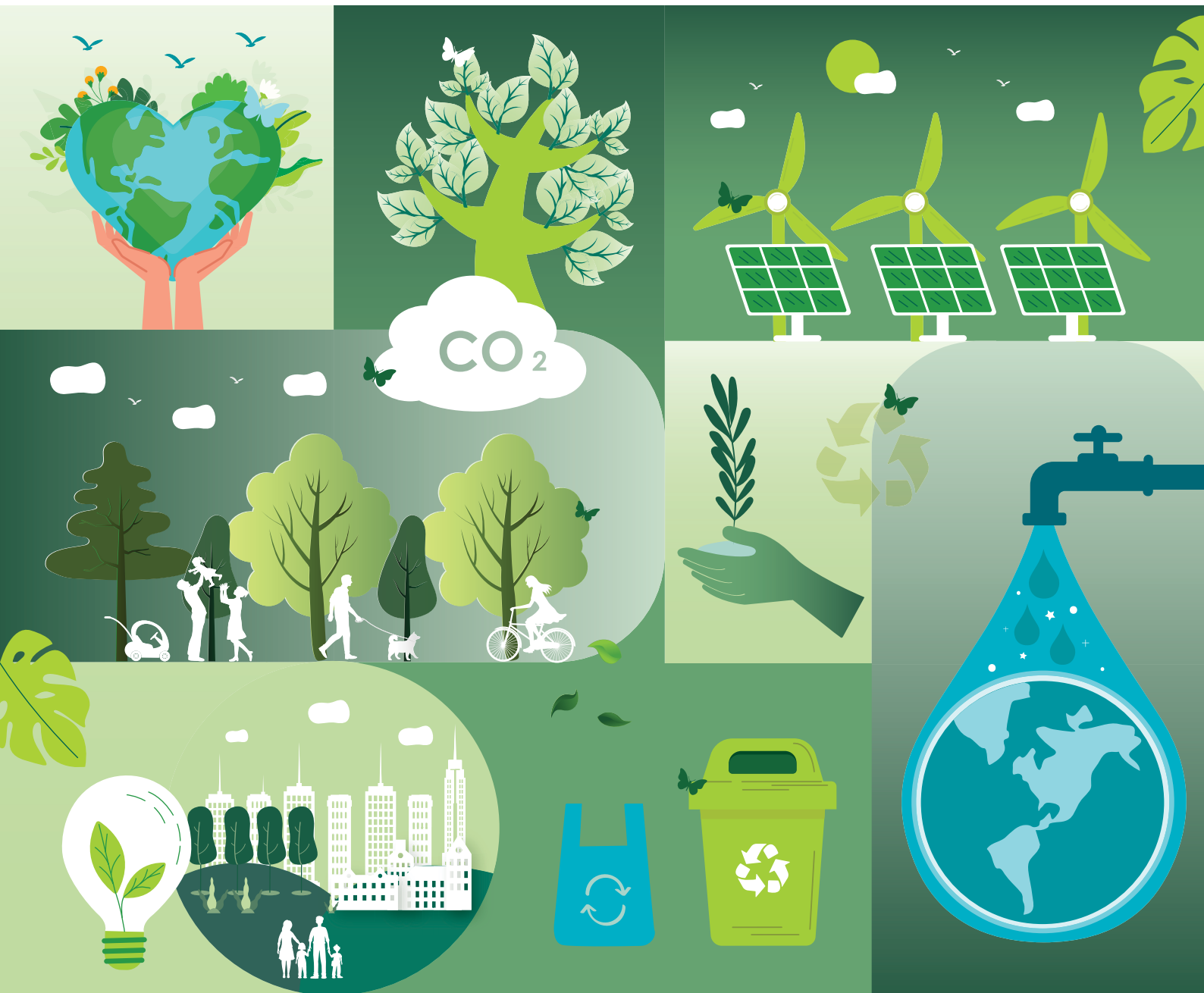


TTW Public Company Limited

WATER FOR LIFE



Delivering “Quality of Water and Quality of Life” for a Sustainable Future

We are doing business with dedication and care to customers and tap water’s users for a long time. The goal is to produce quality, sufficiency and continuity tap water in order to serve the customer requirements and tap water’s users with attention to detail and every production process, starting from source to consumers. In addition, We realizes the importance of sustainability for all stakeholders and all humanity to peaceful coexistence.





Vision Mission and Corporate Values

Vision

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

Mission

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



Corporate Values

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



Continuous Improvement



Proactive & Initiative



Teamwork

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Message from the Managing Director

TTW aims to drive the organization
align with the vision
**“Thailand’s Leading Company in
Water, Energy and Eco-Friendly
Businesses”**
through sustainable creation and taking
care of stakeholders in a
balanced manner



TTW aims to drive the organization align with the vision “Thailand’s Leading Company in Water, Energy and Eco-Friendly Businesses” through sustainable creation and taking care of stakeholders in a balanced manner. Throughout the past, TTW has been aware of sustainable business operations covering environmental, social and governance (ESG) issues, thereby the Risk Management and Corporate Governance Committee oversees sustainability in accordance with the established goals.

Due to the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 26) on November 13, 2021 with the aim of creating mutual responsibility for the threats of climate change at the international level as well as the aim of maintaining the global average temperature rise below 2°C and not to exceed 1.5°C. In addition, Thailand’s policy that focuses on climate change operations to create mechanisms and tools to solve problems effectively.

In the year 2022, the world is still facing the climate change situation that many countries have seriously raised the importance of solving the problem. TTW, as the leading company in the tap water business, focuses on environmentally friendly production processes continuously, TTW assessing GHG emissions from business processes in order to request certification of the Carbon Footprint for Organization (CFO) by the Thailand Greenhouse Gas Management Organization (TGO) as a guideline for determining goals, efficient reduction, and management of GHG emissions from business processes. At the same time, employees are encouraged to create innovations in work processes through Kaizen activities aimed at improving work processes to be more efficient, including adopting digital technology and continuously developing employee skills to support future business expansion.

On behalf of TTW Public Company Limited, we would like to thank stakeholders for your trustworthiness and reliability, including supporting the operation as always. We are still committed to creating continuous growth for the business through good corporate governance toward sustainable organization by operating the business achieve the vision and mission based on the highest satisfaction and benefit of the stakeholders on corporate value.

Ms. Walainut Trivisvavet
Managing Director





About this Report

The Company has published the Sustainability Report for the eleventh consecutive year, commencing in 2012, which has been separated from the Annual Report, based on the 2014 Global Reporting Initiative (GRI-G3) international standards, revised the report according to the GRI-G3.1 version. In 2016-2017, and developed the report according to the GRI-G4 version. In 2018, the report was made according to the GRI Standard version at the Core Option level, and in 2022 the report was made according to GRI Standard 2021 version.

Report Content

The content of this report covers 24 material and other sustainability issues, of which 8 are significantly different from the previous report, mainly added on the issues of social contribution and human rights.

1. Good Performance	13. Employment and Respect for Human Rights
2. Good Corporate Governance	14. Human Rights Risk Assessment
3. Risk Management and Business Continuity	15. Managing Human Rights Complaints and Remedies
4. Crisis Management from the COVID-19 Situation	16. Cooperation with Human Rights Business Partners
5. Supply Chain Management	17. Human Rights Communication and Training
6. Products and Services Responsibility	18. Environmentally Friendly Process of Products and Services
7. Innovation and Technology	19. Water Management
8. Employee Stewardship and Development	20. Waste and Unused Materials Management
9. Occupational Health and Safety	21. Climate Change and Energy Conservation
10. Social and Community Stewardship	22. Biodiversity
11. Social Contributions and Donations	23. Environment Cooperation between Organization
12. Roles and Responsibilities of Human Rights Committees and Executives	24. Environmental Compliance

In addition, the Company adhere to prescribe the goals and show the performance in support of the United Nations Sustainable Development Goals (SDGs) in this report.

Reporting Boundary

This report covers operations from January 1, 2022 - December 31, 2022 to report the organization's sustainability performance in four dimensions which are economy, society, human rights, and environment, then aforementioned performance is linked with United Nations Sustainable Development Goals (SDGs) which covers the operations of the production and distribution of tap water in all five areas including Nakhon Pathom - Samut Sakhon area, Pathum Thani-Rangsit area, Bang Pa-in Industrial Estate area in Ayutthaya, Amata City Industrial Estate area in Chonburi Province and Amata City Industrial Estate area in Rayong Province.

Report Endorsement

This report has been certified by the Company's Sustainability Development Committee. Including received an award of honor "Sustainability Disclosure Award" for the year 2022 for the fourth consecutive year from the Thaipat Institute.

Contact Information

TTW Public Company Limited, Customer Relationship Management Division, 30/130 Moo 12 Buddha Monthon Sai 5 Road, Raikhing, Sampran, Nakhon Pathom Province 73210, Telephone numbers: (+66) 2019 9490-3 Fax: (+66) 2420 6064 Email Address: SD@ttwplc.com



About TTW

The Company operates the utility business throughout the supply chain by operating the tap water production business, maintenance of the tap water production business, wastewater in industrial estate business, as well as other businesses to become “To be Thailand’s Leading Company in Water, Energy and Eco-Friendly Businesses” according to the organization’s vision. TTW regards to technology management, standardization in manufacturing, high quality, verifiable throughout the supply chain, addressing environment and community, including develop business partners growing together sustainably.

Tap Water Production Business

Operated by TTW Public Company Limited (TTW) and Pathum Thani Water Company Limited (PTW).



Tap Water capacity is

540,000

(Cubic meters / Day)



Revenues of **3,670** (Million Baht)



Tap Water capacity is

488,000

(Cubic meters / Day)



Shareholding of **98** (%)

Revenues of **1,708** (Million Baht)

Maintenance of the Tap Water Production Business

Maintenance of tap water system to be efficient and ready to use, operated by Thai Water Operations Company Limited (TWO).



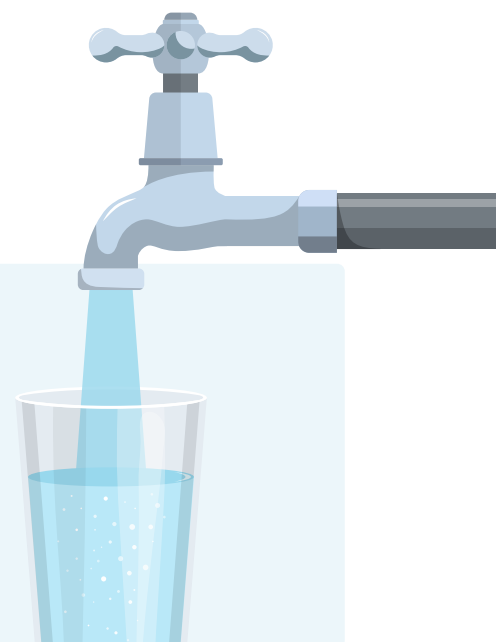
Shareholding of

68 (%)



Revenues of

58 (Million Baht)



Tap water and Wastewater Management Business in the Industrial Estate

Operated by:

- TTW Public Company Limited (TTW)., Bang Pa-in Industrial Estate area in Ayutthaya Province.
- Thai Water Operations Company Limited (TWO)., Amata City Industrial Estate area in Chonburi and Amata City Industrial Estate area in Rayong Province.

TTW

Tap Water capacity is

48,000

(Cubic meters / Day)



Wastewater
treatment

18,000

(Cubic meters / Day)

Revenues
of

236

(Million Baht)

TWO

Tap Water capacity is

50,400

(Cubic meters / Day)



Wastewater
treatment

4,500

(Cubic meters / Day)

Revenues
of

87

(Million Baht)

Other Businesses

Invested in producing and distributing electricity from other energy business in CK Power Public Company Limited (CKP).

