or loss		(27,873,270)	-	(21,150,146)	-	
<i>Item that will be reclassified subsequently to profit or loss</i>						
Asset transferred from customers		(3,386,254)	(3,386,254)	(3,386,254)	(3,386,254)	
Total item that will be reclassified subsequently to profit or loss		(3,386,254)	(3,386,254)	(3,386,254)	(3,386,254)	
Other comprehensive income for the year, net of tax		(31,259,524)	(3,386,254)	(24,536,400)	(3,386,254)	
Total comprehensive income for the year		1,024,645,929	1,126,387,844	937,304,035	1,041,333,604	

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited**Statement of Comprehensive Income (continued)****For the year ended 31 December 2019**

(Unit: Baht)					
		Consolidated financial statements		Separate financial statements	
	Note	2019	2018	2019	2018
Profit attributable to					
Owners of the parent		1,044,793,450	1,117,521,523	961,840,435	1,044,719,858
Non-controlling interests		11,112,003	12,252,575	-	-
		<u>1,055,905,453</u>	<u>1,129,774,098</u>	<u>961,840,435</u>	<u>1,044,719,858</u>
Total comprehensive income attributable to					
Owners of the parent		1,013,533,926	1,114,135,269	937,304,035	1,041,333,604
Non-controlling interests		11,112,003	12,252,575	-	-
		<u>1,024,645,929</u>	<u>1,126,387,844</u>	<u>937,304,035</u>	<u>1,041,333,604</u>
Earnings per share					
Basic earnings per share	34	0.63	0.67	0.58	0.63

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited
Statement of Changes in Equity
For the year ended 31 December 2019

Consolidated financial statements											(Unit: Baht)
Attributable to owners of the parent											
Other components of equity											
Other comprehensive income											
Assets transferred from customers-net											
Issued and paid-up share capital		Premium on share capital		Retained earnings		Total other components of equity		Total owners of the parent		Total equity	
Notes				Appropriated - legal reserve	Appropriated - concession reserve	Unappropriated					
Opening balance as at 1 January 2018											
	1,663,725,149	2,138,522,279	166,500,000	298,762,142	5,960,276,230	14,774,228	14,774,228	10,242,560,028	187,345,756	10,429,905,784	
30	-	-	-	-	(732,038,344)	-	-	(732,038,344)	(19,104,760)	(751,143,104)	
Appropriation of concession reserve for the year											
28	-	-	-	52,719,001	(52,719,001)	-	-	-	-	-	
Total comprehensive income for the year											
	-	-	-	-	1,117,521,523	(3,386,254)	(3,386,254)	1,114,135,269	12,252,575	1,126,387,844	
Closing balance as at 31 December 2018											
	1,663,725,149	2,138,522,279	166,500,000	351,481,143	6,293,040,408	11,387,974	11,387,974	10,624,656,953	180,493,571	10,805,150,524	
Opening balance as at 1 January 2019											
	1,663,725,149	2,138,522,279	166,500,000	351,481,143	6,293,040,408	11,387,974	11,387,974	10,624,656,953	180,493,571	10,805,150,524	
30	-	-	-	-	(798,588,072)	-	-	(798,588,072)	(17,392,858)	(815,980,930)	
Appropriation of concession reserve for the year											
28	-	-	-	42,248,034	(42,248,034)	-	-	-	-	-	
Total comprehensive income for the year											
	-	-	-	-	1,016,920,180	(3,386,254)	(3,386,254)	1,013,533,926	11,112,003	1,024,645,929	
Closing balance as at 31 December 2019											
	1,663,725,149	2,138,522,279	166,500,000	393,729,177	6,469,124,482	8,001,720	8,001,720	10,839,602,807	174,212,716	11,013,815,523	

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited

Statement of Changes in Equity (continued)

For the year ended 31 December 2019

	Separate financial statements							(Unit: Baht)	
	Notes	Issued and paid-up share capital	Premium on share capital	Other components of equity					
				Appropriated - legal reserve	Other comprehensive income				
					Retained earnings	Assets transferred from customers-net	Total other components of equity		
									Appropriated - concession reserve
Opening balance as at 1 January 2018									
	1,663,725,149	2,138,522,279	166,500,000	39,316,426	5,181,702,905	14,774,228	14,774,228	9,204,540,987	
Dividend paid	30	-	-	-	(732,038,344)	-	-	(732,038,344)	
Appropriation of concession reserve for the year	28	-	-	-	12,906,325	(12,906,325)	-	-	
Total comprehensive income for the year		-	-	-	-	1,044,719,858	(3,386,254)	1,041,333,604	
Closing balance as at 31 December 2018									
	1,663,725,149	2,138,522,279	166,500,000	52,222,751	5,481,478,094	11,387,974	11,387,974	9,513,836,247	
Opening balance as at 1 January 2019									
Dividend paid	30	-	-	-	-	-	-	(798,588,072)	
Appropriation of concession reserve for the year	28	-	-	-	9,292,956	(9,292,956)	-	-	
Total comprehensive income for the year		-	-	-	-	940,690,289	(3,386,254)	937,304,035	
Closing balance as at 31 December 2019									
	1,663,725,149	2,138,522,279	166,500,000	61,515,707	5,614,287,355	8,001,720	8,001,720	9,652,552,210	

Eastern Water Resources Development and Management Public Company Limited
Statement of Cash Flows
For the year ended 31 December 2019

		(Unit: Baht)			
		Consolidated		Separate	
		financial statements		financial statements	
Notes		2019	2018	2019	2018
Cash flows from operating activities					
Profit before income tax		1,318,263,357	1,390,961,221	1,179,963,418	1,272,816,717
Adjustments to reconcile profit before income tax to net cash received (paid) from operating activities					
Depreciation	13,14	504,402,769	432,019,718	474,520,664	401,632,215
Amortisation of intangible assets	16	323,744,202	304,107,746	9,633,595	8,686,839
Income from amortisation of assets transferred from customers		(3,386,254)	(3,386,254)	(3,386,254)	(3,386,254)
(Gain) loss on disposal/write-off fixed assets		(1,247,093)	512,966	(1,252,230)	512,966
Impairment loss on concession right	16	-	860,000	-	-
Gain on sales of available-for-sale investments		-	(127,780)	-	(127,780)
Long-term provisions	26	18,905,935	(588,697)	-	-
Employee benefit obligations	25	53,075,607	18,185,685	35,225,881	12,681,831
Dividend income	31	-	-	(120,359,983)	(126,581,983)
Interest income	31	(8,824,348)	(6,989,137)	(44,420,893)	(16,301,893)
Interest expenses		164,895,189	155,969,725	149,909,225	115,904,051
Profit from operating activities before changes in operating assets and liabilities					
		2,369,829,364	2,291,525,193	1,679,833,423	1,665,836,709
Changes in operating assets (increase) decrease					
Trade and other receivables		(57,964,540)	(36,812,947)	(59,084,153)	(26,070,055)
Inventories		(12,288,318)	(275,080)	(8,806,562)	-
Other current assets		(3,376,053)	27,833,886	(4,306,153)	(2,440,217)
Other non-current assets		2,160,459	(26,335,970)	(7,779,479)	(3,246,245)
Changes in operating liabilities increase (decrease)					
Trade and other payables		170,130,260	7,477,323	150,476,140	4,176,637
Accrued expenses		28,125,786	(16,977,829)	35,138,632	(6,239,742)
Other current liabilities		7,000,918	(13,251,900)	3,651,620	(7,130,845)
Employee benefit obligations - paid	25	(28,530,221)	(2,786,739)	(14,354,798)	(1,755,398)
Long-term provisions - paid	26	(10,338,804)	(11,813,760)	-	-
Other non-current liabilities		84,133,591	(138,372,577)	80,009,889	(137,744,134)
Cash provided by operation		2,548,882,442	2,080,209,600	1,854,778,559	1,485,386,710
Income tax paid		(315,179,389)	(312,057,154)	(236,357,899)	(224,183,740)
Net cash generated from operating activities		2,233,703,053	1,768,152,446	1,618,420,660	1,261,202,970

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited**Statement of Cash Flows (continued)****For the year ended 31 December 2019**

(Unit: Baht)

	Notes	Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Cash flows from investing activities					
Payment for short-term investments		(776,587,622)	(1,067,580,045)	(9,098,399)	(16,737,041)
Proceeds from disposal of short-term investments		670,180,896	1,056,470,219	-	145,127,780
Interest received		7,407,626	5,923,878	44,299,307	16,166,511
Dividend received	12	-	-	120,359,983	126,581,983
Proceeds from disposal of fixed assets		2,717,586	18,158,226	2,709,724	18,158,226
Payment for investment property		(2,325,774)	(218,387)	(2,513,093)	(235,976)
Payment for fixed assets and advance for construction		(1,266,725,890)	(480,475,196)	(1,255,941,267)	(428,993,527)
Payment for intangible assets		(198,733,479)	(244,406,111)	(7,757,758)	(12,720,077)
Payment for development cost of water supply project	18	(299,000,000)	-	(299,000,000)	-
Cash returned from construction project		-	529,238,341	-	529,238,341
Interest paid capitalised in qualifying assets		(59,354,670)	(70,421,411)	(59,354,670)	(70,421,411)
Long-term loan made to a subsidiary		-	-	-	(1,600,000,000)
Net cash used in investing activities		(1,922,421,327)	(253,310,486)	(1,466,296,173)	(1,293,835,191)
Cash flows from financing activities					
Proceeds from short-term borrowings from financial institutions	19.1	6,943,000,000	4,409,000,000	5,741,000,000	3,560,000,000
Payment for short-term borrowings from financial institutions	19.1	(7,452,000,000)	(3,678,000,000)	(6,321,000,000)	(2,990,000,000)
Proceeds from long-term borrowings from financial institutions	19.2	1,490,000,000	1,600,000,000	1,490,000,000	1,600,000,000
Payment for long-term borrowings from financial institutions	19.2	(826,200,000)	(2,408,200,000)	(634,000,000)	(616,000,000)
Payment for finance lease liabilities	22	(2,367,030)	(330,637)	(2,367,030)	(330,637)
Dividend paid		(815,912,646)	(750,973,359)	(798,519,938)	(731,868,661)
Interest paid		(167,803,948)	(145,602,783)	(152,473,052)	(108,843,256)
Net cash generated from (used in) financing activities		(831,283,624)	(974,106,779)	(677,360,020)	712,957,446
Net increase (decrease) in cash and cash equivalents		(520,001,898)	540,735,181	(525,235,533)	536,325,225
Cash and cash equivalents at the beginning of the year		578,213,162	37,477,981	540,945,900	4,620,675
Cash and cash equivalents at the end of the year	7	58,211,264	578,213,162	15,710,367	540,945,900
Supplemental cash flow information					
Non-cash transactions:					
Purchase of fixed assets on payable		1,300,437,818	252,131,294	1,294,247,874	251,766,301
Purchase of intangible assets on payable		21,380,884	9,231,232	4,144,003	-
Purchase of assets under finance lease agreements		1,612,200	-	1,612,200	-

The accompanying notes on pages 117 to 164 are an integral part of these consolidated and separate financial statements.

Eastern Water Resources Development and Management Public Company Limited
Notes to the Consolidated and Separate Financial Statements
For the year ended 31 December 2019

1 General information

Eastern Water Resources Development and Management Public Company Limited ("the Company") is a public limited company which listed on the Stock Exchange of Thailand. The Company is incorporated and domiciled in Thailand. The address of the Company's registered office is as follows:

23rd - 26th Floors, East Water Building, No. 1 Soi Vipavadeerangsit 5, Vipavadeerangsit Road, Jomphol Sub-district, Chatujak District, Bangkok.

For reporting purposes, the Company and its subsidiaries are referred to as the Group.

The principal business operations of the Company are development and management of the major water distribution pipeline systems in the Eastern Seaboard area of Thailand, supply of raw water, production and supply of tap water.

The consolidated financial statements include the financial statements of the Company and the following subsidiaries:

Company's name	Nature of business	Country of incorporation	Ownership of interest	
			2019 %	2018 %
<u>Subsidiary held directly by the Company</u>				
Universal Utilities Public Company Limited	Production and supply of tap water, water loss treatment and investment in four tap water supply companies	Thailand	100	100
<u>Subsidiaries held by Universal Utilities Public Company Limited</u>				
Chachoengsao Water Supply Company Limited	Production and supply of tap water	Thailand	100	100
Bangpakong Water Supply Company Limited	Production and supply of tap water	Thailand	100	100
Nakornsawan Water Supply Company Limited	Production and supply of tap water	Thailand	100	100
Egcom Tara Company Limited	Production and supply of tap water	Thailand	90.07	90.07

These financial statements were authorised for issue on 27 February 2020 by the Company's Board of Directors.

2 Accounting policies

The principal accounting policies adopted in the preparation of these consolidated and separate financial statements are set out below.

2.1 Basis of preparation of financial statements

The consolidated and separate financial statements have been prepared in accordance with Thai Financial Reporting Standards ("TFRS") and the financial reporting requirements issued under the Securities and Exchange Act.

The consolidated and separate financial statements have been prepared under the historical cost convention.

The preparation of financial statements in conformity with Thai generally accepted accounting principles requires the use of certain critical accounting estimates. It also requires management to exercise its judgment in the process of applying the Group's accounting policies. Critical accounting estimates, judgements and assumptions are disclosed in Note 4.

An English version of the consolidated and separate financial statements has been prepared from the statutory financial statements that are in the Thai language. In the event of a conflict or a difference in interpretation between the two languages, the Thai language statutory financial statements shall prevail.

Eastern Water Resources Development and Management Public Company Limited
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2.2 New financial reporting standards and revised financial reporting standards

2.2.1 The financial reporting standards are effective for annual periods beginning on or after 1 January 2019. These standards have significant changes and are relevant to the Group.