TTW

TTW invested in CKP

5,219

(Million Baht)



TTW received
dividend from CKP

162 (Million Baht)



CKP

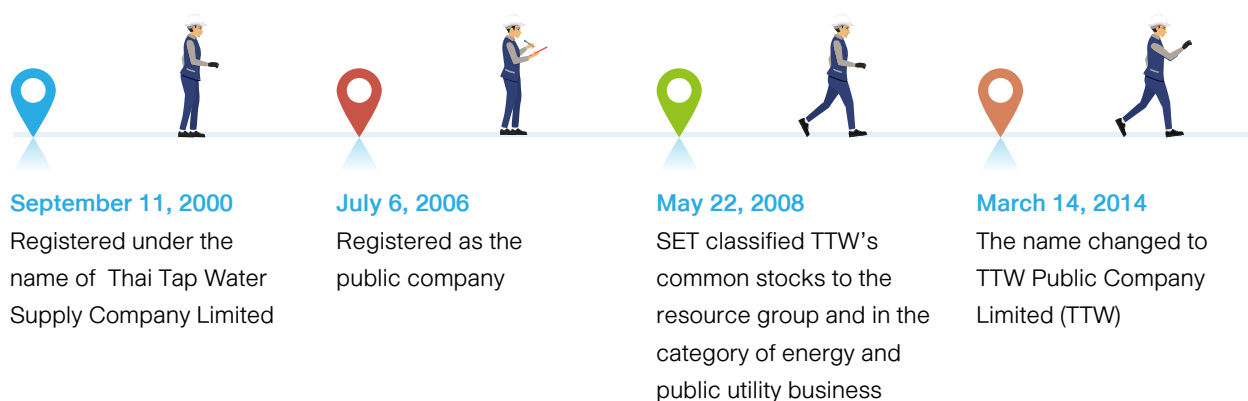
Shareholding of

24.98

(%)



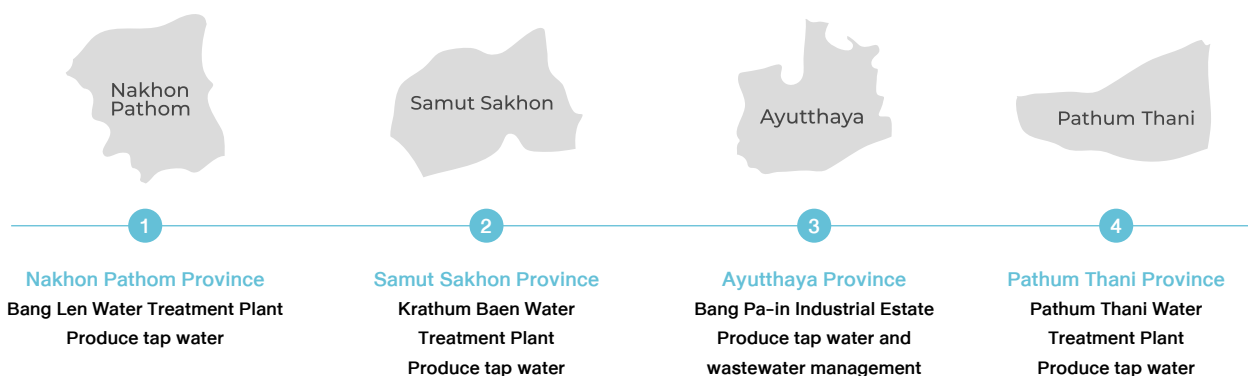
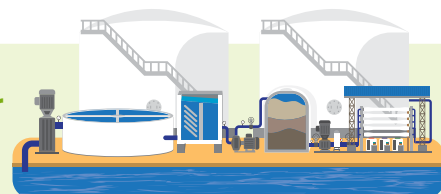
Background



TTW engages in the business of distributing tap water for the Provincial Waterworks Authority (PWA) in the West Bangkok covering 2 areas, namely Nakhon Pathom in 3 districts, consisting of Nakhon Chai Si, Sampran, and Phutthamonthon, and Samut Sakhon in 2 districts, consisting of Krathumbaen and Mueang Samut Sakhon.

TTW has entered into a 30-year BOO contract with the Provincial Waterworks Authority (PWA) and has been granted a waterworks concession from the Ministry of Natural Resources and Environment. Currently, there are 2 water treatment Plants 1) The Banglen Water Treatment Plant located in Bang Len, Nakhon Pathom Province with production capacity of 440,000 Cubic meters / Day and 2) The Krathum Baen Water Treatment Plants located in Klong Maduea, Krathum Baen, Samut Sakhon Province with production capacity of 100,000 Cubic meters / Day, the capacity can be expanded to 400,000 Cubic meters / Day as a backup tap water plant for The Banglen Water Treatment Plant. Nowadays, TTW has a total production capacity of both plants at 540,000 Cubic meters / Day, with a minimum purchase of tap water from PWA at 354,000 Cubic meters / Day.

Currently TTW has the maximum tap water capacity for all business areas of 1,076,000 Cubic meters / Day.



In addition, TTW has invested in subsidiaries and associated companies engaged in the production of tap water, including acquiring the right to manage the tap water production and waste water treatment systems in the industrial estates. And invested in ordinary shares in a holding company in the business of producing and distributing electric from various types of energy. The details are as follows:

Investment Details



Pathum Thani Water Company Limited (PTW)

PTW is TTW's subsidiary, with registered capital of 1,200 million Baht, consisting of 12 million ordinary shares, with a par value of 100 Baht per share, and a paid-up capital of 1,200 million Baht. At December 31, 2022, TTW holding 98% of the registered capital another 2% were held by PWA. PTW operates the business of production and distribution of tap water to the PWA in the Pathum Thani - Rangsit area on a Build-Own-Operate-Transfer (BOOT) basis for a period of 25 years commenced in 1998 onwards. Currently, the production capacity is 488,000 m³ / day, with the minimum off-take quantity to which the PWA has committed amounting to 358,000 m³ / day.



Thai Water Operations Company Limited (TWO)

TWO is TTW's subsidiary, with register capital of 60 million Baht, consisting of 6 hundred thousand ordinary shares, with a par value of 100 Baht per share, and a paid-up capital of 60 million Baht. At December 31, 2022, TTW holding 68% of register capital (another 32% were held by PTW). TWO operates the business of management and maintenance of tap water production and wastewater treatment system for TTW, PTW, the Bang Pa-in Industrial Estate; Ayutthaya, the Amata City Industrial Estate; Chonburi, and the Amata City Industrial Estate; Rayong.



Bang Pa-in Industrial Estate (BIE)

TTW has acquired the rights to produce tap water and wastewater treatment in Bang Pa-in Industrial Estate (BIE); Ayutthaya Province, from Bang Pa-in Land Development Co., Ltd. for 30 years since August 2009, with a production capacity of 48,000 m³ / day and a wastewater treatment capacity of 18,000 m³ / day. Currently, TTW has moved the raw water pumping station from Khlong Wua to the Chao Phraya River at Bang Krasan Sub-District, Bang Pa-in District, Ayutthaya Province, which has better raw water quality, toward mutual trust in quality and continuity in tap water production. The implementation of the BIE project increases the organization's revenue and also adds the skills, knowledge and experience of TTW's personnel to become a direct service provider to customers.



CK Power Public Company Limited (CKP)

CKP is a listed company in the SET, operates business as holding company, which is operating the production and distribution of electricity business. CKP has a registered capital of 9,240 million Baht, consisting of 9,240 million ordinary shares, with a par value of 1 Baht per share, and a paid-up capital of 8,129 million Baht. At December 31, 2022, TTW holding 24.98% of registered capital. CKP invests in three types of electricity production and distribution business, which are Hydroelectric Power Plant, Cogeneration System Plant, Solar Power Plant, by dividing investments in seven subsidiaries and associated companies as follows:

Investments in power plant of three subsidiaries consist of:

1. Nam Ngum 2 Power Company Limited as a CKP's core company by investment via South East Asia Energy Limited)
2. Bangpa-In Cogeneration Company Limited
3. Bangkhenchai Company Limited

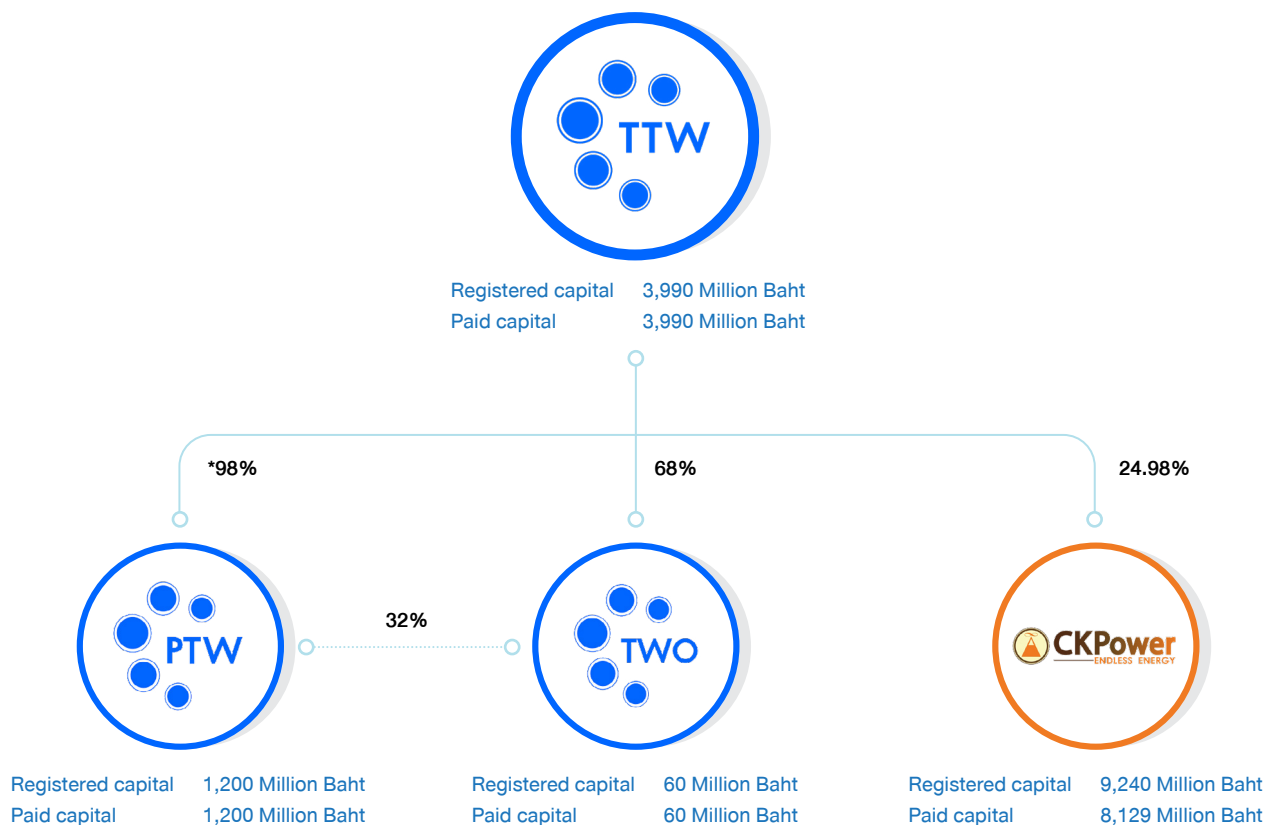
Investments in power plant of four associated consist of:

1. Xayaburi Power Company Limited
2. Luang Prabang Power Company Limited
3. Chiangrai Solar Company Limited
4. Nakhon Ratchasima Solar Company Limited



Shareholding Structure of Company Group

Chart of Shareholding Structure and the Company's Shareholding Percentage
as of December 31, 2022 (Unit : %)



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

TTW is listed on the Stock Exchange of Thailand; its main shareholders are Mitsui Water Holdings (Thailand) Company Limited, CH Karnchang Public Company Limited, Bangkok Expressway and Metro Public Company Limited and investors in Thailand and abroad. The list of the first 5 major shareholders as of December 30, 2022, which is the closing date of the shareholder register book as follows:


	Major Shareholders	Number of Share	Share (%)
1	Mitsui Water Holdings (Thailand) Company Limited	1,036,500,000	25.977
2	CH.Karnchang Public Company Limited	774,077,400	19.400
3	Bangkok Expressway and Metro Public Company Limited	736,900,000	18.469
4	Thai NVDR Company Limited	182,457,453	4.573
5	Mr. Min Tienworn	90,000,000	2.256



Sustainable Development Policy and Strategy

The Company realizes the importance of doing business sustainably, in accordance with the organization's vision "To be Thailand's Leading Company in Water, Energy and Eco-Friendly Businesses" with good governance, along with social responsibility, natural resource conservation and environmental stewardship, towards mutual trust through transparent and inspection processes. Therefore, the Company has established a sustainable development policy to serve as a framework for the management of corporate sustainability development.

In addition, the Company has developed a sustainability strategy to establish the sustainable development measures of the TTW Group as a guideline for sustainable business operations, in accordance with the organization's sustainability policy and Sustainable Development Goals (SDGs) of the United Nations total of the 17 Goals. By reporting on sustainability performance according to the Global Reporting Initiative (GRI).

Sustainable Development Policy	Sustainable Development Strategy
1. Good Corporate Governance 	<ol style="list-style-type: none"> 1. Doing business transparently and verifiable with governance. 2. Add value to the Company's business toward mutual benefit based on the balance among stakeholders. 3. Adapt the Anti-corruption Policy on the operation strictly. 4. Realize the importance of personal data protection and the privacy of those involved by establishing a Personal Data Protection Policy to implement in the operation with stakeholders. 5. Manage risk covering the organization's value chain. 6. Treat stakeholders equally and fairly.

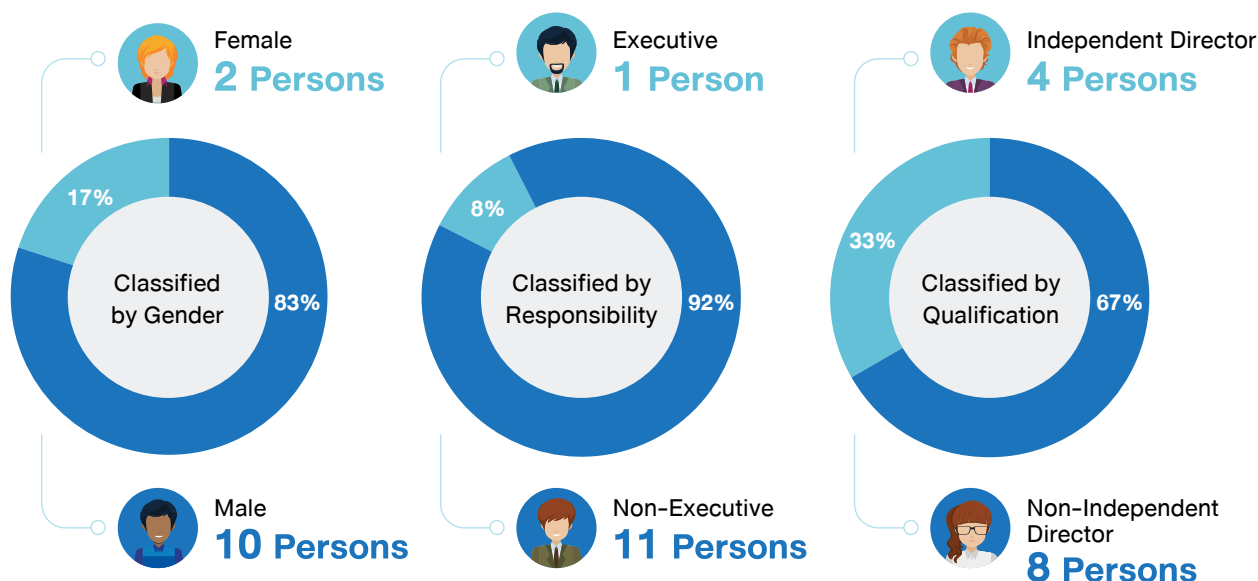


Sustainable Development Policy	Sustainable Development Strategy
<p>2. Business Process Management Continually</p> 	<ol style="list-style-type: none"> 1. Commit to running a comprehensive water business, including raw water management, tap water production, and wastewater treatment. 2. Commit to energy and environmental business in addition to water business. 3. Create long-term added value of products and services by considering the satisfaction of customers and stakeholders. 4. Promote the development and creation of business innovations with social and environmental innovations.
<p>3. Social Value Creation</p> 	<ol style="list-style-type: none"> 1. Manage human resources with efficiency and fairness in accordance with the standards, requirements of laws, and international labor charters. 2. Encourage personnel to develop necessary knowledge and skills according to the employee potential development plan and promote creativity in working through Kaizen activities. 3. Support the occupational health and safety management system by establishing operational manuals and safety standards in accordance with the nature of work and creating a safe working culture throughout the organization. 4. There is a policy on human rights and labor, encouraging executives and employees to respect and comply with international human rights principles based on equality and non-discrimination. 5. Create satisfaction for employees and communities surrounding the Company's business areas. 6. Promote engagement with communities and relevant stakeholders to create the strong relationships, comprehension, and cooperation to reduce conflicts from arising in the future.
<p>4. Sustainable Environmental Management</p> 	<ol style="list-style-type: none"> 1. Realize the importance of doing business without affecting the environment. 2. Conserve energy and climate change through the reduction measures of electricity consumption and GHG emissions from business processes according to the specified goals. 3. Manage water resources by raising awareness of water utilization with value, establishing measures and goals for reusing wastewater from production processes to reproduce tap water. 4. Manage waste and unused materials by using sludge for product research and social use, as well as promoting the valuable use of unused materials. 5. Manage biodiversity for the benefit and value of organizations and ecosystems by establishing preventive measures for tap water and wastewater treatment production systems from negative impacts on living organisms in ecosystems. 6. Promote cooperation and participation in the natural resource conservation and environmental stewardship between the organization and external agencies. 7. Aware of strictly complying with environmental laws by establishing an environmental management system (ISO 14001 : 2015), including internal monitoring and certification from external agencies according to the plan.



Sustainable Development Structure

The structure of the Board of Directors is a one-tier system consisting of 4 sub-committees responsible for overseeing business operations in accordance with the law, objective, and the Company's Articles of Association, as well as the resolutions of the shareholders' meetings, with regular review by the Board of Directors to be align with business conditions and good governance principles. The Board of Directors consists of 12 directors divided by diversity according to the characteristics as follows:



Year's Experience
The tenure for the
Board of Directors

**Average
9 Years**

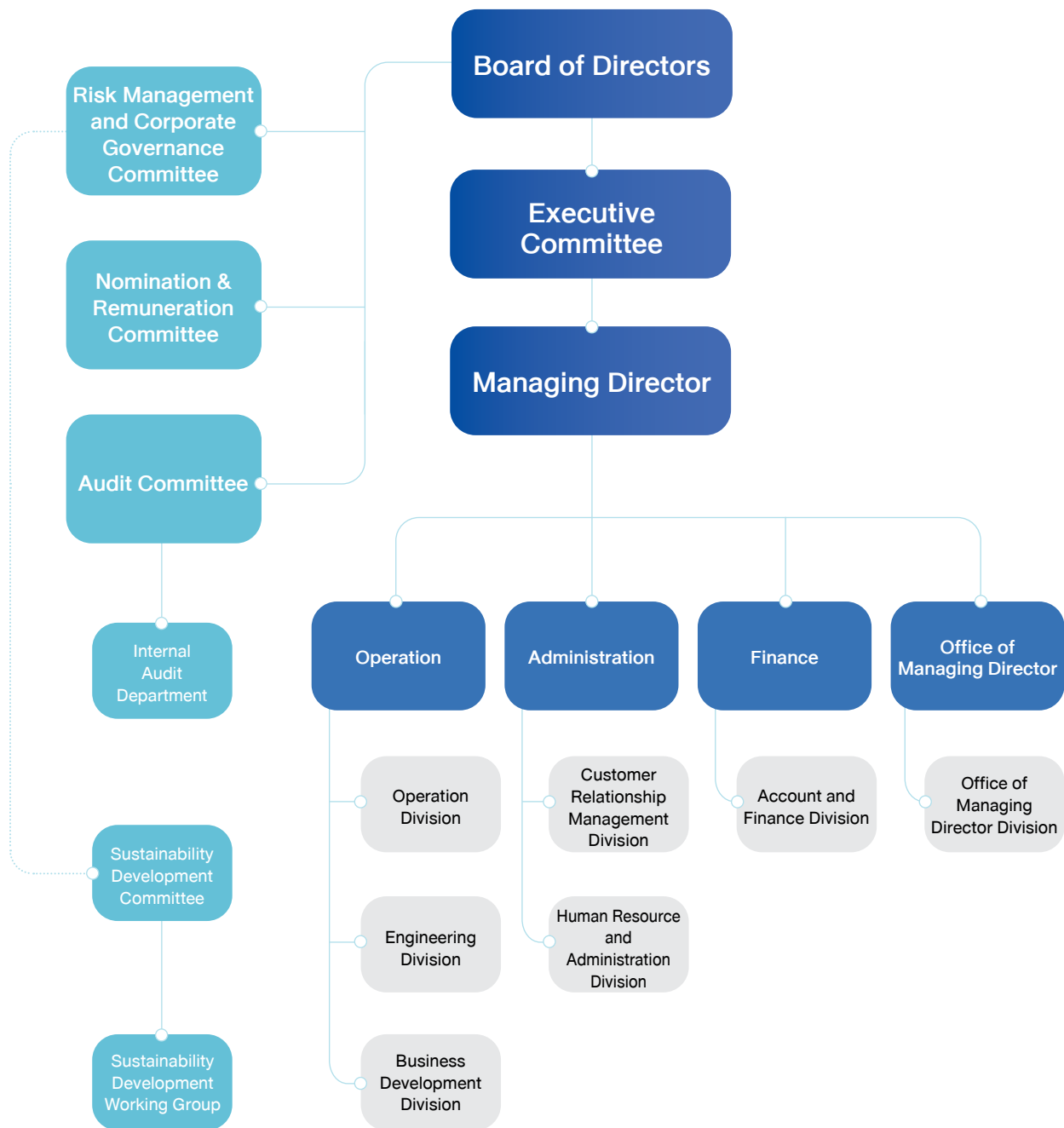
Sub-committees	Categorized by characteristics	Duties and Responsibilities
Executive Committee (Total 5 persons)	<ul style="list-style-type: none"> Non-Executive Director of 4 persons Executive Director of 1 person 4 Males 1 Female 	<ul style="list-style-type: none"> Supervise the Managing Director's performance in accordance with the policies and strategies stipulated by the Board of Directors, as well as provide advice to the Managing Director. Supervise feasibility studies for new projects as well as consider approving various projects. Has the authority to approve any juristic acts which are binding on the Company, In the amount not exceeding 50 Million Baht under the policy and strategy framework by the Board of Directors. Perform other tasks as assigned by the Board of Directors.

Sub-committees	Categorized by characteristics	Duties and Responsibilities
Audit Committee (Total 3 persons)	<ul style="list-style-type: none"> • Non-Executive Director of 3 persons • Independent Director of 3 persons • 3 Males 	<ul style="list-style-type: none"> • Review the Company's financial reports for accuracy and adequate disclosure. • Review the internal control system and internal audit of the company. • Consider the disclosure of the information in case of connected transactions or transactions that may cause conflicts of interest to be accurate, complete and timely.
Risk Management and Corporate Governance Committee (Total 5 persons)	<ul style="list-style-type: none"> • Non-Executive Director of 4 persons • Executive Directors of 1 person • Independent Director of 2 persons • 3 Males • 2 Females 	<ul style="list-style-type: none"> • Consider policies, strategies and risk management plans. • Monitor and control overall risk management at an acceptable level. • Supervise the performance of the Board of Directors as well as the management according to the principles of good corporate governance. • Review the corporate governance policy and the corporate governance manual and code of conduct for business operations. • Follow up on policy compliance through complaints channels. • Supervise operations; provide advice and recommendations for corporate sustainability development.
Nomination and Remuneration Committee (Total 4 persons)	<ul style="list-style-type: none"> • Non-Executive Director of 4 persons • Independent Director of 2 persons • Non-Independent Director of 2 persons • 4 Males 	<ul style="list-style-type: none"> • Recruiting persons for the position of the Board of Directors and Managing Director. • Propose opinions on compensation management and other benefits for the Board of Directors, Sub-Committees and Managing Director.