TAS 28 (revised 2018)	Investments in associates and joint ventures
TAS 40 (revised 2018)	Investment property
TFRS 2 (revised 2018)	Share-based payment
TFRS 15	Revenue from contracts with customers
TFRIC 22	Foreign currency transactions and advance consideration

These standards do not have a material impact to the Group.

2.2.2 Financial reporting standards are effective for annual periods beginning on or after 1 January 2019 and are relevant to the Group. The Group has not yet adopted these standards.

2.2.2.1 Financial instruments

The new financial standards relate to financial instruments are:

TAS 32	Financial instruments: presentation
TFRS 7	Financial instruments: disclosures
TFRS 9	Financial instruments
TFRIC 16	Hedges of a net investment in a foreign operation
TFRIC 19	Extinguishing financial liabilities with equity instruments

These new standards address the classification, measurement, derecognition of financial assets and financial liabilities, impairment of financial assets, hedge accounting, and presentation and disclosure of financial instruments.

The Group's management is currently assessing the impact of these standards.

2.2.2.2 TFRS 16, Leases

Where the Group is a lessee, TFRS 16, Leases will result in almost all leases being recognised on the statement of financial position as the distinction between operating and finance leases is removed. A right-of-use asset and a lease liability will be recognised, with exception on short-term and low-value leases.

On 1 January 2020, the Group will apply TFRS 16 by adjusting cumulative impact to opening retained earnings (modified retrospective approach). From the preliminary assessment, the management expects that the Group will have significant impact on recognition of lease liabilities and right of use assets under operating leases as follows:

- Liabilities under lease agreements are recognised in accordance with the obligations and discounted to present values with incremental borrowing rates of the lessees as of 1 January 2020 amounting of Baht 458.5 million.
- Right-of-use assets are recognised equal to the present value of liabilities under the lease agreements as of 1 January 2020 amounting of Baht 458.5 million.

2.2.2.3 Other new/amended standards

TAS 12	Income tax
TAS 19	Employee benefits
TAS 23	Borrowing cost
TFRIC 23	Uncertainty over income tax treatments

Amendment to TAS 12, Income tax - clarified that the income tax consequences of dividends of financial instruments classified as equity should be recognised according to where the past transactions or events that generated distributable profits were recognised.

Amendment to TAS 19, Employee benefits (plan amendment, curtailment or settlement) - clarified accounting for defined benefit plan amendments, curtailments and settlements that the updated assumptions on the date of change are applied to determine current service cost and net interest for the remainder of the reporting period after the plan amendment, curtailment or settlement.

Amendment to TAS 23, Borrowing costs - clarified that if a specific borrowing remains outstanding after the related qualifying asset is ready for its intended use or sale, it becomes part of general borrowings.

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TFRIC 23, Uncertainty over income tax treatments - explained how to recognise and measure deferred and current income tax assets and liabilities where there is uncertainty over a tax treatment. In particular, it discusses:

- that the Group should assume a tax authority will examine the uncertain tax treatments and have full knowledge of all related information, ie that detection risk should be ignored.
- that the Group should reflect the effect of the uncertainty in its income tax accounting when it is not probable that the tax authorities will accept the treatment.
- that the judgements and estimates made must be reassessed whenever circumstances have changed or there is new information that affects the judgements.

The Group's management is currently assessing the impact of these standards.

2.3 Principles of consolidation and equity accounting

(1) Subsidiaries

Subsidiaries are all entities over which the Group has control. The Group controls an entity when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are consolidated from the date on which control is transferred to the Group until the date that control ceases.

In the separate financial statements, investments in subsidiaries are accounted for using cost method. Direct costs are recorded as cost of initial investment. Dividend income from subsidiaries are recognised as income in profit or loss.

(2) Changes in ownership interests

The Group treats transactions with non-controlling interests that do not result in a loss of control as transactions with equity owners of the Group. A difference between the amount of the adjustment to non-controlling interests to reflect their relative interest in the subsidiary and any consideration paid or received is recognised within equity.

When the Group loses control, joint control over investments, any retained interest in the investment is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value becomes the initial carrying amount of the retained interest which is reclassified to investment in an associate, or a joint venture or a financial asset accordingly.

(3) Intercompany transactions on consolidation

Intra-group transactions, balances and unrealised gains on transactions are eliminated. Unrealised gains on transactions between the Group and its associates and joint ventures are eliminated to the extent of the Group's interest in the joint ventures. Unrealised losses are also eliminated in the same manner unless the transaction provides evidence of an impairment of the asset transferred.

2.4 Foreign currency translation

(a) Functional and presentation currency

The financial statements are presented in Thai Baht which is the Company's functional currency.

(b) Transactions and balances

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

Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the profit or loss.

Any exchange component of gains and losses on a non-monetary item that recognised in profit or loss, or other comprehensive income is recognised following the recognition of a gain or loss on the non-monetary item.

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2.5 Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held at call with banks and other short-term highly liquid investments with maturities of three months or less from the date of acquisition.

2.6 Trade receivables

Trade receivables are amounts due from customers for goods sold or service performed in the ordinary course of business.

Trade receivables are recognised initially at the amount of consideration that is unconditionally unless they contain significant financing components, when they are recognised at its present value. The Group presented trade receivables at cost less allowance for doubtful accounts.

2.7 Inventories

Inventories are stated at the lower of cost and net realisable value.

Cost of inventories is determined by the moving average method. Cost of raw materials comprise all purchase cost and costs directly attributable to the acquisition of the inventory less all attributable discounts. Net realisable value is the estimate of the selling price in the ordinary course of business, less applicable variable selling expenses. Allowance is made, where necessary, for obsolete, slow moving and defective inventories.

2.8 Investments

Investments other than investments in subsidiaries, associates and joint ventures are initially recognised at fair value of consideration paid plus direct transaction cost.

Trading and available-for-sale investments

Trading investments and available-for-sale investments are subsequently measured at fair value. The unrealised gains and losses of trading investments are recognised in profit or loss. The unrealised gains and losses of available for sale investments are recognised in other comprehensive income and are subsequently reclassified to profit or loss when the investment is disposed.

Held-to-maturity investments

Held-to-maturity investments are carried at amortised cost using the effective interest method less impairment.

General investments

General investments are carried at cost less impairment.

Disposal of investments

On a disposal of an investment, the difference between the net disposal proceeds and the carrying amount (including cumulative changes in fair value recognised in equity) is recognised to the profit or loss. When the Group disposes an investment partially, the carrying amount of the disposed part is determined by the weighted average method.

2.9 Investment property

Investment properties, principally freehold office buildings, are held for long-term rental yields or for capital appreciation and are not occupied by the Group.

Investment property is measured initially at cost, including directly attributable costs and borrowing costs.

Land is not depreciated. Depreciation on other investment properties is calculated using the straight line method to allocate cost to residual values over the estimated useful lives, as follows:

Building	20 and 35 years
Building improvement	10 years

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2.10 Property, plant and equipment

Land is stated at cost less any accumulated impairment loss. Plant and equipment are stated at cost less accumulated depreciation and any accumulated impairment loss.

Initial cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent costs are included in the asset's carrying amount, only when it is probable that future economic benefits associated with the item will flow to the Group. The carrying amount of the replaced part is derecognised.

Land is not depreciated. Depreciation on other assets is calculated using the straight-line method to allocate cost to residual values over the estimated useful lives, as follows:

Pumping plants	20 and 35 years
Building	20 and 35 years
Leasehold and building improvements	5, 10 years but not more than leased term
Machinery and equipment	
- Water pipe	30 and 40 years
- Tap water production system	5 and 15 and 20 years
- Tools and equipment	5 years
Office equipment	3 and 5 years
Vehicles	5 years

The asset's residual values and useful lives are reviewed, and adjusted if appropriate, at the end of each reporting period.

Gains or losses on disposals are determined by comparing the proceeds with the carrying amount and are recognised in profit or loss.

2.11 Goodwill

Goodwill is tested for impairment annually, or more frequently if events or changes in circumstances indicate that it might be impaired, and is carried at cost less any accumulated impairment losses.

For the purpose of impairment testing, goodwill is allocated to cash-generating units or groups of cash-generating units that are expected to benefit from the business combination in which the goodwill arose. The units or groups of units are identified at the lowest level at which goodwill is monitored for internal management purposes, being the operating segments.

2.12 Service concession arrangements

Service concession arrangements are arrangements between government (the grantor) and a private sector entity (an operator) which involve the operator constructing the infrastructure used to provide the public service or upgrading it and operating and maintaining that infrastructure for a specified period of time. The operator is paid for its services over the period of the arrangement. The grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price and the grantor control-through ownership, beneficial entitlement or otherwise - any significant residual interest in the infrastructure at the end of the term of the arrangement.

If the Group as the operator provides construction or upgrade services, revenue and costs relating to construction or upgrade services shall be accounted for based on the stage of completion on the construction contract. The consideration received or receivable by the operator shall be recognised at its fair value of a financial asset or an intangible asset.

The Group shall recognise a financial asset to extent that it has an unconditional contractual right to receive cash or another financial asset from or at the direction of the grantor for the construction services and recognise an intangible asset to the extent that it receives a right (a licence) to charge users of the public service. A right to charge users of the public service is not an unconditional right to receive cash because the amounts are contingent on the extent that the public uses the service. If the operator is paid for the construction services partly by a financial asset and partly by an intangible asset it is necessary to account separately for each component of the operator's consideration. Revenue and cost relating to operation services shall be recognised when service is provided by reference to the contract term.

Contractual obligations to maintain or restore infrastructure, except for any upgrade element, shall be recognised and measured at the best estimate of the expenditure that would be required to settle the present obligation at the end of the reporting period.

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2.13 Intangible assets

Right from service concession arrangements

Right from service concession arrangements is the right from service concession arrangements to produce and supply tap water with the government as described in the accounting policies in Note 2.12. Right from service concession arrangements is amortised using the straight-line method over concession period and recorded in profit and loss.

Computer software

Expenditure on acquired computer software is capitalised on the basis of the costs incurred to acquire and amortised using the straight-line method over its estimated useful lives of 10 years.

2.14 Impairment of assets

Assets that have an indefinite useful life are tested annually for impairment, or more frequently if events or changes in circumstances indicate that it might be impaired. Assets that are subject to amortisation are reviewed for impairment whenever there is an indication of impairment. An impairment loss is recognised for the amount by which the carrying amount of the assets exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use.

Where the reasons for previously recognised impairments no longer exist, the impairment losses on the assets concerned other than goodwill is reversed.

2.15 Current and deferred income taxes

The tax expense for the period comprises current and deferred tax. Tax is recognised in profit or loss, except to the extent that it relates to items recognised in other comprehensive income or directly in equity.

Current tax

The current income tax is calculated on the basis of the tax laws enacted or substantively enacted at the end of the reporting period. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation. It establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Deferred income tax

Deferred income tax is recognised on temporary differences arising from differences between the tax base of assets and liabilities and their carrying amounts in the financial statements. However, deferred income tax is not recognised for temporary differences arise from:

- initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss is not recognised
- investments in subsidiaries, associates and joint arrangements where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

Deferred income tax is measured using tax rates of the period in which temporary difference is expected to be reversed, based on tax rates and laws that have been enacted or substantially enacted by the end of the reporting period.

Deferred tax assets are recognised only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilised.

Deferred tax assets and liabilities are offset when there is a legally enforceable right to offset current tax assets and liabilities and when the deferred tax balances relate to the same taxation authority. Current tax assets and tax liabilities are offset where the entity has a legally enforceable right to offset and intends either to settle on a net basis, or to realise the asset and settle the liability simultaneously

Eastern Water Resources Development and Management Public Company Limited
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2.16 Borrowings

Borrowings are recognised initially at the fair value, net of directly attributable transaction costs incurred. Borrowings are subsequently stated at amortised cost.

Borrowings are removed from the statement of financial position when the obligation specified in the contract is discharged, cancelled, or expired. The difference between the carrying amount of a financial liability that has been extinguished or transferred to another party and the consideration paid, including any non-cash assets transferred or liabilities assumed, is recognised in profit or loss as finance costs.

Borrowings are classified as current liabilities unless the Group has an unconditional right to defer settlement of the liability for at least 12 months after the reporting date.

2.17 Borrowing costs

General and specific borrowing costs directly attributable to the acquisition, construction or production of qualifying assets (assets that take long period to get ready for its intended use or sale) are added to the cost of those assets less investment income earned from those specific borrowings. The capitalisation of borrowing costs is ceased when substantially all the activities necessary to prepare the qualifying asset for its intended use or sale are complete.

Other borrowing costs are expensed in the period in which they are incurred.

2.18 Leases

Leases - where the Group is the lessee

Payments made under operating leases (net of any incentives received from the lessor) are charged to profit or loss on a straight-line basis over the period of the lease.

At the inception of finance lease, the lower of the fair value of the leased property and the present value of the minimum lease payments is capitalised. Each lease payment is allocated between the liability and finance charges to achieve a constant rate on the liabilities balance outstanding. The corresponding rental obligations is presented net of finance charges. Finance cost is charged to profit or loss over the lease period.

Leases - where the Group is the lessor

When assets are leased out under a finance lease, the present value of the lease payments is recognised as a receivable. The difference between the gross receivable and the present value of the receivable is recognised as unearned finance income. Lease income is recognised over the term of the lease which reflects a constant periodic rate of return. Initial direct costs are included in initial measurement of the finance lease receivable and reduce the amount of income recognised over the lease term.

Rental income under operating leases (net of any incentives given to lessees) is recognised on a straight-line basis over the lease term.

2.19 Employee benefits

1) Short-term employee benefits

Liabilities for short-term employee benefits such as wages, salaries, paid annual leave and paid sick leave, bonuses and medical care that are expected to be settled wholly within 12 months after the end of the period are recognised in respect of employees' service up to the end of the reporting period. They are measured at the amount expected to be paid.

2) Defined contribution plan

The Group pays contributions to a separate fund in accordance with the provident fund Act B.E. 2530. The Group has no further payment obligations once the contributions have been paid. The contributions are recognised as employee benefit expense when they are due.

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3) *Defined benefit plans*

Amount of retirement benefits is defined by the agreed benefits the employees will receive after the completion of employment. It usually depends on factors such as age, years of service and an employee's latest compensation at retirement.

The defined benefit obligation is calculated annually by an independent actuary using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using market yield of government bonds that matches the terms and currency of the expected cash outflows.

Remeasurement gains and losses are recognised directly to other comprehensive income in the period in which they arise. They are included in retained earnings in the statements of changes in equity.

Past-service costs are recognised immediately in profit or loss.

4) *Other long-term benefits*

The Group gives rewards to employees when they have worked for the Group according to the Group's policies which will be recognised liabilities of other long-term benefits in statement of financial position based on the net present value of the benefits as at the end of reporting period. The benefits is determined by an independent actuary using the projected unit credit method.

Remeasurement gains and losses of other long-term benefits and past-service costs are recognised immediately in profit or loss.

2.20 Provisions

Provisions are recognised when the Group has a present legal or constructive obligation as a result of past events. It is probable that an outflow of resources will be required to settle the obligation and the amount has been reliably estimated.

Provisions are measured at the present value of the expenditures expected to be required to settle the obligation. The increase in the provision due to passage of time is recognised as interest expense.

2.21 Revenue recognition

Revenue is recognised when the Group satisfies a performance obligation by transferring goods or services to customers. The goods and services are transferred when the customers obtain control of that goods and services. Control of the goods and services has transferred when the goods and services are delivered to customers. Delivery occurs when the goods have been shipped to the specific location. A receivable is recognised when the goods and services are delivered as this is the performance obligations satisfied at a point in time.

Revenue is recognised based on the price specified in the contract, net of value-added tax, rebates and discounts. Accumulated experience is used to estimate and provide for the discounts and rebates. An amount of variable consideration is only recognised to the extent that it is highly probable that a significant reversal will not occur.

Any bundled goods or services that are distinct are separately recognised, and any discounts or rebates on the contract price are generally be allocated to the separate elements.

2.22 Dividend distribution

Dividend distributed to the Company's shareholders is recognised as a liability when interim dividends are approved by the Board of Directors, and when the annual dividends are approved by the shareholders.

2.23 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision-maker. The chief operating decision-maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as Chief Executive Officer (CEO) that makes strategic decisions.

Eastern Water Resources Development and Management Public Company Limited
Notes to the Consolidated and Separate Financial Statements
For the year ended 31 December 2019**3 Financial risk management****3.1 Financial risk factors**

The Group's activities expose it to a variety of financial risks: credit risk and interest rates risk. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise potential adverse effects on the financial performance of the Group. The financial risk management is discussed below.

3.1.1 Credit risk

The Group is exposed to credit risk primarily with respect to trade receivables and other receivable. The Group manages the risk by adopting appropriate credit control policies and procedures and therefore does not expect to incur material financial losses. Although the Group may expose to concentration risk due to their having a few large customers, however, those customers are in government sector. The management believes that such risk is therefore low. The maximum exposure to credit risk is limited to the carrying amounts of trade receivables and other receivables as stated in the statement of financial position.

3.1.2 Interest rate risk

The Group's exposure to interest rate risk, which is relate primarily to deposits with financial institutions and short-term and long-term borrowings arising from future movements in market interest rates, will affect the results of the Group's operations and its cash flows. Most of the Group's financial assets and liabilities bear floating interest rates or fixed interest rates which are close to the current market rate. The Group does not use the financial instruments which are derivative to manage exposure from fluctuation in interest rate.

3.2 Fair value estimation

Fair value is categorised into hierarchy based on inputs used as follows:

- Level 1: The fair value of the asset or liability is based on the quoted prices in active markets for identical assets or liabilities.
- Level 2: The fair value of the asset or liability is determined using significant observable inputs and, as little as possible, entity-specific estimates
- Level 3: The fair value of the asset or liability is not based on observable market data.

The Group discloses the fair value measurement in related notes to the financial statements.

4 Critical accounting estimates, judgments and assumptions

Estimates, judgments and assumptions are continually evaluated and are based on historical experience and other factors including expectations of future events that are believed to be reasonable under the circumstances. Critical accounting estimates, judgments and assumptions are as follows:

4.1 Value in use

Value in use is the present value of the future cash flows expected to be derived from assets, discounted by discount rates. The cash flow projections, based on financial forecasts for the remaining useful lives of assets or concession periods that are approved by the management, are calculated based on estimated growth rates which do not exceed their capacity and customers' usage demand. Key assumptions used for value-in-use calculations are growth rates, expense to revenue ratio and gross margin rate. Management determines such rates based on past performance, expectations for market development, considering and business plan. The discount rates used are pre-tax and reflect specific risks relating to the business after the remaining useful lives. The value derived from the afore-mentioned method may vary due to changes in revenue structure, cost structure, discount rate, industrial conditions and economic conditions.

The Group assesses impairment loss of right from service concession arrangements at the cash-generating unit level being the concession contracts of each location. The recoverable amount is determined by the value in use method. The discounted net cash flows from continuing use of assets is calculated over the remaining concession period of each contract. The revenues are calculated from tap water volume usages and estimated growth rate based on customers' demands at each location which do not exceed their capacity. The tap water rate charge is based on an agreed price as stipulated in the contract. The Group applies a discount rate by pre-tax weighted average cost of capital at 10.56% per annum.

In addition, the Group tests annually whether goodwill has suffered any impairment. The recoverable amounts of cash-generating units have been determined based on value-in-use calculation. The calculation requires the use of estimates as described in Note 15.

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4.2 Employee benefits

The present value of defined benefit obligations and other long-term benefits depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for obligations include inflation rate, future salary increases and the discount rate. Any changes in these assumptions will have an impact on the carrying amount of defined benefit obligations and other long-term benefits. The Group determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the obligations. In determining the appropriate discount rate, the Group considers the appropriated rate by using government bond interest rate that is denominated in the currency in which the benefits will be paid, and that the terms to maturity approximate to the terms of the related liability.

The key assumptions for defined benefit obligations and other long-term benefit, based on current market conditions, are disclosed in Note 25.

4.3 Significant uncertainty

The Group has an uncertainty regarding to compensation rate of the two pipeline connecting projects which is disclosed in Note 38. Based on the Group's management judgement, the projected compensation is recorded in the financial statements using the best estimation of compensation rate based on the current information.

5 Capital management

The Group's objectives when managing capital are to safeguard the Group's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital.

In order to maintain or adjust the capital structure, the Group may adjust the amount of dividends paid to shareholders, return capital to shareholders, issue new shares or sell assets to reduce debt.

6 Operating segment information

The principal business operations of the Group are development and management of the major water distribution pipeline systems in the Eastern Seaboard area of Thailand. The reportable segment based on business activities comprises the supply of raw water, production and supply of tap water, waterworks management, and engineering services. Other business activities, such as office building rental, are aggregated under the segment "Others".

The business operations are only conducted in Thailand. Therefore, no geographic information is presented.

The Group accounts for inter-segment sales and transfer between segment as if the sales are made to third parties. The chief operating decision maker evaluates performance by segment operating profit.

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The segment information is summarised as follows:

	Consolidated financial statements						(Unit: Baht)
	2019						
	Sales		Service income				
	Supply of raw water business	Production and supply of tap water business	Waterworks management business	Engineering services	Others	Elimination	Total
Revenues							
Revenue from third parties	2,844,696,384	1,692,752,261	26,949,280	57,096,011	58,584,423	-	4,680,078,359
Revenue from inter-segment	40,173,762	-	238,100,424	-	55,385,298	(333,659,484)	-
Total revenues	2,884,870,146	1,692,752,261	265,049,704	57,096,011	113,969,721	(333,659,484)	4,680,078,359
Cost of sales and services	(1,429,281,441)	(1,234,867,363)	(207,422,003)	(60,225,281)	(108,298,619)	333,659,484	(2,706,435,223)
Segment operating profit (loss)	1,455,588,705	457,884,898	57,627,701	(3,129,270)	5,671,102	-	1,973,643,136
Unallocated income (expenses)							
Other income							49,192,818
Selling expenses							(15,374,124)
Administrative expenses							(523,146,042)
Finance costs							(166,052,431)
Income tax							(262,357,904)
Net profit							1,055,905,453
Timing of revenue recognition							
- Point in time	2,884,870,146	1,503,160,203	251,516,388	-	-	(40,173,762)	4,599,372,975
- Over time	-	189,592,058	13,533,316	57,096,011	113,969,721	(293,485,722)	80,705,384
Total revenue	2,884,870,146	1,692,752,261	265,049,704	57,096,011	113,969,721	(333,659,484)	4,680,078,359

	Consolidated financial statements						(Unit: Baht)
	2018						
	Sales		Service income				
	Supply of raw water business	Production and supply of tap water business	Waterworks management business	Engineering services	Others	Elimination	Total
Revenues							
Revenue from third parties	2,393,819,753	1,647,496,697	39,122,144	55,736,904	84,813,554	-	4,220,989,052
Revenue from inter-segment	40,307,904	-	214,628,463	-	52,524,307	(307,460,674)	-
Total revenues	2,434,127,657	1,647,496,697	253,750,607	55,736,904	137,337,861	(307,460,674)	4,220,989,052
Cost of sales and services	(973,079,878)	(1,184,313,780)	(214,214,806)	(58,372,229)	(102,103,183)	307,460,674	(2,224,623,202)
Segment operating profit (loss)	1,461,047,779	463,182,917	39,535,801	(2,635,325)	35,234,678	-	1,996,365,850
Unallocated income (expenses)							
Other income							34,335,133
Selling expenses							(10,097,242)
Administrative expenses							(472,430,465)
Finance costs							(157,212,055)
Income tax							(261,187,123)
Net profit							1,129,774,098
Timing of revenue recognition							
- Point in time	2,434,127,657	1,438,401,964	230,274,432	-	-	(40,307,904)	4,062,496,149
- Over time	-	209,094,733	23,476,175	55,736,904	137,337,861	(267,152,770)	158,492,903
Total revenue	2,434,127,657	1,647,496,697	253,750,607	55,736,904	137,337,861	(307,460,674)	4,220,989,052

Information about major customers

The Group has major revenues from entities under the control of a government such as Provincial Waterworks Authority, Industrial Estate Authority of Thailand in segment of supply of raw water, production and supply of tap water and engineering services. The revenues for the year ended 31 December 2019 are Baht 3,114.1 million (2018: Baht 2,773.3 million).

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7 Cash and cash equivalents

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Cash on hand	836,000	804,000	277,000	275,000
Deposits at banks - current accounts	3,430,820	1,017,660	3,399,708	986,548
- savings accounts	53,922,997	47,131,893	12,030,757	10,443,132
- fixed accounts	21,447	529,259,609	2,902	529,241,220
	58,211,264	578,213,162	15,710,367	540,945,900

As at 31 December 2019, the interest rates of savings deposits of banks are 0.38% - 1.20% per annum (2018: 0.38% - 1.20% per annum). The fixed deposits with banks have maturity date within three months with interest rate at 0.75% - 0.80% per annum (2018: 0.80% - 1.75% per annum).

8 Short-term investments

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Fixed deposits	110,202,786	46,226,632	-	-
Fixed deposits under the requirement of concession agreement	400,480,753	358,050,182	64,151,866	55,053,467
Total	510,683,539	404,276,814	64,151,866	55,053,467

As at 31 December 2019, fixed deposits with financial institutions have maturity 12 months with interest rates at 1.37% - 1.70% per annum (2018: 0.75% - 1.60% per annum).

Fixed deposits under the requirement of concession agreement are deposits for a reserve under the requirement of tap water concession agreement (Note 28).