Remark: The duties and responsibilities of the Sub-Committees disclosed in the 2022 Annual Report (Form 56-1 One report) as published on the website www.ttwplc.com

Follow up, evaluate and report on sustainability development performance

The Company requires the responsible department to monitor, collect and summarize sustainability performance data by analyzing and evaluating targets based on specific metrics. Then report the performance to executive on a monthly basis, and to establish a sustainable development report that meets international standards, namely the Global Reporting Initiative (GRI) to communicate the results of sustainability development to stakeholders and the public on an annual basis.



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

The Company appoints the Sustainability Development Committee responsible for the internal sustainability management, comprising of Managing Director, Vice Managing Director, Assistant Managing Director, and Director of Department, it is under the supervision of the Risk Management and Corporate Governance Committee, including the appointment of the Sustainability Development Working Group comprising of Department Managers and Section Managers from various departments to serve the sustainability policies and measures assigned to expand concrete results to cover all business areas of the Company.



Assessment of Sustainability Issues

Completeness Check

The Company places importance on the management of material sustainability issues and the scope of reporting. The executives have reviewed the significant topics in accordance with the completeness by considering the Materiality Topics, Topics Boundary, and Time as a guideline for planning sustainable operations. The guidelines for identifying 24 key sustainability issues will be linked to the operational strategy toward the determination of report content in the Sustainability Report.

Sustainability Review

The Company has reviewed the process of preparation and disclosure of sustainability reports through various channels, including the preparation of a stakeholder opinion survey at the end of this report to express opinions and suggestions on the operational guidelines and disclosure of sustainability information. The Company has gathered various suggestions to improve the content and format of sustainability performance disclosure in the following year. In 2022, the Company has summarized the significant sustainability issues and scope of reporting as follows:



 Sustainability Issues TTW Group	Business Relationship					
	Internal Organization	External Organization				
	 Employees	 Shareholders / Investors	 Customers	 Business Partners	 Community / Society	 Environment Agencies

Economic (Leader of Private Sector in Operating Tap Water Business)

Good Performance	★★★★	★★★★	★★	★★★★	★★★★	★★★★
Good Corporate Governance	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Risk Management and Business Continuity	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Supply Chain Management	★★★★	★★	★	★★★★	★★★★	★★
Products and Services Responsibility	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Innovation and Technology	★★★★	★★	★★★★	★★★★	★★★★	★★★★
Crisis Management from the COVID-19 Situation	★★★★	★★	★★★★	★★★★	★★★★	★★★★

Social (Quality of Life)

Employee Stewardship and Development	★★★★	★★	★	★★★★	★★★★	★★★★
Occupational Health and Safety	★★★★	★★	★★★★	★★★★	★★★★	★★★★
Social and Community Stewardship	★★★★	★★	★★	★★★★	★★★★	★★★★
Social Contributions and Donations	★★	★★	★★	★★★★	★★★★	★★★★



 Sustainability Issues TTW Group	Business Relationship					
	Internal Organization	External Organization				
	 Employees	 Shareholders / Investors	 Customers	 Business Partners	 Community / Society	 Environment Agencies

Human Rights (Business and Human Rights)

Roles and Responsibilities of Human Rights Committees and Executives	★★★★	★★★★	★	★★★★	★★★★	★★★★
Employment and Respect for Human Rights	★★★★	★★★★	★	★★★★	★★★★	★★★★
Human Rights Risk Assessment	★★★★	★★★★	★	★★★★	★★★★	★★★★
Managing Human Rights Complaints and Remedies	★★★★	★★★★	★	★★★★	★★★★	★★★★
Cooperation with Human Rights Business Partners	★★★★	★★★★	★	★★★★	★★★★	★★
Human Rights Communication and Training	★★★★	★★★★	★	★★★★	★★★★	★★★★

Environmental (Environmental Sustainability Management)

Environmentally Friendly Process of Products and Services	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Water Management	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Waste and Unused Materials Management	★★★★	★★	★★★★	★★★★	★★★★	★★★★
Climate Change and Energy Conservation	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★
Biodiversity	★★★★	★★	★★★★	★★★★	★★★★	★★★★
Environment Cooperation between Organization	★★★★	★★★★	★★	★★★★	★★★★	★★★★
Environmental Compliance	★★★★	★★★★	★★★★	★★★★	★★★★	★★★★

Symbol :



The meaning is:

High importance



The meaning is:

Medium importance
























The meaning is:




















Low importance

Linking sustainability issues to GRI indicators and the United Nations Sustainable Development Goals (UN SDGs)

Sustainability Issues	Descriptions	GRI Index	SDGs
Economic			
1. Good Performance	Information on business operations through the effectively previous year, such as revenue, profit, investment and business expansion, etc.	201-1, 207-1, 207-2, 207-3, 207-4	 
2. Good Corporate Governance	Operations under the principles of good governance, transparency in business operations, anti-corruption, and equitable treatment of stakeholders.	2-9, 2-10, 2-15, 2-16, 2-17, 2-18, 2-19, 2-20, 2-21, 2-26, 2-27, 2-28, 2-30, 205-1, 205-2, 205-3, 206-1	   
3. Risk Management and Business Continuity	Manage corporate risks in dimensions of economy, society, environment, human rights and new risks align with an acceptable criterion, including preventing incidents and suspending in case of emergency so that business can operate without interruption.	201-2	 
4. Crisis Management from the COVID-19 Situation	Effectively manage the crisis from the COVID-19 situation that affected the organization.	403-1, 403-2, 403-3, 403-4, 403-6	   
5. Supply Chain Management	Manage procurement, supplier assessment and risk analysis in the procurement process, as well as participate in the development of operational potential of business partners and the Company simultaneously, including seeking for new business opportunities to achieve maximum operational efficiency.	2-6, 204-1, 308-1, 308-2, 414-1, 414-2	 
6. Products and Services Responsibility	Responsibility to produce products and services with quality and standards recognized to customers, customer and consumer relationship management, including the assessment of the impact of the Company's products and services.	416-1, 416-2, 417-1, 417-2, 417-3, 418-1	  

Sustainability Issues	Descriptions	GRI Index	SDGs
7. Innovation and Technology	Apply innovation and technology to business operations, including promoting innovation in products and services and/or new processes.	203-1	  
Social			
1. Employee Stewardship and Development	Manage human resources with efficiency and fairness in accordance with standards, practices, requirements of laws and international labor charters. Encourage personnel to develop necessary knowledge and skills according to the employee development plan, including creativity.	2-7, 2-8, 201-3, 401-2, 404-1, 404-2, 404-3	   
2. Occupational Health and Safety	Take care of employees' health, safety and working environment, raise safety standards with modern equipment, supporting a good occupational health and safety management system with operational manuals and safety standards corresponding to risk characteristics, and create a safe working culture throughout the organization.	403-1, 403-2, 403-3, 403-4, 403-5, 403-6, 403-7, 403-8, 403-9, 403-10	  
3. Social and Community Stewardship	Participate in solving social and community problems, provide knowledge and create jobs for the community to improve the quality of life of the community, encourage engagement with relevant stakeholders for good relationship, understanding and strong cooperation.	413-1, 413-2	    
4. Social Contributions and Donations	Support essential items and budget to social activities and various crises.	413-1, 413-2, 415-1	  
Human Right			
1. Roles and Responsibilities of Human Rights Committees and Executives	Establish human rights and labor policies, encourage executives and employees to respect and comply with international human rights standards based on equality and non-discrimination principles.	2-11, 2-22	  

Sustainability Issues	Descriptions	GRI Index	SDGs
2. Employment and Respect for Human Rights	Fair employment; no child labor, forced labor, illegal foreign workers, including not forcing pregnant employees to work dangerous to their health and body. All must be voluntary.	407-1, 408-1, 409-1, 414-1, 414-2	  
3. Human Rights Risk Assessment	Risks of human rights violations to stakeholders are identified and assessed in the risk assessment process of the units performing their responsibilities. All risks will be managed by defining measures and management plans and systematically reporting progress to the supervisory line executives.	416-1, 416-2, 417-1, 417-2, 417-3, 418-1	  
4. Managing Human Rights Complaints and Remedies	Set up a system for receiving complaints both internally and externally through various channels for all groups of stakeholders to conveniently access at all times, including processes to protect and heal those affected by human rights operations.	406-1, 411-1, 418-1	  
5. Cooperation with Human Rights Business Partners	Promote and encourage Business Partners in the supply chain to operate with respect to human rights, including the establishment of a Supplier Code of Conduct.	407-1, 408-1, 409-1	  
6. Human Rights Communication and Training	Regularly communicate to raise awareness among employees about business and human rights, including promoting training for employees to realize of ethics and respect for human rights during all operation.	410-1	  
Environmental			
1. Environmentally Friendly Process of Products and Services	Products produced from processes and technologies with attention to the impact on the environment, from the selection of raw materials for production until completion, into goods and/or products pending to be delivered and distributed to customers and/or consumers.	301-1, 301-2, 301-3	    

Sustainability Issues	Descriptions	GRI Index	SDGs
2. Water Management	Raise awareness of the water value consumption by implementing measures and setting target for reusing wastewater from the production process, including participation in water management with external agencies at the organization level and network for sustainable water management.	303-1, 303-2, 303-3, 303-4, 303-5	 
3. Waste and Unused Materials Management	Manage waste and unused materials by using the remaining sludge to be researched into products and used for social benefits, including promoting the reuse of waste and unused for the utilization of resources with value.	301-1, 301-2, 301-3, 306-1, 306-2, 306-3, 306-4, 306-5	  
4. Climate Change and Energy Conservation	Implement measures to reduce electricity consumption and reduce GHG emissions from business processes according to the set goals, including requesting certification of GHG emissions from business processes from the Thailand Greenhouse Gas Management Organization (Public Organization) or TGO.	302-1, 302-2, 302-3, 302-4, 302-5, 305-1, 305-2, 305-3, 305-4, 305-5, 305-6, 305-7	  
5. Biodiversity	Manage biodiversity to benefit and value organizations and ecosystems by preventing water supply and wastewater treatment systems from affecting living things in various ecosystems.	304-1, 304-2, 304-3, 304-4	  
6. Environment Cooperation between Organization	Promote cooperation and participation in natural resource conservation and environmental stewardship between the organization and external agencies.	2-29	    
7. Environmental Compliance	Realize the importance of strict compliance with environmental laws by establishing an environmental management system (ISO 14001: 2015), including internal monitoring and certification from external agencies according to the plan.	2-27	  













Sustainability Issues with Sustainable Development Goals (SDGs)









Sustainability Issues Analysis








The Company assesses and prioritizes sustainability issues which stakeholders giving emphasize, considering together with risk factors throughout the supply chain, based on the Global Reporting Initiative framework, GRI Standard 2021. In 2022, the stakeholders and the Company focus on 24 sustainability issues, the aforementioned issues will be analyzed for organizational risks and opportunities linked to the Sustainable Development Goals (SDGs), which are aligned with 15 of the 17 UN Sustainable Development Goals. The sixth goal is the Company's main mission of doing business to achieve the goal of the Clean Water and Sanitation, while the remaining goals are secondary missions that support the Company's operations to achieve the goals of organization.
















Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Economic					
Good Performance	<ul style="list-style-type: none"> Policies and strategies in economic and sustainable development. Efficient economic, social and environmental management. 	<ul style="list-style-type: none"> Review policies and strategies in economic and sustainable development. Review of water supply targets. Create confidence in business operations for stakeholders. 	<ul style="list-style-type: none"> Operation of tap water concession business with only one customer. 	<ul style="list-style-type: none"> Government policy supports the use of tap water instead of groundwater. People's demand for tap water is increasing. 	 