Change in the short-term investments during the year is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Opening net book amount	404,276,814	393,039,207	55,053,467	39,316,426
Addition during the year	776,587,621	1,067,580,045	9,098,399	160,737,041
Redeem during the year	(670,180,896)	(1,056,342,438)	-	(145,000,000)
Closing net book amount	510,683,539	404,276,814	64,151,866	55,053,467

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9 Trade and other receivables

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Trade receivables	475,345,887	420,604,028	327,331,213	271,768,181
Other receivables				
- Third parties	1,252,674	833,269	1,251,963	708,321
- Related parties (Note 35.2)	19,449	16,274	10,483,261	9,419,406
Prepayments	25,063,688	22,705,337	19,077,191	17,605,316
Others	520,167	78,417	520,167	78,418
	502,201,865	444,237,325	358,663,795	299,579,642

The detail of trade receivables is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Trade receivables - billed				
- Third parties	131,579,074	119,656,014	130,378,661	113,161,932
- Related parties (Note 35.2)	202,705,116	165,071,354	194,395,775	156,154,696
Total trade receivables - billed	334,284,190	284,727,368	324,774,436	269,316,628
Trade receivables - unbilled				
- Third parties	1,081,173	908,734	-	-
- Related parties (Note 35.2)	139,980,524	134,967,926	2,556,777	2,451,553
Total trade receivables - unbilled	141,061,697	135,876,660	2,556,777	2,451,553
	475,345,887	420,604,028	327,331,213	271,768,181

The aging analysis of trade receivables - billed is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Within credit term	329,235,686	259,756,298	319,800,051	249,410,366
Overdue below 3 months	777,296	20,700,397	706,432	16,800,642
Overdue 3 - 6 months	925,225	2,531,467	925,161	1,372,018
Overdue 6 - 12 months	1,525,638	902,131	1,522,447	896,527
Overdue more than 12 months	2,435,498	1,452,228	2,435,498	1,452,228
	334,899,343	285,342,521	325,389,589	269,931,781
<u>Less</u> Allowance for doubtful accounts	(615,153)	(615,153)	(615,153)	(615,153)
	334,284,190	284,727,368	324,774,436	269,316,628

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10 Inventories

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Raw water	8,806,562	-	8,806,562	-
Spare parts and supplies	16,825,462	13,343,706	-	-
	25,632,024	13,343,706	8,806,562	-

11 Other current assets

	(Unit: Baht)			
	Consolidated financial statements		Consolidated financial statements	
	2019	2018	2019	2018
Withholding tax receivables	19,234,123	76,585	-	-
Undue input value added tax	19,410,276	18,654,239	10,888,422	10,897,902
VAT receivables	6,273,118	2,135,138	5,165,423	-
Others	8,673,448	8,340,566	4,570,169	5,298,373
	53,590,965	29,206,528	20,624,014	16,196,275

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12 Investment in a subsidiary

Company	Nature of business	Country of incorporation	Paid-up share capital					Separate financial statements			
			2019		2018		Ownership of interest	Investment value		Dividend income	
			Million Baht	Million Baht	Million Baht	Million Baht		2019 Baht	2018 Baht	2019 Baht	2018 Baht
Universal Utilities Public Company Limited	Production and supply of tap water water loss treatment and investment in four tap water supply companies	Thailand	510	510			100	510,000,000	510,000,000	120,359,983	126,581,983
Total investment in a subsidiary								510,000,000	510,000,000	120,359,983	126,581,983

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13 Investment property - net

	(Unit: Baht)		
	Consolidated financial statements		
	Land	Building and building improvement	Total
At 1 January 2018			
Cost	45,859,440	225,942,404	271,801,844
<u>Less</u> Accumulated depreciation	-	(85,872,170)	(85,872,170)
Net book amount	45,859,440	140,070,234	185,929,674
For the year ended 31 December 2018			
Opening net book amount	45,859,440	140,070,234	185,929,674
Addition	-	218,387	218,387
Disposal	-	(470,388)	(470,388)
Depreciation charged	-	(8,044,292)	(8,044,292)
Closing net book amount	45,859,440	131,773,941	177,633,381
At 31 December 2018			
Cost	45,859,440	225,253,014	271,112,454
<u>Less</u> Accumulated depreciation	-	(93,479,073)	(93,479,073)
Net book amount	45,859,440	131,773,941	177,633,381
For the year ended 31 December 2019			
Opening net book amount	45,859,440	131,773,941	177,633,381
Addition	-	2,325,774	2,325,774
Disposal	-	(601,780)	(601,780)
Depreciation charged	-	(7,793,500)	(7,793,500)
Closing net book amount	45,859,440	125,704,435	171,563,875
At 31 December 2019			
Cost	45,859,440	225,989,030	271,848,470
<u>Less</u> Accumulated depreciation	-	(100,284,595)	(100,284,595)
Net book amount	45,859,440	125,704,435	171,563,875

Depreciation expense of Baht 7.8 million (2018: Baht 8.0 million) is included in cost of rental and services.

Fair value of investment property is Baht 287.0 million (2018: Baht 285.8 million).

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	(Unit: Baht)		
	Separate financial statements		
	Land	Building and improvement	Total
At 1 January 2018			
Cost	48,024,548	244,513,893	292,538,441
<u>Less</u> Accumulated depreciation	-	(93,147,096)	(93,147,096)
Net book amount	48,024,548	151,366,797	199,391,345
For the year ended 31 December 2018			
Opening net book amount	48,024,548	151,366,797	199,391,345
Addition	-	235,976	235,976
Disposal	-	(508,273)	(508,273)
Depreciation charged	-	(8,692,185)	(8,692,185)
Closing net book amount	48,024,548	142,402,315	190,426,863
At 31 December 2018			
Cost	48,024,548	243,768,978	291,793,526
<u>Less</u> Accumulated depreciation	-	(101,366,663)	(101,366,663)
Net book amount	48,024,548	142,402,315	190,426,863
For the year ended 31 December 2019			
Opening net book amount	48,024,548	142,402,315	190,426,863
Addition	-	2,513,093	2,513,093
Disposal	-	(650,248)	(650,248)
Depreciation charged	-	(8,421,194)	(8,421,194)
Closing net book amount	48,024,548	135,843,966	183,868,514
At 31 December 2019			
Cost	48,024,548	244,564,273	292,588,821
<u>Less</u> Accumulated depreciation	-	(108,720,307)	(108,720,307)
Net book amount	48,024,548	135,843,966	183,868,514

Depreciation expense of Baht 8.4 million (2018: Baht 8.7 million) is included in cost of rental and services.

Fair value of investment property is Baht 308.5 million (2018: Baht 307.2 million).

The fair value of investment property is assessed by valuer. Fair value of land is valued by market comparison approach. Land is valued by comparable sale price of land in close proximity, level 2 of fair values hierarchy (Note 3.2). Building and building improvement are valued by income approach, level 3 of fair values hierarchy (Note 3.2), due to the use of significant unobservable inputs such as rental rate per metres and estimated future profits.

Amounts recognised in profit and loss that are related to investment property are as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Rental and service income of building	41,395,614	67,569,948	46,676,017	73,131,602
Direct operating expense arising from investment property that generated rental income	(40,930,844)	(48,990,586)	(46,151,961)	(52,859,197)
	464,770	18,579,362	524,056	20,272,405

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14 Property, plant and equipment - net

Consolidated financial statements											(Unit: Baht)
								</			

Depreciation expense of Baht 466.5 million (2018: Baht 397.1 million) is charged in cost of goods sold and Baht 30.1 million (2018: Baht 26.9 million) is charged in administrative expenses.

Additions include Baht 1.6 million (2018: Baht 1.5 million) assets leased under finance leases (where the Group is the lessee).

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Separate financial statements										(Unit: Baht)
		Land	Pumping plants	Buildings	Leasehold and building improvement	Machinery and equipment	Office equipment	Vehicles	Construction in progress	Total
At 1 January 2018										
Cost		394,955,101	1,605,429,905	513,213,140	268,002,438	9,777,797,043	316,417,769	1,090,095	4,994,500,267	17,871,405,758
Less Accumulated depreciation		-	(379,179,039)	(235,695,841)	(207,099,134)	(2,793,579,543)	(284,626,431)	(1,003,757)	-	(3,901,183,745)
Net book amount		394,955,101	1,226,250,866	277,517,299	60,903,304	6,984,217,500	31,791,338	86,338	4,994,500,267	13,970,222,013
For the year ended 31 December 2018										
Opening net book amount		394,955,101	1,226,250,866	277,517,299	60,903,304	6,984,217,500	31,791,338	86,338	4,994,500,267	13,970,222,013
Addition		-	1,760,000	67,500	3,076,927	17,874,900	18,307,345	4,820,000	497,833,891	543,740,563
Transfer		-	373,942,302	15,623,579	28,768,257	3,222,022,986	2,421,490	-	(3,642,778,614)	-
Disposal/write-off, net		-	-	(154,158)	(778,148)	(7,661,931)	(10,545)	-	(6,122,300)	(14,727,082)
Depreciation charged		-	(57,410,563)	(19,959,401)	(20,981,671)	(280,893,502)	(12,076,724)	(1,618,168)	-	(392,940,029)
Closing net book amount		394,955,101	1,544,542,605	273,094,819	70,988,669	9,935,559,953	40,432,904	3,288,170	1,843,433,244	14,106,295,465
At 31 December 2018										
Cost		394,955,101	1,981,132,207	528,580,045	298,420,163	13,010,032,998	310,152,270	5,910,095	1,843,433,244	18,372,616,123
Less Accumulated depreciation		-	(436,589,602)	(255,485,226)	(227,431,494)	(3,074,473,045)	(269,719,366)	(2,621,925)	-	(4,266,302,658)
Net book amount		394,955,101	1,544,542,605	273,094,819	70,988,669	9,935,559,953	40,432,904	3,288,170	1,843,433,244	14,106,295,465
For the year ended 31 December 2019										
Opening net book amount		394,955,101	1,544,542,605	273,094,819	70,988,669	9,935,559,953	40,432,904	3,288,170	1,843,433,244	14,106,295,465
Addition		96,200,000	3,002,496	1,213,698	346,110	20,971,361	8,334,410	-	1,243,680,758	1,373,748,833
Transfer		-	206,939,697	17,402,446	17,562,841	36,340,844	3,879,916	-	(282,125,744)	-
Disposal/write-off, net		-	-	(1,305,924)	(61,825)	(7,858,024)	(20)	-	(1,617,900)	(10,843,693)
Depreciation charged		-	(71,360,227)	(20,496,017)	(18,635,834)	(340,785,815)	(13,857,577)	(964,000)	-	(466,099,470)
Closing net book amount		491,155,101	1,683,124,571	269,909,022	70,199,961	9,644,228,319	38,789,633	2,324,170	2,803,370,358	15,003,101,135
At 31 December 2019										
Cost		491,155,101	2,191,074,400	544,548,420	315,766,342	13,059,397,614	319,356,999	5,910,095	2,803,370,358	19,730,579,329
Less Accumulated depreciation		-	(507,949,829)	(274,639,398)	(245,566,381)	(3,415,169,295)	(280,567,366)	(3,585,925)	-	(4,727,478,194)
Net book amount		491,155,101	1,683,124,571	269,909,022	70,199,961	9,644,228,319	38,789,633	2,324,170	2,803,370,358	15,003,101,135

Depreciation expense of Baht 440.4 million (2018: Baht 369.4 million) is charged in cost of goods sold and Baht 25.7 million (2018: Baht 23.6 million) is charged in administrative expenses.

Additions include Baht 1.6 million (2018: Baht 1.5 million) assets leased under finance leases (where the Company is the lessee).

As at 31 December 2019, the Company has office equipment under financial lease agreements with cost and net book value amounting to Baht 7.3 million and Baht 2.8 million, respectively (2018: Baht 5.7 million and Baht 3.7 million, respectively).

Borrowing costs of Baht 61.8 million (2018: Baht 67.1 million) arising from financing specifically entered into a pipeline constructing project and tap water production system are capitalised during the year and are included in "Addition". The Group uses capitalisation rates based on actual interest rate of borrowings at 1.40% - 4.18% per annum (2018 : 2.62% - 4.18% per annum).

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15 Goodwill

Goodwill presented in the consolidated financial statements of Baht 103.3 million, is from the acquisition of equity interest in Egcom Tara Company Limited on 31 August 2015.

The Group tests impairment of goodwill. The recoverable amounts of cash-generating units have been determined based on the calculation of value-in-use. The calculation uses cash flow projections based on financial budgets covering the remaining concession period of tap water production acquiring from business acquisition. The significant assumptions are fixed minimum tap water volume and selling price with growth at 1.50% per annum which is an average of 10-year of consumer price index. The Group applies a pre-tax discount rate of weighted average cost of capital at 10.56% per annum.

The recoverable amounts of cash-generating units exceed carrying value by Baht 131.1 million. An increase in discount rate to 12.03% per annum or a decrease in tap water price growth rate to 0.23% per annum would remove the remaining headroom.

16 Intangible assets - net

	(Unit: Baht)		
	Consolidated financial statements		
	Right from service concession arrangements	Computer software	Total
At 1 January 2018			
Cost	5,102,940,556	83,039,285	5,185,979,841
<u>Less</u> Accumulated amortisation	(1,436,217,837)	(32,888,415)	(1,469,106,252)
<u>Less</u> Allowance for impairment	(14,140,000)	-	(14,140,000)
Net book amount	3,652,582,719	50,150,870	3,702,733,589
For the year ended 31 December 2018			
Opening net book amount	3,652,582,719	50,150,870	3,702,733,589
Addition	232,570,908	12,720,077	245,290,985
Amortisation charged	(295,420,907)	(8,686,839)	(304,107,746)
Reclassification	916,960	-	916,960
Impairment charged	(860,000)	-	(860,000)
Closing net book amount	3,589,789,680	54,184,108	3,643,973,788
At 31 December 2018			
Cost	5,336,428,424	95,759,362	5,432,187,786
<u>Less</u> Accumulated amortisation	(1,731,638,744)	(41,575,254)	(1,773,213,998)
<u>Less</u> Allowance for impairment	(15,000,000)	-	(15,000,000)
Net book amount	3,589,789,680	54,184,108	3,643,973,788
For the year ended 31 December 2019			
Opening net book amount	3,589,789,680	54,184,108	3,643,973,788
Addition	203,125,375	7,757,758	210,883,133
Amortisation charged	(314,110,607)	(9,633,595)	(323,744,202)
Reclassification	(39,653)	-	(39,653)
Closing net book amount	3,478,764,795	52,308,271	3,531,073,066
At 31 December 2019			
Cost	5,539,514,146	103,517,120	5,643,031,266
<u>Less</u> Accumulated amortisation	(2,045,749,351)	(51,208,849)	(2,096,958,200)
<u>Less</u> Allowance for impairment	(15,000,000)	-	(15,000,000)
Net book amount	3,478,764,795	52,308,271	3,531,073,066

Amortisation of Baht 247.3 million (2018: Baht 237.3 million) is charged in cost of goods sold and Baht 76.4 million (2018: 66.8 million) is charged in administrative expenses.

The allowance for impairment of intangible assets of Baht 15.0 million as at 31 December 2019 is from service concession arrangement at Lan Island. Sales of tap water at this location are lower than the budget because there are other natural water resources that can be used in lieu of tap water.

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	(Unit: Baht)
	Separate financial statements
	Computer software
At 1 January 2018	
Cost	83,039,285
<u>Less</u> Accumulated amortisation	<u>(32,888,415)</u>
Net book amount	50,150,870
For the year ended 31 December 2018	
Opening net book amount	50,150,870
Addition	12,720,077
Amortisation charged	<u>(8,686,839)</u>
Closing net book amount	54,184,108
At 31 December 2018	
Cost	95,759,362
<u>Less</u> Accumulated amortisation	<u>(41,575,254)</u>
Net book amount	54,184,108
For the year ended 31 December 2019	
Opening net book amount	54,184,108
Addition	7,757,758
Amortisation charged	<u>(9,633,595)</u>
Closing net book amount	52,308,271
At 31 December 2019	
Cost	103,517,120
<u>Less</u> Accumulated amortisation	<u>(51,208,849)</u>
Net book amount	52,308,271

Amortisation of Baht 0.9 million (2018: Baht 1.1 million) is charged in cost of goods sold and Baht 8.7 million (2018: 7.6 million) is charged in administrative expenses.

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17 Deferred income tax

The analysis of deferred tax assets and deferred tax liabilities is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Deferred tax assets:				
Deferred tax assets to be recovered within 12 months	305,399	2,219,318	-	1,978,516
Deferred tax assets to be recovered after more than 12 months	63,307,183	48,081,335	31,417,266	21,997,516
	63,612,582	50,300,653	31,417,266	23,976,032
Deferred tax liabilities:				
Deferred tax liabilities to be settled within 12 months	25,619,362	25,619,362	-	-
Deferred tax liabilities to be settled after more than 12 months	355,223,432	367,356,661	79,370,721	68,981,114
	380,842,794	392,976,023	79,370,721	68,981,114
Deferred income tax - net	317,230,212	342,675,370	47,953,455	45,005,082

Presentation in the statement of financial position is as follows:

Deferred tax assets	24,066,442	21,935,597	-	-
Deferred tax liabilities	341,296,654	364,610,967	47,953,455	45,005,082
Deferred income tax - net	317,230,212	342,675,370	47,953,455	45,005,082

Change in deferred tax assets and liabilities is as follows:

	(Unit: Baht)						
	Consolidated financial statements						
	Long-term provision	Allowance for doubtful accounts	Impairment of assets	Employee benefit	Tax loss	Others	Total
Deferred tax assets							
As at 1 January 2018	6,559,804	6,925,008	2,828,000	27,012,398	-	81,535	43,406,745
Transaction recorded in profit or loss	(2,472,705)	-	172,000	3,131,061	4,048,768	2,014,784	6,893,908
As at 31 December 2018	4,087,099	6,925,008	3,000,000	30,143,459	4,048,768	2,096,319	50,300,653
Transaction recorded in profit or loss	1,721,212	-	-	4,857,805	1,785,114	(2,020,520)	6,343,611
Transaction recorded in other comprehensive income	-	-	-	6,968,318	-	-	6,968,318
As at 31 December 2019	5,808,311	6,925,008	3,000,000	41,969,582	5,833,882	75,799	63,612,582

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	(Unit: Baht)		
	Consolidated financial statements		
	Intangible asset	Plant and equipment	Total
Deferred tax liabilities			
As at 1 January 2018	345,487,257	60,895,471	406,382,728
Transaction recorded in profit or loss	(21,492,348)	(8,085,643)	(13,406,705)
As at 31 December 2018	323,994,909	68,981,114	393,976,023
Transaction recorded in profit or loss	(22,522,836)	10,389,607	(12,133,229)
As at 31 December 2019	301,472,073	79,370,721	380,842,794

	(Unit: Baht)			
	Separate financial statements			
	Allowance for doubtful accounts	Employee benefit	Others	Total
Deferred tax assets				
As at 1 January 2018	364,571	19,396,313	81,535	19,842,419
Transaction recorded in profit or loss	-	2,118,829	2,014,784	4,133,613
As at 31 December 2018	364,571	21,515,142	2,096,319	23,976,032
Transaction recorded in profit or loss	-	4,174,217	(2,020,520)	2,153,697
Transaction recorded in other comprehensive income	-	5,287,537	-	5,287,537
As at 31 December 2019	364,571	30,976,896	75,799	31,417,266

	(Unit: Baht)	
	Separate financial statements	
	Plant and equipment	Total
Deferred tax liabilities		
As at 1 January 2018	60,895,471	60,895,471
Transaction recorded in profit or loss	8,085,643	8,085,643
As at 31 December 2018	68,981,114	68,981,114
Transaction recorded in profit or loss	10,389,607	10,389,607
As at 31 December 2019	79,370,721	79,370,721

18 Other non-current assets

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Advance for construction	577,433,342	277,822,805	577,433,342	277,822,805
Development cost of water supply project	299,000,000	-	299,000,000	-
Prepaid expenses	27,523,535	28,450,167	6,756,248	5,116,458
Deposit and retention	2,356,611	2,356,611	-	-
Other receivables	32,802,184	32,802,184	-	-
Allowance for doubtful accounts				
- other receivables	(32,802,184)	(32,802,184)	-	-
Refundable withholding tax	19,591,662	26,965,178	-	-
Receivable - recycle water project	10,801,826	4,662,136	10,801,826	4,662,136
Others	2,919,158	2,314,838	2,048,259	1,460,799
	939,626,134	342,571,735	896,039,675	289,062,198

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Other receivables of Baht 32.8 million are transactions between Universal Utilities Public Company Limited, a subsidiary, and a private company. These related to the fine from the production of tap water that did not meet the minimum volume. On 26 October 2015, the subsidiary's Board of Directors approved to record an allowance for doubtful accounts of a private company of Baht 32.8 million. This is because the subsidiary terminated a contract to purchase raw water with such company in 2015 and there is a potential for debt might not be collectable. On 17 February 2016, the subsidiary sued a private company regarding a breach of raw water purchase agreement and requested a private company to pay damages of Baht 37.5 million plus interest at 7.5% per annum. On 19 July 2017, the Civil Court ordered the defendant to pay the damages to the subsidiary in the amount of Baht 37.5 million plus interest at the rate of 7.5 percent per annum commencing from the filing date. At present, the subsidiary has filed a petition to appoint the bailiff due to the private company did not lodge an appeal within the deadline.

19 Borrowings

		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
Notes		2019	2018	2019	2018
Current					
Short-term borrowings from financial institutions	19.1	305,000,000	814,000,000	-	580,000,000
Current portion of long-term borrowings from financial institutions	19.2	826,200,000	826,200,000	634,000,000	634,000,000
Total current borrowings		1,131,200,000	1,640,200,000	634,000,000	1,214,000,000
Non-current					
Borrowings from financial institutions	19.2	3,830,000,000	3,166,200,000	3,830,000,000	2,974,000,000
Debentures	19.3	2,398,362,741	2,397,954,566	2,398,362,741	2,397,954,566
Total non-current borrowings		6,228,362,741	5,564,154,566	6,228,362,741	5,371,954,566
Total borrowings		7,359,562,741	7,204,354,566	6,862,362,741	6,585,954,566

19.1 Short-term borrowings from financial institutions

		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
Promissory notes		305,000,000	814,000,000	-	580,000,000
		305,000,000	814,000,000	-	580,000,000

Promissory notes bear interest rate at fixed rate per annum. Principal is repayable at call.

Change in short-term borrowings from financial institutions is as follows:

		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
As at 1 January		814,000,000	83,000,000	580,000,000	10,000,000
Addition		6,943,000,000	4,409,000,000	5,741,000,000	3,560,000,000
Repayment		(7,452,000,000)	(3,678,000,000)	(6,321,00,000)	(2,990,000,000)
As at 31 December		305,000,000	814,000,000	-	580,000,000

As at 31 December 2019, The Group and the Company have outstanding short-term credit facilities of Baht 3,846.2 million and Baht 2,909.2 million, respectively.

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19.2 Long-term borrowings from financial institutions

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Current portion	826,200,000	826,200,000	634,000,000	634,000,000
Non - current portion	3,830,000,000	3,166,200,000	3,830,000,000	2,974,000,000
	4,656,200,000	3,992,400,000	4,464,000,000	3,608,000,000

Change in long-term borrowings from financial institutions is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
As at 1 January	3,992,400,000	4,800,600,000	3,608,000,000	2,624,000,000
Addition	1,490,000,000	1,600,000,000	1,490,000,000	1,600,000,000
Repayment	(826,200,000)	(2,408,200,000)	(634,000,000)	(616,000,000)
As at 31 December	4,656,200,000	3,992,400,000	4,464,000,000	3,608,000,000

	Credit limit Million Baht	Outstanding credit facilities		Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018	2019	2018
		Million Baht	Million Baht	Million Baht	Million Baht	Million Baht	Million Baht
The Company							
a)	800.0	-	-	160.0	320.0	160.0	320.0
b)	2,000.0	-	-	400.0	800.0	400.0	800.0
c)	1,000.0	-	-	814.0	888.0	814.0	888.0
d)	1,600.0	-	-	1,600.0	1,600.0	1,600.0	1,600.0
e)	1,200.0	-	-	1,200.0	-	1,200.0	-
f)	1,600.0	1,310.0	-	290.0	-	290.0	-
The subsidiary							
a)	317.0	-	-	64.4	126.8	-	-
b)	644.0	-	-	128.8	257.6	-	-
Total	9,161.0	1,310.0	-	4,656.2	3,992.4	4,464.0	3,608.0

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Long-term loans of the Company

	Credit facility (Million Baht)	Date of agreement	Objective	Period	Interest rate	Repayment schedule
a)	800.0	20 March 2015	To invest in pipeline project	5 years	- At fixed rate per annum	Principal is repaid annually in 5 installments, beginning 23 March 2016. - The 1st - 5th instalment is Baht 160 million each
b)	2,000.0	20 March 2015	To refinance	5 years	- At fixed rate per annum	Principal is repaid annually in 5 installments, beginning 23 March 2016. - The 1st - 5th installments is Baht 400 million each
c)	1,000.0	5 June 2015	To invest in pipeline project	10 years	- At fixed rate per annum	Principal is repaid annually in 9 installments, beginning 5 June 2017. - The 1st - 2nd installments is Baht 56 million each - The 3rd - 4th installments is Baht 74 million each - The 5th - 6th installments is Baht 148 million each - The 7th installments is Baht 166.5 million - The 8th installments is Baht 185 million - The 9th installments is Baht 92.5 million
d)	1,600.0	28 August 2018	To provide loan to a subsidiary	6 years	- At fixed rate per annum	Principal is repayable in 4 annual installments, beginning 27 August 2021. The 1st - 4th installments is Baht 400 million each
e)	1,200.0	11 March 2019	To invest in pipeline project	5 years	- At floating Rate	Principal is repayable in 3 annual installments, beginning 11 March 2022 - The 1st - 3rd installments is Baht 400 million each
f)	1,600.0	26 December 2019	To invest in pipeline and water business project	7 years	- At fixed rate per annum	Principal is repayable in 5 annual installments, beginning 30 December 2022. - The 1st installments is Baht 160 million - The 2th installments is Baht 240 million - The 3th installments is Baht 320 million - The 4th installments is Baht 400 million - The 5th installments is Baht 480 million

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Long-term borrowings of subsidiary - Universal Utilities Public Company Limited

	Credit facility (Million Baht)	Date of agreement	Objective	Period	Interest rate	Repayment schedule
a)	317.0	12 June 2015	To refinance	5 years	- At fixed rate per annum	Principal is repaid annually in 5 installments, beginning 12 June 2016.
b)	644.0	8 June 2015	To refinance	5 years	- At fixed rate per annum	Principal is repaid annually in 5 installments, beginning 10 June 2016.

Long-term borrowings from financial institutions of the Group are unsecured loan. The Group is required to comply with certain conditions including debt to equity ratio not exceeding 2:1 and debt service coverage ratio not below 1.10.

The average interest rate of borrowings for the year 2019 was 2.80% (2018 : 2.70%).

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19.3 Debentures

Debentures comprise:

The first tranche is senior and unsecured debenture of Baht 1,200 million. Debenture has a maturity of 7 years with due in 2022. It bears interest at a fixed rate at 3.84% per annum. The interest will be paid semi-annually on 16 June and 16 December.

The second tranche is senior and unsecured debenture of Baht 1,200 million. Debenture has a maturity of 10 years with due in 2025. It bears interest at a fixed rate at 4.18% per annum. The interest will be paid semi-annually on 16 June and 16 December.