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Good Corporate Governance	<ul style="list-style-type: none"> Operation policy under the principles of good governance, Board duties and responsibilities, transparency, report, and Anti-corruption. 	<ul style="list-style-type: none"> Review the corporate governance policy. Conduct business ethically. Transferring knowledge of business ethics to employees at all levels. Disseminate knowledge of business ethics on the website. Report the results of corporate governance to the Risk Management and Corporate Governance Committee. 	<ul style="list-style-type: none"> The development of good corporate governance of listed companies has increased steadily, if the Company adjusts slowly, it may affect the Company's future investment. 	<ul style="list-style-type: none"> Having good corporate governance principles, transparency, risks management covering economic, social and environmental aspects, which will affect investor confidence and promote sustainable investment in the future. 	   
Risk Management and Business Continuity	<ul style="list-style-type: none"> Risk management in economic, social and environmental aspects, incident prevention and suspension of emergencies to keep business running without interruption. 	<ul style="list-style-type: none"> Review of economic, social and environmental risk assessments. Review the organization's Emerging Risk. Organize the risk management training course. Rehearsing an Emergency Plan. Report risk management results to the Risk Management Officer and Risk Management and Corporate Governance Committee according to the specified cycle. 	<ul style="list-style-type: none"> In the current situation, new risks are always arising, which are unpredictable risks that may affect the Company's business operations. 	<ul style="list-style-type: none"> Risk management covering economic, social and environmental aspects, including new risks that may arise, there are regular training and emergency drills, resulting on effective standards of operation. 	 
Crisis Management from the COVID-19 Situation	<ul style="list-style-type: none"> Crisis management from COVID-19 which the organization was affected. 	<ul style="list-style-type: none"> Implementation of the BCP plan on "Measures to Prevent COVID-19 Virus Infection" Provide employees and stakeholders with the necessary resources to prevent the spread of COVID-19. 	<ul style="list-style-type: none"> Although the COVID-19 vaccine is currently available, it is mutated and spread easily. If the epidemic is not prevented effectively, it could affect the country's economic growth. 	<ul style="list-style-type: none"> The ability to professionally manage the epidemic of COVID-19 and equipment prevent the spread of COVID-19 to hospital and stakeholders, resulting in the credibility of the company. 	   





Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Supply Chain Management	<ul style="list-style-type: none"> Management and risk analysis in the purchasing process, including assesses business partners for maximum efficiency. Engaging with business partners in order to develop potential, including finding new business opportunities. 	<ul style="list-style-type: none"> Procurement under fair agreements. Establish a project for procurement of products and services that are environmentally friendly. Prepare a backup plan and intensify the delivery of products and find delivery channels that do not affect the production process, including finding new sources of replacement products, if there is an event that the same business partner is unable to deliver the products. 	<ul style="list-style-type: none"> The Company's business operation has relationships with stakeholders in the business value chain, which the Company has to analyze the relationship between the business and the stakeholders in each operating activity, This will lead to management of key sustainability issues throughout the value chain from affecting the Company's business operations. 	<ul style="list-style-type: none"> The Company analyzes which stakeholders are directly and indirectly affected by the business, resulting in the relationships management with each stakeholder appropriately and related with the organizational context. Select business partner who has the potential to conduct business ethically, build cooperation in developing and enhancing the potential of business partners for sustainable growth together. 	 
Products and Services Responsibility	<ul style="list-style-type: none"> Responsibility for producing quality products and services is acceptable to customers, customer relationship management and impact assessment of the company's products and services. 	<ul style="list-style-type: none"> Production and distribution of tap water to customers according to quality standards that are sufficient and consistent. Provide regular consultation and meeting for working with customers. Provide training courses to develop skills for customers Supporting customer relations activities. 	<ul style="list-style-type: none"> Today's technological developments, including climate change, have resulted in changing consumer behavior and making business practices obsolete. 	<ul style="list-style-type: none"> Quality products and services according to international standards, as well as satisfaction in using products and services of customers resulting to the organization is recognized and has an advantage over its competitors. 	  
Innovation and Technology	<ul style="list-style-type: none"> Apply innovation and technology to work processes and promote the organization's innovation. 	<ul style="list-style-type: none"> Provide training to develop Kaizen skills both inside and outside the Company. Transferring knowledge and exchange experiences among departments through the Kaizen Project and Exchange Program. 	<ul style="list-style-type: none"> Advances in innovation and technology have transformed the global society, causing the activities that have been traditionally practiced are obsolete, due to the high competition and uncertainty. 	<ul style="list-style-type: none"> Being a leader in innovations and technology that keep up with current situations, resulting to the stability of the business and the opportunity to expand new businesses in the future. 	  

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
		<ul style="list-style-type: none"> Improved the hybrid water supply process due to the combination of conventional and membrane water treatment systems. Membrane technology is applied in tap water production, which is an advanced technology capable of filtration of viral and bacterial pathogens which are internationally recognized. 			
Social and Human Right					
Employee Stewardship and Development	<ul style="list-style-type: none"> Personnel and labor relations Management, employee development and increasing the potential of employee. 	<ul style="list-style-type: none"> Regularly review the employee performance appraisal process. Review of the compensation determination process. Establish employee potential development plan. Establish employees training plans at all levels. Consider selecting internal personnel before recruiting external personnel. Arrange for an election of the Welfare Committee. Employees satisfaction survey. 	<ul style="list-style-type: none"> Intense competition of current business as well as changing customer demands has resulted in the employees' knowledge and skills not developing to keep pace with the change. 	<ul style="list-style-type: none"> Continually developing knowledge and skills for employees to keep up with the changes will result in employees having the knowledge and skills to support rapid change both now and future. 	   
Occupational Health and Safety	<ul style="list-style-type: none"> Take care of the employees' health, safety and good working environment. 	<ul style="list-style-type: none"> Provide employees an annual check-up, adding a special health check for employees working at risk area and employees over 35 years. Assess environmental factors that may affect the health and safety of employees, such as light, noise, dust, pollution, etc. Regularly training and develop safety knowledge. Regular rehearsal of emergency plans to prepare for critical situations. Annual review of risks and emergencies in working processes. 	<ul style="list-style-type: none"> The good health trends of employees who are not satisfactory, as well as safety in the work of employees and business partners may affect the confidence in operation of the Company. 	<ul style="list-style-type: none"> Raising the standard of safety and modern equipment in work, this will result in confidence in working together and become the Company's safety standard. 	  

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Social and Community Stewardship	<ul style="list-style-type: none"> Participate with community activities include helping to solve social problems and improve the quality of life of the community, educating, income generation, including the conservation of natural resources and the environment with the community. 	<ul style="list-style-type: none"> Supporting scholarships for students in schools with a shortage in service areas. Transfer knowledge of composting from organic waste mixed with sludge to schools in business areas. Transferring knowledge on water conservation to schools and communities. Solving social problems in times of crisis. 	<ul style="list-style-type: none"> The Company's business operations in various areas affecting nearby communities, this includes the increase stakeholders and social expectations towards the Company's business that shows social and environmental responsibility. 	<ul style="list-style-type: none"> Using the Company's knowledge and abilities to become a model community that can be self-reliant and have a better quality of life by creating the participation of all parties. 	    
Social Contributions and Donations	<ul style="list-style-type: none"> Supporting social and environmental stewardship activities and sharing during of crisis. 	<ul style="list-style-type: none"> Producing and supporting bottled water for stakeholders, utilizing it for social activities, including COVID-19 epidemic prevention activities. Support budgets for stakeholders in activities that are beneficial to society. Support Buddhist activities and preserve Thai traditions. 	<ul style="list-style-type: none"> May not receive cooperation from stakeholders. 	<ul style="list-style-type: none"> Good relationship with stakeholders through contributions and donations activities. 	  
Roles and Responsibilities of Human Rights Committees and Executives	<ul style="list-style-type: none"> Process to respect human rights for stakeholders. 	<ul style="list-style-type: none"> Human Rights and Labor Policy. Set guidelines and procedures for respecting the human rights of stakeholders for the Board of Directors, executives and employees to adhere to. 	<ul style="list-style-type: none"> Stakeholders' lack of confidence in the Company regarding respect for human rights negative effects its image and business operations. 	<ul style="list-style-type: none"> Gaining confidence from stakeholders in the company about respecting human rights affects its good image and smooth business operations. 	  
Employment and Respect for Human Rights	<ul style="list-style-type: none"> Right to a good quality of life. Rights to equality. Right to be receive by protection law. Protection of rights and personal information. 	<ul style="list-style-type: none"> Personal Data Protection Policy for Employees. No child labor under the age of 15 is employed. No forced labor employment. No illegal foreign workers. Pregnant employees are not allowed to work that is hazardous to their health and body as required by law. 	<ul style="list-style-type: none"> May receive complaints about human rights violations from employees negative effecting the image and business operations. 	<ul style="list-style-type: none"> Employees are encouraged, resulting in increased work efficiency. 	  

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Human Rights Risk Assessment	<ul style="list-style-type: none"> Efficiently manage human rights risks for stakeholders. 	<ul style="list-style-type: none"> Establish guidelines for human rights risk assessment of stakeholders. Determine measures to reduce the human rights risks of stakeholders. 	<ul style="list-style-type: none"> Causing damage to the Company's business operations from human rights risks incurred with stakeholders. 	<ul style="list-style-type: none"> Minimize the negative impacts caused by human rights risks. Stakeholders' confidence in the Company regarding respect for human rights. 	  
Managing Human Rights Complaints and Remedies	<ul style="list-style-type: none"> Manage human rights complaints and remedies for stakeholders. 	<ul style="list-style-type: none"> Determine channels and processes for receiving whistle blowing and human rights complaints accessible to all employees and stakeholders. Establish a mechanism to protect whistleblowers and complainants. Keep whistleblowing information confidential. Determine the penalties if the complainant is guilty of human rights violations or does not comply with human rights regulations or relevant laws. 	<ul style="list-style-type: none"> May receive complaints about human rights violations from employees negative affecting the image and business operations. 	<ul style="list-style-type: none"> Stakeholders' confidence in the Company regarding respect for human rights. 	  
Cooperation with Human Rights Business Partners	<ul style="list-style-type: none"> Fair business practices. Protection of rights and personal information. 	<ul style="list-style-type: none"> Personal Data Protection Policy for business partners. Promote business operations that respect human rights. 	<ul style="list-style-type: none"> May receive complaints about human rights violations from business partners. Negative impacts on business cooperation with business partners. 	<ul style="list-style-type: none"> Confidence of business partners toward the company regarding respect for human rights. Cooperation in doing business with business partners. 	  
Human Rights Communication and Training	<ul style="list-style-type: none"> Human rights learning and training process. 	<ul style="list-style-type: none"> Communicate and publicize human rights news to employees and related parties. Training courses on human rights for employees and related parties. 	<ul style="list-style-type: none"> This poses a human rights risk due to a lack of understanding of the relevant laws. 	<ul style="list-style-type: none"> Minimize the negative impacts caused by human rights risks. Stakeholders' confidence in the Company regarding respect for human rights. 	  

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Environmental					
Environmentally Friendly Process of Products and Services	<ul style="list-style-type: none"> Manage production process for the Company's products and services that do not affect the environment, both inside and outside the organization. 	<ul style="list-style-type: none"> Produce tap water without loss of water with Zero Discharge. Establish a project for green procurement of product and service. Membrane technology is applied in the tap water process, which able separate suspended solids or dissolved solids from liquid and can Remove contaminants, pathogens such as viruses and bacteria. Operate and monitor the performance in accordance with the environmental standard system that has been certified by external agency (ISO 14001 : 2015). 	<ul style="list-style-type: none"> The global warming and increasing climate change and the reduction of GHG emission according to the Paris Agreement to keep the average global temperature above 1.5 degrees Celsius. 	<ul style="list-style-type: none"> Improve the production process to be environmentally friendly by establish a Solar Rooftop to reduce electricity consumption and develop waste into products. As a result, the cost of electricity consumption per product unit is reduced and promotes sustainable use of resources. 	    
Water Management	<ul style="list-style-type: none"> Water management using in the tap water business, including water management with the communities and related agencies to solve water quality problems and sustainable water shortages. 	<ul style="list-style-type: none"> The residual water from the sludge extraction process will be reused in the tap water production process. Establish a project responding to the people's tap water demand in collaboration with PWA, in order to support standardized tap water accession. Campaign to promote activities to maintain water sources and water quality of the Tha Chin River and canals in the service area. Monitor water sources with relevant external agencies such as Department of Water Resources, Royal Irrigation Department, the Environment and Pollution Control Office 5, Metropolitan Waterworks Authority, Provincial Waterworks Authority, Private agency and the We Love Tha Chin River Club, Nakhon Pathom. Organize Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project in collaboration with Raikhing Municipality, the Environment and Pollution Control Office 5 and the Phasi Charoen water transmission and maintenance project, Regional Irrigation Office 11. 	<ul style="list-style-type: none"> Climate change results in no seasonal precipitation, the amount of water in dams and natural water bodies has decreased or the quality of raw water degradation may affect the production of tap water. 	<ul style="list-style-type: none"> Enhance the ability to manage a complete range of water include upstream development, campaign to promote water conservation and worthwhile use of water by promoting integrated work with other organizations. 	 

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Waste and Unused Materials Management	<ul style="list-style-type: none"> Waste management does not affect business operation and stakeholders, including adding waste value using for business and social benefits. 	<ul style="list-style-type: none"> Waste is sorted into 3 types: general waste, recycle waste and hazardous waste. The head office separates food waste from general waste to make compost from the automatic food waste sorting machine. Organize a compost project from organic waste mixed with sediment for trees at Thairath Wittaya 4 School and Sukwattanaram School, Nakhon Pathom Province. 	<ul style="list-style-type: none"> Urban and industrial growth resulting to increase waste materials, causing pollution and impact in the environment as well as the wasteful using natural resources, causing a shortage. 	<ul style="list-style-type: none"> Research and development for the reuse of waste materials or adding value to waste with waste management in accordance with the 3Rs principle and circular economy. 	  
Climate Change and Energy Conservation	<ul style="list-style-type: none"> Establish policies and measures for energy conservation, establish project to reduce energy consumption. 	<ul style="list-style-type: none"> Establish project for procurement of products and services that are environmentally friendly. Establish the Solar Rooftop project on the roof of the clear water tank of the company. Join the energy conservation project of the Department of Alternative Energy Development and Efficiency, Ministry of Energy. Establish Care the Bare Project cooperated with the Stock Exchange of Thailand. Organize the "Greenhouse Gas Emission Assessment from the Business Process Project" by hiring a GHG emissions assessment consultant who has been verified by an external agency, including being certified for the carbon footprint of the organization from the TGO. 	<ul style="list-style-type: none"> The global warming and increasing climate change and the reduction of GHG emission according to the Paris Agreement to keep the average global temperature above 1.5 degrees Celsius. 	<ul style="list-style-type: none"> Improve the production process to be environmentally friendly by establish a Solar Rooftop to reduce electricity consumption and develop waste into products. 	  

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
Biodiversity	<ul style="list-style-type: none"> Maintain and protect natural resources and ecosystem integrity that may be affected by the Company's business operations. 	<ul style="list-style-type: none"> Establish a mesh cover in front of the raw water pump pipe to prevent fish and aquatic animals from entering the production process. The residual water from the sludge extraction process will be reused in the tap water production process, in order to prevent the release of waste water into the Tha Chin River and Chao Phraya River. Establish campaign to promote the conservation of the Tha Chin River and its branch canal. Organize Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project. 	<ul style="list-style-type: none"> Stakeholders have higher expectations of environmentally conscious business practices and the strictness of biological resource conservation laws. 	<ul style="list-style-type: none"> There is a system to prevent aquatic animals from entering the raw water pumping process as well as maintaining upstream, middle stream and downstream sources by monitoring the Company's upstream forest growth, resulting to the water source that is the input factor for the tap water production process is ecologically complete. 	  
Environment Cooperation between Organization	<ul style="list-style-type: none"> Raising awareness and participation in environmental stewardship with external agencies. 	<ul style="list-style-type: none"> Establish campaign to promote the conservation of the Tha Chin River and its branch canal in collaboration with the We Love the Tha Chin River Club, Nakhon Pathom. Follow-up activity of the 1 Million Seeding to Create Watershed Forests Project with the Department of National Parks, Wildlife and Plant Conservation. Organize a compost project from organic waste mixed with sludge for trees within the school in the business area together with the Faculty of Environment, Kasetsart University. Organize a project to serve people's tap water needs in collaboration with the PWA to support universal access to standardized tap water. Organize Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project in collaboration with Raikhing Municipality, the Environment and Pollution Control Office 5 and the Phasi Charoen Water Transmission and Maintenance Project, Regional Irrigation Office 11. 	<ul style="list-style-type: none"> Lack of cooperation with the environment between organizations may affect the environmental conservation and long-term business operation. 	<ul style="list-style-type: none"> Building cooperation in environmental stewardship with government, private and community organizations, what will be gained from the cooperation will be a large perspective that contributes to sustainability. 	    

Sustainability Issues	Details	Methods	Risk	Opportunity	SDGs
		<ul style="list-style-type: none"> Supervise water sources in collaboration with relevant external agencies, such as the Department of Water Resource, the Royal Irrigation Department, the Environment and Pollution Control Office 5, the Metropolitan Waterworks Authority, the Provincial Waterworks Authority, private organizations and We Love the Tha Chin River Club, Nakhon Pathom. 			
Environmental Compliance	<ul style="list-style-type: none"> Establish the policies and operate according to the environmental management system related to ISO 14001 : 2015. 	<ul style="list-style-type: none"> Waste is sorted into 3 types: general waste, recycle waste and toxic waste. Establish the company's environmental objectives and follow the established indicators. Establish environmental action plans and report operating results to Management on a regular basis. Conduct regular environmental risk assessments. Conduct an Internal Audit ISO 14001:2015, the Company's environmental operations comply with the specified standards at least once per year. 	<ul style="list-style-type: none"> The strictness of environmental laws is increasing may affect the Company's operating costs. 	<ul style="list-style-type: none"> Raise awareness along with system administration and compliance with environmental laws toward corporate culture by adhering to common sense practices. 	  

Goals and Performance

The Company has adopted a sustainable development policy to determine sustainability issues and corporate sustainability development goals as a framework for production and showing social and environmental responsibility for sustainable growth. The 24 sustainability-related issues can be identified, which can be linked to 15 of the 17 United Nations Sustainable Development Goals (UN SDGs). The Company has set sustainable development goals covering good corporate governance, economic, social and environmental aspects of the organization according to the 2022 Annual Report (Form 56-1 One Report) as disclosed on the website www.ttwplc.com.

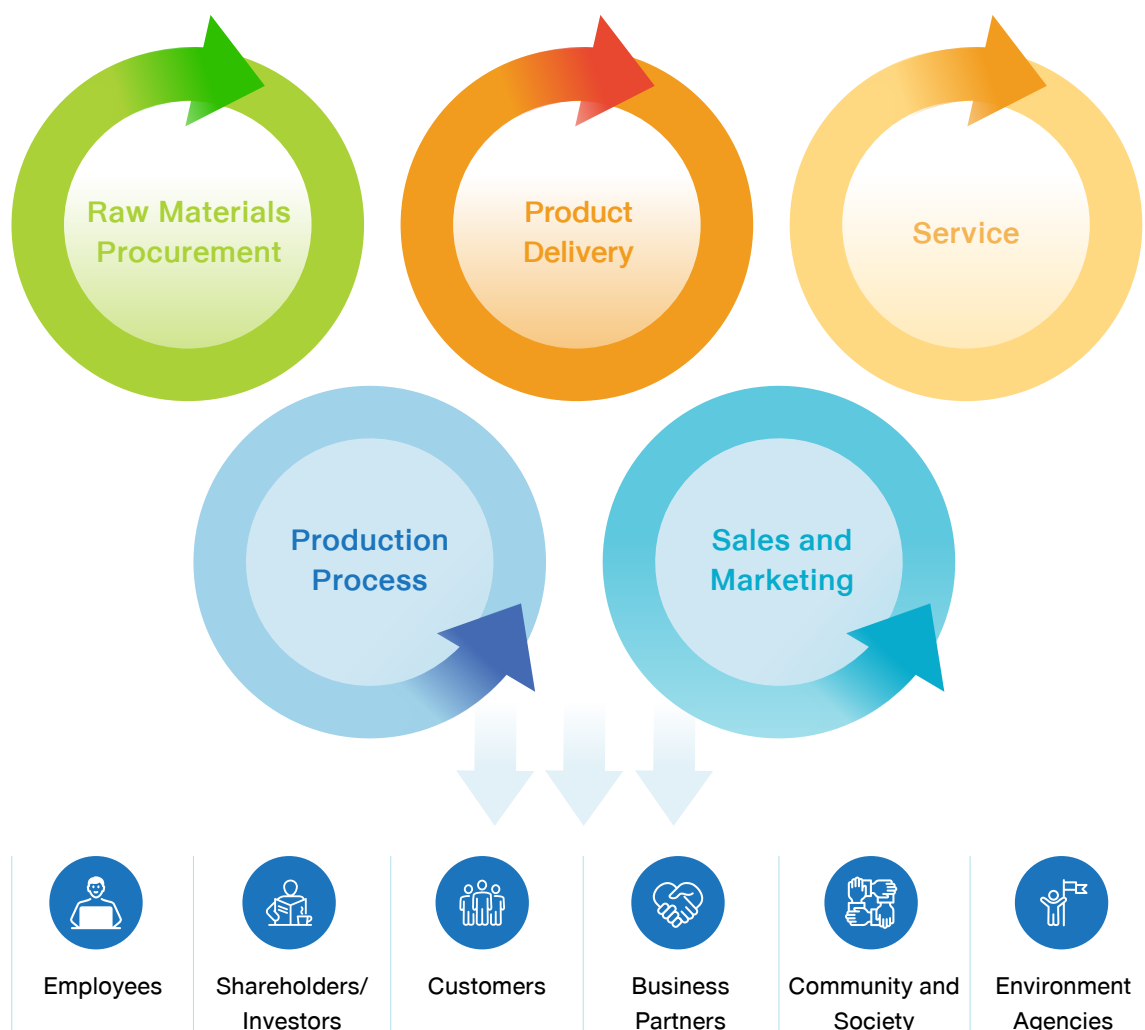


Stakeholder Engagement

The Company recognizes the participation of stakeholders, it believes that good relationships based on trust, as well as the opinions and suggestions of stakeholders towards the organization are valuable assets to the organization, affecting the achievement of sustainable development and growth. Stakeholder management will enable the organization to respond effectively to the needs of stakeholders, creating maximum benefits for all sectors as well as reducing the risk of damage to the image and the potential for business interruption. The Company continually communicates with its stakeholders in order to gain an understanding of the issues and listen to their opinions in order to integrate them into the Company's decision-making and business planning processes.

Relationship between the Business and Stakeholders in the Value Chain

The Company analyzes relationship between business and stakeholders each operating activity, which leading to analysis and management of key sustainability issues which is important to added value to products and services and creating the Company competitiveness, consisting of five main activities which are continuous and related from upstream to downstream in the value chain as follows:



Stakeholders Management Process

1. Define stakeholder groups and prioritize them, based on three criteria:
 - Stakeholders involved in the Company's business operation.
 - The company creates a sustainable impact on the stakeholders.
 - Key stakeholders impact the Company's sustainability.
2. Stakeholders management
 - Define the stakeholder's responsible work segment.
 - Define a method for surveying stakeholder needs and expectations.
 - Collect stakeholder's needs and expectations.
3. Analysis and selection of key points
 - Consider the importance of needs and expectations issues of the stakeholders in the context of their impact, risk, and chance according to corporate policies and goals, both in terms of importance to stakeholders and organization.
4. Implementing the results
 - Submit the analysis results to the Company's Sustainability Development Committee in order to determine the sustainability operation direction and establish the Company's sustainability strategy.
5. Prioritization of TTW's Stakeholders (respectively)

5.1 Employees

Employees are a key factor in the success of organization, the Company is therefore determined to create a human resource management system and fair performance assessment, enhancing career opportunities and advancement, continually developing knowledge and potential of employees, and maintaining a safe working environment in accordance with high international standards, as well as fostering good working culture and environment.