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Debenture tranche 1	1,200,000,000	1,200,000,000	1,200,000,000	1,200,000,000
Debenture tranche 2	1,200,000,000	1,200,000,000	1,200,000,000	1,200,000,000
Less Deferred debenture issuing costs	(1,637,259)	(2,045,434)	(1,637,259)	(2,045,434)
Debentures - net	2,398,362,741	2,397,954,566	2,398,362,741	2,397,954,566

Change in debentures is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Balance as at 1 January	2,397,954,566	2,397,562,352	2,397,954,566	2,397,562,352
Amortisation of issuing cost	408,175	392,214	408,175	392,214
Balance as at 31 December	2,398,362,741	2,397,954,566	2,398,362,741	2,397,954,566

20 Trade payables

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Trade payables				
- Third parties	144,449,398	107,474,767	113,395,204	78,437,849
- Related parties (Note 35.2)	1,785,541	1,805,294	23,636,487	20,840,866
Other payables				
- Related parties (Note 35.2)	171,100,794	37,925,412	114,904,511	2,181,347
	317,335,733	147,205,473	251,936,202	101,460,062

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21 Finance lease liabilities

Minimum lease payments under finance lease liabilities are as follows :

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Not later than 1 year	2,070,856	2,932,626	2,070,856	2,932,626
Later than 1 year but not later than 5 years	1,274,164	1,968,260	1,274,164	1,968,260
	3,345,020	4,900,886	3,345,020	4,900,886
Less Future finance charges on finance leases	(193,786)	(994,822)	(193,786)	(994,822)
Present value of finance lease liabilities	3,151,234	3,906,064	3,151,234	3,906,064

The present value of finance lease liabilities is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Not later than 1 year (short-term portion)	1,899,442	2,120,878	1,899,442	2,120,878
Later than 1 year but not later than 5 years (long-term portion)	1,251,792	1,785,186	1,251,792	1,785,186
	3,151,234	3,906,064	3,151,234	3,906,064

22 Reconciliation of liabilities arising from financing activities

	(Unit: Baht)				
	1 January 2019	Cash flow		Non-cash transactions	31 December 2019
		In	Out		
Consolidated financial statements					
Short-term borrowings from financial institutions	814,000,000	6,943,000,000	(7,452,000,000)	-	305,000,000
Long-term borrowings from financial institutions	3,992,400,000	1,490,000,000	(826,200,000)	-	4,656,200,000
Debentures	2,397,954,566	-	-	408,175	2,398,362,741
Finance lease liabilities	3,906,064	-	(2,367,030)	1,612,200	3,151,234
Separate financial statements					
Short-term borrowings from financial institutions	580,000,000	5,741,000,000	(6,321,000,000)	-	-
Long-term borrowings from financial institutions	3,608,000,000	1,490,000,000	(634,000,000)	-	4,464,000,000
Debentures	2,397,954,566	-	-	408,175	2,398,362,741
Finance lease liabilities	3,906,064	-	(2,367,030)	1,612,200	3,151,234

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	(Unit: Baht)				
	1 January 2018	Cash flow In	Out	Non-cash transactions	31 December 2018
Consolidated financial statements					
Short-term borrowings from financial institutions	83,000,000	4,409,000,000	(3,678,000,000)	-	814,000,000
Long-term borrowings from financial institutions	4,800,600,000	1,600,000,000	(2,408,200,000)	-	3,992,400,000
Debentures	2,397,562,352	-	-	392,214	2,397,954,566
Finance lease liabilities	4,236,701	-	(330,637)	-	3,906,064
Separate financial statements					
Short-term borrowings from financial institutions	10,000,000	3,560,000,000	(2,990,000,000)	-	580,000,000
Long-term borrowings from financial institutions	2,624,000,000	1,600,000,000	(616,000,000)	-	3,608,000,000
Debentures	2,397,562,352	-	-	392,214	2,397,954,566
Finance lease liabilities	4,236,701	-	(330,637)	-	3,906,064

23 Accrued expenses

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Accrued bonus	50,339,082	56,479,130	37,655,130	36,710,020
Accrued compensation of project	58,731,858	50,055,214	58,731,858	50,055,214
Accrued utilities expenses	15,771,229	14,157,612	490,263	-
Others	65,952,626	42,495,396	51,151,009	26,642,737
	190,794,795	163,187,352	148,028,260	113,407,971

24 Other current liabilities

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Undue output value added tax	35,759,107	32,220,607	21,495,659	18,056,595
Withholding taxes payables	16,357,262	11,834,322	12,849,272	8,118,771
Revenue department payables	4,466,442	6,100,241	-	3,614,356
Advance received	1,649,720	425,625	419,621	425,625
Others	7,892,545	8,822,327	6,069,260	6,898,711
	66,125,076	59,403,122	40,833,812	37,114,058

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25 Employee benefit obligations

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Statement of financial position				
Post-employment benefits	205,118,524	146,883,620	152,068,146	105,622,569
Other long-term benefits	4,729,389	3,577,319	2,816,337	1,953,148
Liability in the statement of financial position	209,847,913	150,460,939	154,884,483	107,575,717
Profit or loss:				
Post-employment benefits	51,539,956	17,459,392	34,080,984	12,233,551
Other long-term benefits	1,535,651	726,293	1,144,897	448,280
	53,075,607	18,185,685	35,225,881	12,681,831
Other comprehensive income				
Remeasurement for:				
Post-employment benefits	34,841,588	-	26,437,683	-

25.1 Defined benefit plan

The amount recognised in the statement of financial position is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Present value of funded obligations	205,118,524	146,883,620	152,068,146	105,622,569
Liability in the statement of financial position	205,118,524	146,883,620	152,068,146	105,622,569

Change in defined benefit obligation for the year is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
At 1 January	146,883,620	131,578,876	105,622,569	95,076,377
Current service cost	15,013,334	13,511,296	10,377,040	9,365,270
Interest expense	4,662,693	3,948,096	3,351,732	2,868,281
Past service cost	22,125,062	-	16,270,222	-
Expense from voluntary retirement project	9,738,867	-	4,081,990	-
	51,539,956	17,459,392	34,080,984	12,233,551
Remeasurements:				
Loss from change in financial assumptions	30,339,706	-	22,253,590	-
Experience loss	4,501,882	-	4,184,093	-
	34,841,588	-	26,437,683	-
Transfer employees to a subsidiary	-	-	-	(307,691)
Benefits paid	(28,146,640)	(2,154,648)	(14,073,090)	(1,379,668)
At 31 December	205,118,524	146,883,620	152,068,146	105,622,569

On 5 April 2019, an amendment bill to the Labour Protection Law was published in the Government Gazette. The amended law became effective on 5 May 2019. The main amendment is that the compensation for employees who have retired and have more than or equal to 20 years of service has changed from 300 days' pay to 400 days' pay. The effect of the new law is Baht 22.1 million and Baht 16.3 million on the consolidated financial statements and the separate financial statements, respectively. The Group recognised such expenses in profit and loss in the second quarter of 2019.

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The principal of actuarial assumptions used for defined benefit plan is as follows:

	(Unit: % per annum)	
	2019	2018
Discount rate	1.9	3.0
Salary growth rate	5.0 - 10.0	5.0 - 10.0

	Impact on post-employment benefit obligations	
	Increase/ (decrease) (Baht)	
	Change in assumption	
	2019	2018
Discount rate	Increase 1%	Increase 1%
	Decrease 1%	Decrease 1%
Salary growth rate	Increase 1%	Increase 1%
	Decrease 1%	Decrease 1%
	2019	2018
	(15,879,345)	(10,380,604)
	18,856,910	12,195,759
	17,827,486	11,670,644
	(15,421,389)	(10,181,553)

The above sensitivity analyses are based on a change in an assumption while holding all other assumptions constant. In practice, this is unlikely to occur, and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions, the same method has been applied as when calculating the post-employment benefit liability recognised within the statement of financial position which is the projected unit credit method.

The method and type of assumptions used in preparing the sensitivity analysis do not change comparing to the previous period.

The weighted average duration of the defined benefit obligation is 38.5 years (2018: 37.5 years).

25.2 Other long-term benefit

The amount recognised in the statement of financial position is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Present value of funded obligations	4,729,389	3,577,319	2,816,337	1,953,148
Liability in the statement of financial position	4,729,389	3,577,319	2,816,337	1,953,148

Change in other long-term benefit obligation for the year is as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
At 1 January	3,577,319	3,483,117	1,953,148	1,905,193
Current service cost	623,197	615,384	390,773	383,252
Interest expense	120,769	110,909	70,556	65,028
Past service cost				
Remeasurements:				
Loss from change in financial assumptions	264,831	-	222,096	-
Experience loss	526,854	-	461,512	-
	1,535,651	726,293	1,144,897	448,280
Transfer employees to a subsidiary	-	-	-	(24,595)
Benefits paid	(383,581)	(632,091)	(281,708)	(375,730)
At 31 December	4,729,389	3,577,319	2,816,337	1,953,148

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The principal of actuarial assumptions used for other long-term benefit is as follows:

			2019	2018	
Discount rate	1.9%			3.0%	
One Baht weight of gold	20,300 Baht			20,200 Baht	
			Impact on other long-term benefits		
			Increase/ (decrease) in assumption (Baht)		
Change in assumption					
2019			2018	2019	2018
Discount rate	Increase 1%	Increase 1%	(167,116)	(140,344)	
	Decrease 1%	Decrease 1%	185,723	155,614	

26 Long term provisions

	(Unit: Baht)	
	Contractual obligations from service concession arrangements	
	Consolidated financial statements	
	2019	2018
At 1 January	20,786,080	33,188,538
Addition (reversal)	18,905,935	(588,697)
Utilised during the year	(10,338,804)	(11,813,761)
At 31 December	29,353,211	20,786,080

27 Other non-current liabilities

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Retention payables	162,645,434	125,261,843	119,736,770	86,476,882
Cash received - bank guarantee	37,478,973	17,128,973	37,478,973	17,128,973
Advance received	26,400,000	-	26,400,000	-
Rental guarantee received from a subsidiary (Note 35.2)	-	-	58,000	58,000
	226,524,407	142,390,816	183,673,743	103,663,855

28 Reserve

Reserve comprises:

1) Legal reserve

Reserve pursuant to section 116 of the Public Limited Companies Act B.E. 2535, the Company is required to set aside a legal reserve equal to at least 5 percent of its net profit for the year after deducting accumulated deficit brought forward (if any), until such reserve reaches 10 percent of the Company's registered share capital. The legal reserve is non-distributable.

2) Concession reserve

Reserve under the requirement of an amendment to tap water concession agreements which requires the Company to set aside a reserve equal to 10 percent of net profit for the year. The reserve shall be maintained by the fixed deposit at bank. This reserve is non-distributable. The Group has a policy to record a concession reserve on a quarterly basis from the net profit of each quarter.

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29 Other components of equity

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
At 1 January	11,387,974	14,774,228	11,387,974	14,774,228
Amortisation of assets transferred from customers	(3,386,254)	(3,386,254)	(3,386,254)	(3,386,254)
At 31 December	8,001,720	11,387,974	8,001,720	11,387,974

Assets transferred from customers since 1997 represent water distribution pipeline systems and water measured equipment in accordance with the water supply agreement. The Company records assets transferred from customers in equity and recognises as revenue over the useful life of assets.

30 Dividends

The Company

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
Year 2019				
Dividend for the year 2018	Annual General Meeting of the shareholders on 23 April 2019	449.2	0.27	17 May 2019
Interim dividend on operating results for the six-month period ended 30 June 2019	Board of Directors' meeting on 26 August 2019	349.4	0.21	11 September 2019
		798.6		
Year 2018				
Dividend for the year 2017	Annual General Meeting of the shareholders on 23 April 2018	399.3	0.24	18 May 2018
Interim dividend on operating results for the six-month period ended 30 June 2018	Board of Directors' meeting on 9 August 2018	332.7	0.20	5 September 2018
		732.0		

Subsidiary

Universal Utilities Public Company Limited

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
Year 2019				
Dividend for the year 2018	Annual General Meeting of the shareholders on 29 April 2019	67.3	0.13	15 May 2019
Interim dividend on operating results for the six-month period ended 30 June 2019	Board of Directors' meeting on 26 August 2019	53.1	0.10	9 September 2019
		120.4		

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	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2018</u>				
Dividend for the year 2017	Annual General Meeting of the shareholders on 27 April 2018	67.4	0.13	12 May 2018
Interim dividend on operating results for the six-month period ended 30 June 2018	Board of Directors' meeting on 27 August 2018	<u>59.2</u>	0.12	12 September 2018
		<u>126.6</u>		

Indirect subsidiaries

Chachoengsao Water Supply Company Limited

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2019</u>				
Dividend for the year 2018	Annual General Meeting of the shareholders on 30 April 2019	18.1	1.81	1 May 2019
Interim dividend on operating results for the six-month period ended 30 June 2019	Board of Directors' meeting on 30 September 2019	<u>17.5</u>	1.75	30 October 2019
		<u>35.6</u>		

Year 2018

Dividend for the year 2017	Annual General Meeting of the shareholders on 27 April 2018	14.2	1.423	18 May 2018
Interim dividend on operating results for the six-month period ended 30 June 2018	Board of Directors' meeting on 23 August 2018	<u>16.4</u>	1.637	12 September 2018
		<u>30.6</u>		

Bangpakong Water Supply Company Limited

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2019</u>				
Dividend for the year 2018	Annual General Meeting of the shareholders on 30 April 2019	13.5	3.367	15 May 2019
Interim dividend on operating results for the six-month period ended 30 June 2019	Board of Directors' meeting on 30 August 2019	<u>16.1</u>	4.015	9 September 2019
		<u>29.6</u>		

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	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2018</u>				
Dividend for the year 2017	Annual General Meeting of the shareholders on 27 April 2018	15.3	3.833	18 May 2018
Interim dividend on operating results for the six-month period ended 30 June 2018	Board of Directors' meeting on 23 August 2018	17.1	4.267	12 September 2018
		<u>32.4</u>		

Nakornsawan Water Supply Company limited

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2019</u>				
Dividend for the year 2018	Annual General Meeting of the shareholders on 30 April 2019	0.7	0.088	15 May 2019
Interim dividend on operating results for the six-month period ended 30 June 2019	Board of Directors' meeting on 26 August 2019	1.1	0.134	9 September 2019
		<u>1.8</u>		

Year 2018

Dividend for the year 2017	Annual General Meeting of the shareholders on 27 April 2018	2.3	0.288	18 May 2018
Interim dividend on operating results for the six-month period ended 30 June 2018	Board of Directors' meeting on 23 August 2018	0.9	0.118	12 September 2018
		<u>3.2</u>		