The Company also extends the "Care" toward employees and their families regularly through a variety of activities provided, such as "Managing Director meets employees" to provide employees opportunities exchange ideas closely with the Managing Director, encouraging employees' creativity to develop and improve their work with the Kaizen project, giving scholarships for employees' children, annual work satisfaction survey. There are also monthly birthday events for employees, provided preventive vaccinations from government agencies, weekly testing COVID-19 before entering the workplace, group insurance, regular preparation of anti-spraying equipment for the workplace, provided Factory Accommodation Isolation, including caring for employees' families to vaccinate from government agencies as well.

5.2 Shareholders / Investors

The Company is committed to taking responsibility and creating utmost satisfaction for shareholders by taking into account the sustainable economic growth of the organization and continually providing reasonable returns by operating transparently with reliable accounting systems, control systems, and internal audit systems. The Company continuously discloses information to shareholders and investors, both retail and institutional investors, through various channels in order for shareholders and investors to access information conveniently and quickly, for example: organizing a General Meeting of Shareholders (AGM), Plant Visit, Analyst Meeting, Credit Rating, etc.

The Company takes into account the rights of shareholders and encourages shareholders to fully exercise their legal rights, such as the right to attend the AGM meeting, the right to express opinions and vote cast. Furthermore, the Company has given the minority shareholders the right to propose meeting agenda in advance and nominate a candidate to be appointed as a director.

5.3 Customers

The Company is committed to creating satisfaction and confidence with customers in order to receive safe, quality and fair products and services by continually raising the standard of production of products and services, including maintaining good and lasting relationships. Hence, the Company has annually organized various activities, such as performance summary meeting, training courses, information service, technical development, promoting the use of tap water, complaint management, satisfaction survey, and customer relationship activities, for example: off-site meeting, supporting for the Kathin ceremony, supporting scholarships for customers' children (PWA) to enhance satisfaction and relationship with customers.

5.4 Business Partners

The Company upholds equality and integrity in business conduct and mutual benefits based on the Code of Business Conduct, strictly comply with the laws, rules and conditions of contractual obligations, create trade alliances, maintain good relationship with all parties, including organizing a joint problem solving meeting, training courses, and visits to production sites of business partners for sustainable business and industry development is beneficial to society and the nation as a whole.

5.5 Community / Society

The Company has continually emphasized the community's safety both in the service area and outside the service area as well as the quality of life of the people and society. The Company operates its business together with the prevention and reduction of potential impacts on the community and environment, as well as giving back to the community and society as a whole in order for the Company and society growing together in a sustainable manner. However, most social projects focus on the promotion and development of education, career building and participation

in solving community problems, we realize that education and the quality of life of people in society are important to the country's development, which will affect the company's long-term business operations. The Company has developed projects that provide economic, social and environmental benefits at the same time, for example: "sludge product development project" with the objective to turn waste into products by hiring communities to produce clay tiles and use them as part of building decorations for schools in Samut Sakhon and Nakhon Pathom provinces.

5.6 Environment Agencies

The Company emphasizes the importance of responsibility for environmentally friendly production processes in order not to affect the external environment, such as reproduce tap water from the waste water, develop the Solar Rooftop project on the roof of the Company's clear water tanks, for save energy or develop sludge into building materials for social benefits. In addition, we have participated in solving water resource problems with the Watershed Subcommittee to maintain water resources, upstream forest planting, training on water conservation for employees and communities as well as continually engaging with the community in solving environmental problems. The Company recognizes that "water" is essential to our livelihood and business operations thus promoting integrated solutions to water problems by Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project in collaboration with Raikhing Municipality, the Environment and Pollution Control Office 5 and the Phasi Charoen Water Transmission and Maintenance Project, Regional Irrigation Office 11, which has signed a memorandum of agreement and educate community representatives and entrepreneurs about the water quality restoration of Bang Sue Canal, including collecting water samples to analyze the water quality of Bang Sue Canal on a monthly basis. In 2022, the Company will install grease traps for communities

and entrepreneurs living along Bang Sue Canal, as well as water quality improvement equipment, such as air blowers, solar turbines, and rafts for water treatment plants and improving the landscape along the Bang Sue Canal in the water quality improvement area, etc.

The Company cooperates with the Faculty of Environment, Kasetsart University and the Laem Phak Bia Environmental Research and Development Project due to the royal initiative have prepared a "The Compost from Organic Waste mixed with Sludge Project" The compost will have nutrients in the soil suitable for growing fruit trees and flowering plants. At present, the Company has prepared a compost project at the head office and is in the process with schools in the area surrounding the Banglen Water Treatment Plant, Nakhon Pathom Province, namely Wat Sukwattanaram School, and Thairath Wittaya 4 School. This is to creates mutual value between the

business sector and society at the same time.

The Company has established "The Greenhouse Gas Emission Assessment from the Business Process Project" by hiring a consultant registered with Thailand Greenhouse Gas Management Organization (Public Organization) or TGO is Green Style Company Limited, which is verified by the Greenhouse Gas Management Certification Unit, University of Phayao and has been certified for the preparation of the Carbon Footprint for Organization by the TGO.

6. Responding to expectations or needs of stakeholders

The Company has summarized the operating results to meet the expectations or needs of stakeholders according to the 2022 Annual Report (Form 56-1 One Report) as disclosed on the website www.ttwplc.com.



Stakeholders' Feedback to the Company



Mr. Nuttawut Nuchanaka

Information Department Manager / TTW Public Company Limited

I have been working with TTW since 2007, the Company encourages employees to advance in their careers. I have been entrusted with important duties as a supervisor. The Company has organized training to educate supervisors to develop their work, as well as providing financial planning opportunities for the future in the form of savings and investments, including the welfare of medical expenses covering the health of employees as well.



Mr. Thaweesak Srivala

Public Relations Officer / TTW Public Company Limited

The Company provides opportunities for new generations to be part of the organization, encouraging employees to learn and develop their potential by organizing training in the skills necessary more effectively. It also promotes work safety by improving welfare for employees to have a better quality of life, such as cost of living, including increasing the amount of medical expenses and improving wages and fair compensation. It is considered to emphasize the physical and mental health of employees as well.



Mr. Pawat Plaengsri

PWA Managers of Regional Offices / Rangsit Branch (Senior Level)

All the time, the Provincial Waterworks Authority, Rangsit Branch (Senior Level), has always received good cooperation from TTW, whether it is a discussion on water distribution guidelines to create maximum satisfaction for water users, including supporting services for the service users at the Waterworks Authority, such as improving the landscape, renovating the building as a multi-purpose building to provide services to service users and employees of the Provincial Waterworks Authority, Rangsit Branch (Senior Level) for mutual use.



Ms. Naruemon Youngsirikul

Head of Administration / Provincial Waterworks Authority, Rangsit Branch (Senior Level)

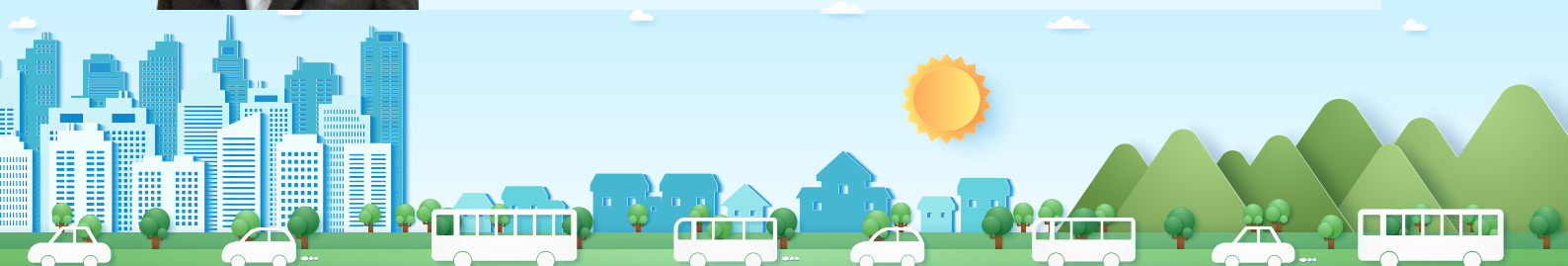
TTW has always given importance to the Provincial Waterworks Authority, Rangsit Branch (Senior Level) in various aspects, including supporting scholarships for employees' children, and other activities, such as renovation of office buildings, office merit support, sponsorship of New Year activities, and cooperation in many areas all along.



Mr. Tinworn Nimnarak

Managing Directors / T.N.S. Industry Co., Ltd

I have been attending a meeting with TTW since 2021 with a feeling of pleasure and pride to work with a public organization with a good management and quality control system for tap water production. My team and I received knowledge, advice and solutions from TTW to apply in our maintenance service get the job done.





Mr. Phichitpol Ngammuen
Managing Director / PC. Network Service Co., Ltd

It is an honor for me and my staff to work with TTW, throughout work together, I have received courtesy and been a part in solving obstacles that arise during the completion of work according to the goals. I am impressed and delighted to work with TTW now and in the future.



Mr. Samruay Kanthawee
Community leader / Moo 10, Rai Khing, Sam Phran, Nakhon Pathom Province

At first, I couldn't even imagine joining the project "Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River", what will be gained from this project? But with continuous action, I have seen TTW's intention to restore the water quality of Bang Sue Canal so that it can benefit the community. I ask TTW to expand the project to other canals so that other communities can have clean canals like Bang Sue Canal.



Mr. Sanae Srisoonthorn
Director / Wat Sukwattanaram School, Nakhon Pathom Province

I would like to thank TTW for selecting Wat Sukwattanaram School participated in the project "Compost, Conservation of the Land and Environmental" In the past, TTW has given equipment and knowledge on how to make compost from organic waste mixed with sludge from the Banglen Water Treatment Plant by lecturers from Kasetsart University and the Laem Phak Bia Environmental Research and Development Project under the Royal Initiative. The teachers and students who participated in the training gained knowledge on self-composting making them aware of the importance of waste segregation and recycling.



Mr. Karn Saengsukdee
Director of Environmental Planning Department / Environment and Pollution Control Office 5

As the coordinator of the Environment and Pollution Control Office 5, I am delighted that TTW places great importance on and supports the community's environmental management, especially in solving the water quality problems of Bang Sue Canal and Tha Chin River through "Restore the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project" We have supported speakers to convey knowledge and understanding about wastewater management and solid waste management to raise awareness and change behaviors in environmental management to communities and entrepreneurs in the Bang Sue Canal area, including cooperation in activities to restore the water quality of Bang Sue Canal under the aforementioned project. We hope that TTW will continue to support and cooperate with the government and people in protecting the environment.



Ms. Naphapat Kongthongsang
Member of We Love the Tha Chin River Club, Nakhon Pathom

Thank you TTW for taking care of the Tha Chin River and continually supporting people's organizations. In my opinion, if an organization located along the Tha Chin River supports the people's sector without social and environmental budgets but with volunteer hearts, it will make the people's sector work happily and hopefully. We will continue to drive our work every year.

Remark: The information has been authorized by stakeholders to be published in this report.





Leader of Private Sector in Operating Tap Water Business

Good Performance

The Company is aware of operating a business that adheres to things that are straightforward, honest, transparent, legal, and verifiable. Aiming for steady, continuous, and sustainable growth in order to achieve the vision based on the balance between customers, employees, partners, shareholders, communities and the environment according to the organization's mission on the satisfaction and utmost benefit of stakeholders by constantly evolving, work proactively with initiative and teamwork. The Company's economic performance is shown on page 122 of this report.

Good Corporate Governance

Managing a business through good corporate governance is an important factor reflecting an efficient, fair, transparent, verifiable, management system with social and environmental responsibility. This will create credibility for shareholders, investors, stakeholders and all related parties.