Egcom Tara Company Limited

	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
<u>Year 2019</u>				
Dividend for the year 2018	Annual General Meeting of the shareholders on 29 April 2019	33.8	0.98	15 May 2019
Interim dividend on operating results for the first quarter of 2019	Board of Directors' meeting on 22 May 2019	46.2	1.34	20 June 2019
Interim dividend on operating results for the second quarter of 2019	Board of Directors' meeting on 28 August 2019	45.9	1.33	9 September 2019
Interim dividend on operating results for the third quarter of 2019	Board of Directors' meeting on 27 November 2019	49.3	1.43	23 December 2019
		<u>175.2</u>		

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	Approved by	Dividends Million Baht	Dividend per share Baht	Paid on
Year 2018				
Dividend for the year 2017	Annual General Meeting of the shareholders on 27 April 2018	50.7	1.47	18 May 2018
Interim dividend on operating results for the first quarter of 2018	Board of Directors' meeting on 18 June 2018	45.9	1.33	13 July 2018
Interim dividend on operating results for the second quarter of 2018	Board of Directors' meeting on 23 August 2018	45.5	1.32	12 September 2018
Interim dividend on operating results for the third quarter of 2018	Board of Directors' meeting on 28 November 2018	50.4	1.46	24 December 2018
		<u>192.5</u>		

31. Other income

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Interest income	8,824,348	6,989,137	44,420,893	16,301,893
Dividend income	-	-	120,359,983	126,581,983
Claims	18,019,588	12,943,267	10,957,308	9,442,845
Compensation from delay of work	1,253,216	-	123,393	-
Income from computer system service	-	-	5,919,100	4,973,000
Others	21,095,666	14,402,729	14,910,534	9,983,276
	<u>49,192,818</u>	<u>34,335,133</u>	<u>196,691,211</u>	<u>167,282,997</u>

32. Expenses by nature

Significant expenses by nature are as follow:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Salary and wages and other employee benefits	392,840,511	341,712,888	284,765,809	241,931,769
Depreciation and amortisation expenses	828,146,971	736,127,464	484,154,259	410,319,054
Rental and project compensation expenses	110,544,759	101,967,132	89,351,251	81,964,616
Raw materials and consumables used	43,709,731	33,733,940	-	-
Electricity expenses	707,877,810	454,431,098	548,506,932	301,185,981
Purchase of raw water	287,393,629	237,286,526	204,091,771	154,641,414
Purchase of tap water	-	-	58,048,860	54,284,909
Hiring and service expenses	240,928,026	256,684,273	67,963,358	69,244,399
Repair and maintenance	256,728,846	187,593,092	150,256,473	89,108,385
Loss on impairment of assets	-	860,000	-	-
Waterwork management expense	-	-	180,395,101	160,343,554
Expense for development of quality of life and environment	19,438,891	13,315,793	19,438,891	13,315,793
Finance costs	<u>166,052,431</u>	<u>157,212,055</u>	<u>151,066,468</u>	<u>117,185,312</u>

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33 Income tax

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Current tax:				
Current tax on profit for the year	281,287,544	282,142,668	210,483,884	224,262,203
Adjustment in respect of prior year	(452,800)	(654,932)	(596,811)	(117,374)
Total current tax	280,834,744	281,487,736	209,887,073	224,144,829
Deferred tax:				
Items related to temporary differences	(18,476,840)	(20,300,613)	8,235,910	3,952,030
Total deferred tax	(18,476,840)	(20,300,613)	8,235,910	3,952,030
Total tax expense	262,357,904	261,187,123	218,122,983	228,096,859

The tax on the Group's profit before tax differs from the theoretical amount that would arise using the basic tax rate of the home country of the Company as follows:

	(Unit: Baht)			
	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Profit before tax	1,318,263,357	1,390,961,221	1,179,963,418	1,272,816,717
Tax calculated at a tax rate of 20% (2018: 20%)	263,652,671	278,192,244	235,992,684	254,563,343
Tax effect of:				
Income not subject to tax	(677,250)	(677,250)	(24,749,248)	(25,993,646)
Additional expenses deductible for tax	(14,653,710)	(20,991,272)	(2,936,968)	(3,163,576)
Expenses not deductible for tax purpose	14,488,993	5,318,333	10,413,326	2,808,112
Adjustment in respect of prior year	(452,800)	(654,932)	(596,811)	(117,374)
Tax charged	262,357,904	261,187,123	218,122,983	228,096,859

The effective tax rate for the consolidated and separate financial statements is 18.24% and 18.49%, respectively (2018: 18.78% and 17.92%, respectively).

The tax relating to component of other comprehensive income is as follows:

	(Unit: Baht)					
	Consolidated financial statements					
	2019			2018		
	Before tax	Tax (charge) credit	After tax	Before tax	Tax (charge) credit	After tax
Actuarial gain/loss on remeasurement of post-employment benefit obligations	34,841,588	(6,968,318)	27,873,270	-	-	-
Other comprehensive income	34,841,588	(6,968,318)	27,873,270	-	-	-
	(Unit: Baht)					
	Separate financial statements					
	2019			2018		
	Before tax	Tax (charge) credit	After tax	Before tax	Tax (charge) credit	After tax
Actuarial gain/loss on remeasurement of post-employment benefit obligations	26,437,683	(5,287,537)	21,150,146	-	-	-
Other comprehensive income	26,437,683	(5,287,537)	21,150,146	-	-	-

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34 Earnings per share

Basic earnings per share is calculated by dividing the net profit attributable to shareholders of the Company by the weighted average number of ordinary shares in issue during the year.

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Net profit attributable to owners of the parent (Baht)	1,044,793,450	1,117,521,523	961,840,435	1,044,719,858
Weighted average number of ordinary shares in issue (Share)	1,663,725,149	1,663,725,149	1,663,725,149	1,663,725,149
Basic earnings per share (Baht)	0.63	0.67	0.58	0.63

There are no potential dilutive ordinary shares in issue for the years ended 2019 and 2018. Therefore, diluted earnings per share is not presented.

35 Related parties transactions

The Company is a public listed company. The first major shareholder is Provincial Waterworks Authority which owns 40.20% of the Company's share and has representative in the Company's board of directors.

Industrial Estate Authority of Thailand owns 4.57% of the Company's share and has representative in the Company's board of directors.

35.1 Transactions incurred during the year

	Consolidated financial statements		Separate financial statements	
	2019	2018	2019	2018
Sales - raw water				
Major shareholders				
Provincial Waterworks Authority	624,381,282	319,780,672	624,381,282	319,780,672
Industrial Estate Authority of Thailand	980,831,599	975,151,100	980,831,599	975,151,100
Subsidiary				
Universal Utilities Public Company Limited	-	-	40,173,762	40,307,904
	1,605,212,881	1,294,931,772	1,645,386,643	1,335,239,676
Sales - tap water				
Major shareholder				
Provincial Waterworks Authority	1,278,448,056	1,230,555,184	191,405,889	177,315,761
Construction revenue under concession agreement				
Major Shareholder				
Provincial Waterworks Authority	194,435,066	209,070,733	-	-
Interest income				
Subsidiary				
Universal Utilities Public Company Limited	-	-	42,800,000	14,657,534
Rental and service income				
Major shareholder				
Provincial Waterworks Authority	36,026,493	28,989,696	-	-
Subsidiary				
Universal Utilities Public Company Limited	-	-	55,385,298	52,524,306
	36,026,493	28,989,696	55,385,298	52,524,306

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		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
<u>Dividend income</u>					
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	120,359,983	126,581,983
<u>Other income</u>					
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	11,488,713	10,974,300
<u>Cost of sales and cost of services</u>					
<u>Major shareholder</u>					
Provincial Waterworks Authority		20,793,071	20,766,245	8,423,127	8,286,461
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	238,100,424	214,628,463
		20,793,071	20,766,245	246,523,551	222,914,924
<u>Administrative expenses</u>					
<u>Major Shareholder</u>					
Provincial Waterworks Authority		-	326,361	-	-
<u>Subsidiary</u>					
Egcom Tara Company Limited		-	-	283,373	159,577
		-	326,361	283,373	159,577

35.2 Outstanding balances at end of the years

		(Unit: Baht)			
		Consolidated financial statements		Separate financial statements	
		2019	2018	2019	2018
<u>Trade receivables - billed</u>					
<u>Major shareholders</u>					
Provincial Waterworks Authority		112,101,727	76,473,303	99,925,466	62,933,313
Industrial Estate Authority of Thailand		90,603,389	88,598,051	90,603,389	88,598,052
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	3,866,920	4,623,331
		202,705,116	165,071,354	194,395,775	156,154,696
<u>Trade receivables - unbilled</u>					
<u>Major shareholder</u>					
Provincial Waterworks Authority		139,980,524	134,967,926	-	1,297,003
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	2,556,777	1,154,550
		139,980,524	134,967,926	2,556,777	2,451,553
<u>Other receivables</u>					
<u>Major shareholder</u>					
Provincial Waterworks Authority		19,449	16,274	-	-
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	10,483,261	9,419,406
		19,449	16,274	10,483,261	9,419,406
<u>Trade payables</u>					
<u>Major shareholder</u>					
Provincial Waterworks Authority		1,785,541	1,805,294	758,523	685,137
<u>Subsidiary</u>					
Universal Utilities Public Company Limited		-	-	22,877,964	20,155,729
		1,785,541	1,805,294	23,636,487	20,840,866

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		(Unit: Baht)	
		Consolidated financial statements	Separate financial statements
		2019	2018
		2019	2018
Other payables			
Major shareholder			
Provincial Waterworks Authority		171,100,794	37,925,412
Subsidiary			
Egcom Tara Company Limited		-	-
		124,120	-
		171,100,794	37,925,412
		144,904,511	2,128,347
Rental guarantees			
Subsidiary			
Universal Utilities Public Company Limited		-	-
		58,000	58,000

35.3 Key management compensation

Key management compensation can be categorised as follows:

		(Unit: Baht)	
		Consolidated financial statements	Separate financial statements
		2019	2018
		2019	2018
Short-term benefits		107,279,255	109,237,268
Post-employment benefits		13,788,641	5,916,718
Other long-term benefits		43,191	40,665
		24,567	21,176
		121,111,087	115,194,651
		92,569,093	88,159,690

35.4 Long-term loan to a subsidiary

On 29 August 2018, the Company made long-term loan to Universal Utilities Public Company Limited of Baht 1,600.0 million. The loan period is six years with fixed interest rate per annum. The repayment is Baht 400.0 million per annum, starting from 2021.

36 Commitments and contingent liabilities

36.1 Capital commitments

Capital commitments which are not recognised in the financial statements are as follows:

		(Unit: Baht)	
		Consolidated financial statements	Separate financial statements
		2019	2018
		2019	2018
Property, plant and equipment		3,161,243,209	1,762,953,391
Intangible assets		88,647,870	130,613,718
		-	-
		3,249,891,079	1,893,567,109
		3,161,243,209	1,762,953,391

36.2 Operating lease commitments

The future aggregate minimum lease payments in respect of the lease of land, motor vehicles and computer under non-cancellable operating lease contracts are as follows.

		(Unit: Baht)	
		Consolidated financial statements	Separate financial statements
		2019	2018
		2019	2018
Within 1 year		21,184,762	18,670,386
1 to 5 years		12,705,575	21,598,998
		10,428,134	9,606,108
		1,274,164	5,655,560
		33,890,337	40,269,384
		11,702,298	15,261,668

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36.3 Raw water and tap water purchase agreements and long-term service commitments

- 36.3.1 As at 31 December 2019 and 2018, the Group has commitment under an agreement to purchase raw water from the Royal Irrigation Department at the price as specified in a Ministerial Regulation. The agreement does not specify the expiring date.
- 36.3.2 As at 31 December 2019, the Group has commitment under the contract to purchase raw water from a private company with the minimum amount of Baht 447.2 million. (2018 : Baht 483.2 million).
- 36.3.3 As at 31 December 2019, the Group has commitments under the service agreement that the Group has to pay in the future of Baht 162.1 million (2018 : Baht 174.7 million).

36.4 Guarantees

- 36.4.1 As at 31 December 2019, the Group and the Company has contingent liabilities from letters of guarantee issued by local commercial banks to (1) the Provincial Electricity Authority for electricity consumption, (2) the Ministry of Finance for management and operation of the major water distribution pipeline systems in the Eastern Seaboard area, (3) the Provincial Water Authority and the Royal Irrigation Department for compliance to agreements, and (4) counterparty for bidding the project totalling Baht 236.1 million and Baht 140.4 million, respectively. (2018: Baht 243.0 million and Baht 147.4 million, respectively).
- 36.4.2 As at 31 December 2019 and 2018, the Group has contingent liabilities in respect of being a guarantor of subsidiaries for letters of guarantee issued by local commercial banks to those subsidiaries in a credit limit of Baht 200 million for guarantees of electricity consumption, tap water production and distribution and information records of water consumers.
- 36.4.3 As at 31 December 2019, the Company has contingent liabilities from letters of guarantee issued by local commercial bank to a financial institution for the construction of Tubma reservoir development project in credit limit of Baht 200 million.

37 Litigation

The Group has significant litigation cases as follows:

The Company

- 1) The Company and Samed Utilities Company Limited which used to be a subsidiary, were sued for compensation and damages in a lawsuit of black case number Por 808/2558 regarding a breach of an agreement. The private company filed a complaint with the Civil Court requesting that the Company and the subsidiary be ordered to pay damages totalling Baht 30.9 million. On 17 November 2015, the Court made the decision that Samed Utilities Company Limited has to pay the private company Baht 20.5 million plus interest at 7.50% per annum and dismissed the case against the Company. On 17 March 2016, the Company lodged an appeal regarding the fine imposed on Samed Utilities Company Limited. On 22 December 2016, the Appeal Court delivered its verdict according to the Court of First Instance ordering Samed Utilities Company Limited to pay the private company, and to dismiss the case for the Company part. On 20 April 2017, Samed Utilities Company Limited filed a petition. This case is in process of consideration by the Supreme Court.

The subsidiary

- 1) On 25 February 2016, Universal Utilities Public Company Limited was sued in a lawsuit of black case number 570/2559 regarding the purchasing of raw water from a private company which the plaintiff claims that raw water was pumped from a well on the plaintiff's land. The plaintiff filed a complaint with the Chonburi Provincial Court requesting the subsidiary to return the raw water or to pay damages of Baht 49.8 million. On 29 March 2018, the Court dismissed the case. On 19 June 2018, the plaintiff appealed to the Court. The subsidiary filed a cross-appeal to the Court on 30 August 2018. On 24 January 2019, the Appeal Court dismissed the case. This case is in process of following the filing of the plaintiff's petition. The Appeal Court then published a letter to certify that the case was finalised on 20 March 2019.

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38 Project compensation

A government agency is considering a deal for the Company to rent/manage the 2 pipeline connecting projects ("projects") and adjust the compensation. A letter issued by this government agency stipulated the Company was to initially pay compensation for the projects at a percentage of the raw water sold from the commencing of the operating year (year 1998). In addition, if it is decided that a final rate is more than the rate at which the Company already paid, the Company is to make additional payment, in full, as a lump sum; while if the final rate is lower, the government agency agrees to pay back the surplus by offsetting it against the remuneration of the following years.

On 8 January 2010, the government agency issued a letter to the Company notifying it that a deal for the Company to rent/manage the projects and the adjusting of compensation must be processed in accordance with the Act on Private Participation in a State Undertaking B.E. 2535, whereby a committee has, under Section 13, authority to set the compensation rate and negotiate benefits with the Company in order to reach a preliminary conclusion. On 9 May 2011, the Committee under section 13 had a resolution to approve the Company's rental of a pipeline without auction.

In 2015, the Company and the government agency hold a meeting to agree on project compensation rate. On 21 July 2015, the Company sent a letter to the government agency to inform that the Company was willing to pay the compensation for the current year at a higher rate and keep the previous rate for the past years. Subsequently, the government agency issued a letter dated 14 October 2015 to the Company notifying that the compensation rate must be processed and considered in accordance with the Act on Private Participation in a State Undertaking B.E. 2556 and then submitted to the Cabinet for approval. In the meanwhile, the government agency accepted the temporary payment with the new compensation rate from the year 2015 onwards.

The Company records the project compensation by using the new compensation rate since the year 2015. The management considers that such rate is the best estimation based on the current information.

On 29 August 2019, the government agency issued a letter notifying to the Company that the Company's pipeline projects are infrastructure and public service as defined by Article 7 of the Public-Private Partnership Act B.E. 2562. The government agency is required to hire a consultant to study and analyse the investment project in order to comply with Section 8, Section 22 and Section 27 of the Public-Private Partnership Act. B.E. 2562.

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39 Significant agreements

39.1 Concession arrangements

The Group has significant concession arrangements as follows:

- 1) Concession arrangements which the Group has to transfer assets to the grantor at the end of the concession period (BOOT)

No.	Arrangement title	Arrangement date	Signatories	Period	Classification of concession arrangement
1	Agreement to manage the water system at Sattahip Waterworks	28 July 2000	The Company and the Provincial Waterworks Authority	30 years from the date that the Provincial Waterworks Authority appointed the Company to manage Sattahip Waterworks (1 March 2001)	Intangible assets
2	Agreement to produce and sell tap water to the Provincial Waterworks Authority's Nakornsawan office, Nakornsawan Province	7 November 2000	Nakornsawan Water Supply Company Limited and the Provincial Waterworks Authority	25 years from the date of the first tap water sale (1 March 2003)	Intangible assets
3	Agreement to produce and sell tap water to the Provincial Waterworks Authority's Chachoengsao office, Chachoengsao Province	9 November 2000	Chachoengsao Water Supply Company Limited and the Provincial Waterworks Authority	25 years from the date of the first tap water sale (1 April 2003)	Intangible assets
4	Agreement to produce and sell tap water to the Provincial Waterworks Authority's Bangpakong office, Chachoengsao Province	9 November 2000	Bangpakong Water Supply Company Limited and the Provincial Waterworks Authority	25 years from the date of the first tap water sale (1 April 2003)	Intangible assets
5	Agreement to provide water works management services in Bo Win Municipal area	30 March 2004/ 5 August 2005	The Company and the Chaopraya Surasak Municipality / the Bo Win Sub-district Administrative Organisation	25 years from the date of the first tap water sale (11 March 2005)	Intangible assets
6	Agreement to provide water works management services at Koh Lan	17 September 2004	The Company and Pattaya City	15 years from the date of the first tap water sale (1 October 2006)	Intangible assets
7	Agreement to operate and manage waterworks system of the Nong Kham Sub-district Administrative Organisation	29 December 2010	Universal Utilities Public Company Limited and Nong Kham Sub-district Administrative Organisation	25 years from the date of the first tap water sale (4 January 2011)	Intangible assets
8	Agreement to operate and manage waterworks system in Huaro Sub-district area, Phitsanulok Province	28 March 2014	Universal Utilities Public Company Limited and Huaro Sub-district Municipality	30 years from the date of the first tap water sale under the agreement or new agreed date of tap water sale	Intangible assets

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- 2) Concession arrangements which the Group has to transfer assets to the grantor when the construction is completed (BTO).

No.	Arrangement title	Arrangement date	Signatories	Period	Classification of concession arrangement
9	Revised agreement to manage water system of Sattahip Waterworks (Sattahip - Pattaya)	18 October 2004	The Company and the Provincial Waterworks Authority	30 years from the date that the Provincial Waterworks Authority appointed the Company to manage Sattahip Waterworks (1 March 2001)	Intangible assets
10	Agreement to produce and sell tap water to Rayong Waterworks, Rayong Province	14 March 2006	Universal Utilities Public Company Limited and the Provincial Waterworks Authority	25 years from the date of the first tap water sale (12 July 2006)	Intangible assets
3)	Concession arrangements which the Group has no condition to transfer assets to the grantor but grantor has option to purchase the assets when the operator operates to the half of concession period.				

No.	Arrangement title	Arrangement date	Signatories	Period	Classification of concession arrangement
11	Agreement to produce and sell tap water to Koh Samui Waterworks	7 July 2004	The Company and the Provincial Waterworks Authority	15 years from the date of the first tap water sale (12 May 2005)	Intangible assets
12	Agreement to produce and sell tap water to Chonburi Waterworks, Chonburi Province	3 June 2009	Universal Utilities Public Company Limited and the Provincial Waterworks Authority	20 years from the date of the first tap water sale (12 April 2010)	Intangible assets
13	Agreement to produce and sell tap water to Ratchaburi Waterworks, Rayong and Samut Songkram Province	7 April 2001	Egcom Tara Company Limited and the Provincial Waterworks Authority	30 years from the date of the first tap water sale 7 April 2001	Intangible assets

The significant terms of the concession arrangements as mentioned above are such as the operator has to provide construction, maintenance and management of the tap water production systems to meet quantity, quality and tap water price requirements. In some arrangements, the price will be increased by linking to a consumer price index.

Arrangements No. 1-6, No 9 and No 11, the Company has entered into a contract with Universal Utilities Public Company Limited to be the operator for the tap water production and the construction or improvement of infrastructure in the concession arrangements.

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39.2 Other agreements

The Company

- 1) On 26 December 1993, the Company entered into an agreement with the Ministry of Finance to manage and operate the major water distribution pipeline systems in the Eastern Seaboard area. The contract term is 30 years, from 1 January 1994 to 30 September 2023 and the Company is required to pay a minimum of Baht 2 million per annum to the Ministry of Finance. In any years when the Company's revenues from the sales of raw water exceed Baht 200 million, the Company is required to pay the Ministry of Finance with a sharing benefit at a rate of 1 percent of sales of raw water from the Nong Khor and Dok Krai reservoirs. In addition, when the Company's annual rate of return on equity exceeds 20 percent, an additional sharing benefit at the rate of 15 percent of the return in excess of the paid 20 percent is to be paid to the Ministry of Finance. Nevertheless, the total sharing benefit should not exceed 6 percent of the value of the assets leased from the Ministry of Finance, as assessed following the passage of time.
- 2) On 9 August 2017, the Company entered into raw water purchase agreements with a private company for 10 years starting from 1 November 2017. The counterparties can extend the agreement for two times, not more than 10 years for each time (the maximum agreement period is 30 years). The Company agrees to purchase raw water at a minimum of 8 million cubic meters per year during the 1st-3rd year and 12 million cubic meters per year from the 4th year onwards.

40 Fair value of financial instruments

The fair value of financial instruments is as follows:

	(Unit: Baht)			
	Consolidated		Separate	
	financial statements		financial statements	
	2019	2018	2019	2018
Long-term borrowings from financial institutions	4,557,059,979	3,881,619,653	4,369,966,250	3,501,576,161
Debentures	2,380,134,038	2,376,734,879	2,380,134,038	2,376,734,879

This fair value is categorised within level 3 (Note 3.2) which calculated by using the discounted future cash flow by market interest rate throughout the borrowing agreement period.

The majority of the Group's other financial asset and liabilities is short-term. The fair values are not materially different from the book value.

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41 Information of usage and sales volume of raw water classified by distribution networks

A government agency, owner of the pipeline of distribution networks, requires the Company to disclose information about raw water usage and sales classified by distribution networks which is used for calculation of compensation as follows;

41.1 Usage and sales volume of raw water classified by distribution networks

	Separate financial statements			
	2019		2018	
	Volume Cubic Metres '000	Amount Baht'000	Volume Cubic Metres '000	Amount Baht'000
Total used volume of raw water				
Nong Pla Lai - Map Ta Pud Network	118,761	1,228,734	98,532	1,073,083
Dok Krai - Map Ta Pud Network	68,031	776,315	75,976	827,519
Chachoengsao - Chonburi Network	92,192	754,438	46,466	456,027
Nong Pla Lai - Nong Khor Network	34,430	367,776	28,772	305,656
Total	313,414	3,127,263	249,746	2,662,285
Less raw water used to produce tap water				
Dok Krai - Map Ta Pud Network	(16,026)	(158,662)	(15,484)	(153,289)
Nong Pla Lai - Nong Khor Network	(8,458)	(83,731)	(7,562)	(74,868)
Total sales of raw water	288,930	2,884,870	226,700	2,434,128

Sales of raw water from Chachoengsao - Chonburi Network consist of:

	(Unit: Baht'000)	
	Separate financial statements	
	2019	2018
Nong Khor - Laem Chabang Network 1	494,583	247,958
Nong Khor - Laem Chabang Network 2	142,337	121,086
Chachoengsao Network	117,518	86,983
Total	754,438	456,027

41.2 Proportion of sales volume of raw water to end users

	(Unit: %)	
	Separate financial statements	
	2019	2018
Industrial Estates	53	65
Waterworks Authority	28	14
Factories	19	21
Total	100	100

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42 Promotional privileges

The Company

The Company was received promotional privileges from industrial water distribution project in an industrial estate as follows:

1. Promotion certificate no. 61-1180-1-00-1-0 dated 4 October 2018. Under these privileges, the Company has received exemption from certain taxes and duties, including exemption from corporate income tax for the promoted activities for the period of 5 years commencing the period when revenue is first earned from the promoted business. The Company is required to comply with the terms, conditions and restrictions as specified in the promotional certificate.
2. Promotion certificate no. 61-0859-1-00-1-0 dated 13 August 2019. Under these privileges, the Company has received exemption from certain taxes and duties, including exemption from corporate income tax for the promoted activities for the period of 5 years commencing the period when revenue is first earned from the promoted business. The Company is required to comply with the terms, conditions and restrictions as specified in the promotional certificate.

In the year 2019, the Company has no revenue from operation under these promotion certificates.

Subsidiary

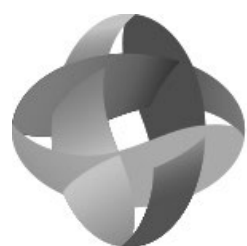
The subsidiary was received promotional privileges as follows:

1. Promotional privileges for production of tap water in Chonburi province according to promotion certificate no. 1143(2)/2556 dated 25 December 2012. Under these privileges, the subsidiary has received exemption from certain taxes and duties, including exemption from corporate income tax for the promoted activities for the period of 8 years commencing the period when revenue is first earned from the promoted business being 28 December 2012.
2. Promotional privileges for waste water treatment in Rayong province according to promotion certificate no. 59-0284-1-00-1-0 dated 1 January 2016. Under these privileges, the subsidiary has received exemption from certain taxes and duties, including exemption from corporate income tax for the promoted activities for the period of 8 years commencing the period when revenue is first earned from the promoted business being 30 November 2017.

The subsidiary is required to comply with the terms, conditions and restrictions as specified in the promotional certificate.

43 Events occurring after the statement of financial position

On 27 February 2020, a meeting of the Company's Board of Directors passed a resolution to propose the Annual General Meeting of shareholders on 22 April 2020 adopts a resolution to pay a dividend of Baht 0.47 per share, or a total of Baht 782.0 million. According to the resolution of the Board of Directors on 26 August 2019, an interim dividend payment was made to shareholders on 11 September 2019 of Baht 0.21 per share, or a total of Baht 349.4 million from the earnings of the six months ended 30 June 2019. The remaining dividend payment of Baht 0.26 per share, or a total of Baht 432.6 million, will be paid and recorded after approval by the Annual General Meeting of shareholders.



eastwater

**Water is our
responsibility**





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