In order for the Company to grow steadily and sustainably according to its vision and mission, the Board of Directors has assigned the Risk Management and Corporate Governance Committee to consider, review, promote, supervise, and monitor the Company's good corporate governance operations, including focusing on environment, society and governance (ESG) from the internal business process to the outside of the organization to achieve the

mission according to the established goals. In addition, review and update the corporate governance policy to align with international standard practices, laws, rules, regulations, and requirements of relevant agencies, in accordance with the principles of good corporate governance for listed companies 2017 (CG Code 2017) of the Securities and Exchange Commission (SEC), including good corporate governance principles according to the Corporate Governance Report of Thai Listed Companies (CGR) of the Thai Institute of Directors (IOD), ASEAN CG Scorecard, and best practices of the Stock Exchange of Thailand (SET).

Corporate Governance Policy

The Board of Directors realizes the importance of good corporate governance, therefore, establishes Good Corporate Governance Policy in written form as a guideline for the Board of Directors, executives and employees to practice fair, transparent, verifiable and efficient organizational management, as follow:

1. The Board of Directors strives to create more value for the Company in long term by supervising and operating carefully according to the capacity for the shareholders' benefit maximum while taking care to prevent conflicts by responsible for decisions and actions as the Board of Directors.
2. The Board of Directors will equally treat all the shareholders and stakeholders with fairness.

3. The Board of Directors operates with transparency and verification by disclosing accurate, complete, and timely information to all stakeholders.
4. The Board of Directors conducts business with regard to risks on a regular basis by implementing appropriate control and risk management.
5. The Board of Directors has established the code of conduct for directors, executives, and employees, whereby the Board of Directors must act as an example as well as a role model for executives and employees in accordance with the principles of the Company's corporate governance.
6. The Board of Directors is required to conduct an annual self-assessment on a regular basis to serve as a framework for reviewing the Board's performance.

Major changes and developments related to the review of policies, guidelines and corporate governance systems through the past year

In 2022, the Risk Management and Corporate Governance Committee reviewed the corporate governance policy and presented to the Board of Directors for approval to update the content to be up to date. The latest amendment to the Corporate Governance Policy was approved in June 2022, which updated the actual details of the sub-committees, emphasizing the roles and responsibilities of the Board of Directors of corporate governance of listed companies each aspect as a practical guideline for directors, executives and employees.

In addition, the Board of Directors has reviewed the charter of all sub-committees, namely the Executive Committee, Audit Committee, Nomination and Remuneration Committee, and the Risk Management and Corporate Governance Committee to align with corporate governance nowadays.

The Board of Directors, Executive and Employees have consistently followed the good corporate governance policy. In 2022, there was no situation where the implementation did not comply with the policy. From such determination, in 2022, the Company received awards and certifications for compliance with good corporate governance principles as follows:

1. The Thai Institute of Directors (IOD) announced the results of the 2022 the Corporate Governance Report

of Thai Listed Companies (CGR), with TTW receiving an "excellent" rating.

2. Ranked as "Thailand Sustainability Investment" (THSI) for the year 2022 in the securities sector worth 30,000 - 100,000 million Baht.
3. The Thai Investors Association has announced the results of the quality assessment of the 2022 Annual General Meeting of Shareholders, with TTW receiving a full score of 100.
4. Awarded ASEAN Asset Class PLCs from the ASEAN CG Scorecard 2021 project.

Board of Directors

- The Board of Directors is diverse (Board Diversity) with skills aligned with business strategies through the Board Skills Matrix Table, as well as diversity in education and experience without limiting any other differences.
- 12 directors without gender discrimination, consists of 2 women and 1 executive.
- 4 independent directors, representing 33.33% of all directors.
- To ensure effective checks and balances of power, the Chairman of the Board, the Chief Executive Office, and Managing Director shall be held by different individuals, and does not hold any position in the sub-committee.

Board of Directors' Performance

- Board of Directors meeting (excluding meetings of sub-committees), totaling 6 times.
- The Risk Management and Corporate Governance Committee is responsible for overseeing CSR/ Sustainability activities. Resolved to acknowledge the results of the Company's participation with stakeholders from the Risk Management and Corporate Governance Committee meeting, as well as reporting the results of violations of the Code of Conduct to the Board of Directors' meeting quarterly. In 2022, the Company did not receive any complaints from stakeholders and violate any code of conduct.

Nomination of the Board of Directors


The Nomination and Remuneration Committee considers the person to be appointed as a director, whether it is a representative of the shareholders, an Independent Director or a list of names proposed by shareholders

according to the Company's right provided to shareholders, to nominate a person as a director at the Annual General Meeting of Shareholders, including the Director Pool of the Thai Institute of Directors (IOD) propose to the Board of Directors for consideration in the event that the position of director is vacant due to reasons other than retiring by rotation, then propose at the shareholders' meeting in the event that the director completes his / her term by considering the following factors:

1. Gender diversity, age, knowledge, ability, experience and expertise in various fields as needed by using Director Qualifications and Skills Matrix for consideration in accordance with legal requirements, notifications of the SET and SEC, and the Company's Articles of Association which consistent with the strategic plan in accordance with the good corporate governance principles for the benefit of the Company's business development.
2. Work experiences that transparent, unblemished, moral, virtuous, responsible, maturity and professional.

The Board of Directors' skills

The Board of Directors has gender diversity, professions, and expertise necessary and beneficial to the Company's business operations and with appropriate checks and balances of directors with a variety of educational qualifications and expertise as follows:

Directors	Tap Water / Energy / Engineering Business 	Accounting / Finance / Economics / Business Administration 	Law / Political Science 	Strategy and Business Plan 	Corporate Governance / Internal Control / Risk Management 	Human Resource Development 
1. Dr. Thanong Bidaya	✓	✓	—	✓	✓	✓
2. Mr. Plew Trivisvavet	✓	✓	—	✓	✓	✓
3. Mr. Phongsarit Tantisuvanitchkul	✓	✓	—	✓	✓	✓
4. Mr. Phairuch Mekarporn	✓	✓	—	✓	✓	✓
5. Mr. Somnuk Chaidejsuriya	✓	—	✓	✓	✓	✓
6. Mr. Yuttana Yimgarund	✓	✓	—	✓	✓	✓
7. Dr. Sombat Kitjalaksana	✓	—	✓	✓	✓	✓
8. Mr. Suvich Pungchareon	✓	✓	—	✓	✓	✓
9. Mrs. Payao Marittanaporn	✓	—	✓	✓	✓	✓
10. Mr. Kaoru Umehara	✓	—	✓	✓	✓	✓
11. Mr. Hideo Matsumoto	✓	✓	—	✓	✓	✓
12. Ms. Walainut Trivisvavet	✓	✓	✓	✓	✓	✓
Total	12	8	5	12	12	12

Performance Assessment's the Board of Directors

The Company prescribes in the corporate governance policy and the good corporate governance principle that the Board of Directors has to perform annual self-assessment to ensure the efficiency of corporate governance. Hence, the board performance assessment is required to carry out at least once a year in order to consider the operational results and improve further. The assessment form is divided into 3 types, consisting of 1) self-assessment form for the entire board, 2) self-assessment form for sub-committees, and 3) self-assessment form for individual committees. At the Board of Directors meeting No. 5/2022 held on December 13, 2022 has resolved to acknowledge the assessment of the Board of Directors and Sub-Committees for the year 2022 as follows:



Entire Board - assessment
Avg. Evaluated Score **3.9** of 4

Sub-committee - assessment
Avg. Evaluated Score **3.8** of 4

Individual Committees - assessment
Avg. Evaluated Score **3.9** of 4

Management Guidelines

1. Organization Management Based on the Principles of Good Corporate Governance

The Company conducts business under good corporate governance principles continuously in accordance with sustainability. Therefore, the Board of Directors, executives, and employees adhere to comply with the law, rules and regulations related to business operations and good corporate governance are in line with the guidelines of the Stock Exchange of Thailand and the Office of the Securities and Exchange Commission.

2. Establish Policies, Codes of Conduct and Guidelines for Executives and Employees

The Board of Directors has established the Company's Code of Business Conduct and Ethics for directors, executives, and employees in order for those involved adhere to the guidelines with honesty to the Company, stakeholders, shareholders, investors, society, communities as well as government and people, it is clear and convenient for directors, executives, and employees to know the Company's expected business ethics guidelines.

3. Internal Control

The Board of Directors has appointed an Audit Committee to oversee the internal control system by organizing an internal audit division cooperates with independent external auditors to responsible for the developing and reviewing the efficiency and sufficiency of the internal control system, reporting to the Audit Committee and disclose the report in the 2022 Annual Report (Form 56-1 One report).

4. Risk Management and Corporate Governance

The Board of Directors has appointed the Risk Management and Corporate Governance Committee to oversee the compliance with the good corporate governance principles, social and environment responsibility and the company 's risk management by considering the severity impacts likelihood arising,

defining measures and responsible persons, including measures for report and evaluation by appoint Risk Management Officer to present the working plan and the performance to the Risk Management Committee, where the Internal Audit Department is responsible for presenting the performance to the Risk Management and Corporate Governance Committee for quarterly reporting to the Board of Directors.

5. Ensure Disclosure and Financial Integrity

The Company realizes the correct disclosure information in accordance with the requirements of the regulators. In addition, various disclosure channels are in place for all stakeholders to easily access information, cooperation between directors, executives and employees is provided to realize the importance of information disclosure and operational transparency.

6. Assessment, Validation, Awareness and Comprehension to Continually and Consistently

The Board of Directors has appointed the Risk Management and Corporate Governance Committee to supervise business operations in accordance with the good corporate governance principles and code of conduct, supporting and building to understand of these principles in order to lead the correct action, including responsible for receiving complaints and assessing the ethics of the executives and employees on a regular basis.

Ownership Requirements of Executives (Shareholding)

Directors and Executives' Securities Trading

The Company requires directors and executives to report the Company's trading securities in order to prevent accusations of using inside information in securities trading by requiring directors and executives are prohibited from buying or changing the Company's security for one month before the release of the financial statement or financial position and the status of the Company, including other important information to investors. In addition, directors and

executives are required to report their changes of interest to the Company and will be updated annually. Such information will be kept for internal use only in order to comply with Notification of the Capital Market Supervisory Board No. TorJor. 2/2552 Re: Reporting on Interests of Directors, Executives and Related Persons.

Guidelines

1. The Company will send a notice to the directors and executives, including their spouses and underage child, requesting to refrain from trading or changing in securities holding by reporting to the Risk Management and Corporate Governance Committee and the Board of Directors quarterly.
2. Employees with access to important information that may affect stock price should either refrain from trading Company's securities or wait for the public has received the information with the reasonable time to assess it in order to comply with the Company's internal information protection policy.
3. Directors and executives are required to report the Company Secretary when trading or changing in securities holding in order to submit the report to the supervisory authority within the time required by law, consisting of a report of securities holding (form 59-1) and report of change in securities holding (Form 59-2).
4. Directors and executives are required to report the Company every change of their interest and will be updated annually.

Code of Conduct

The Company has established the Corporate Governance and Code of Conduct Handbook as the guidelines for the Board of Directors executives and employees at all levels, a review was carried out to develop the Company's corporate governance principles serve the standards, which the working group reviewed and found that are appropriate for the current situation.

In addition, we have received opinions and recommendations from the Risk Management and

Corporate Governance Committee to establish the Company's good corporate governance in anti-corruption under the government policy that emphasizes reducing corruption problems in the country.

The Company provides training to educate both inside and outside the organization on compliance with good governance, emphasizing on creating awareness among employees from the start of their work. The Corporate Governance Manual and Code of Conduct Handbook has been prepared as a guideline for corporate governance practices, and the content is used as one of the topics for new employee orientation as well as the promotion of current personnel where communicate via e-mail and published on the Company's website in the Corporate Governance category: <https://www.ttwplc.com/storage/cg/cg/files/20210817-ttw-cg-code-of-ethics-en.pdf>

Code of Conduct Performance in Business Operations

In 2022, there was no violation of business ethics by reporting the results to the Board of Directors quarterly. In the event of a violation of the Code of Conduct in business operation, the Company has a process to correct repeated incidents as follows:

The process of monitoring compliance with the Good Corporate Governance and Code of Conduct Handbook

If there is a violation or non-compliance with the Good Corporate Governance and Code of Conduct Handbook, there is a process as follows.

1. Record reports of non-compliance with the Good Corporate Governance and Code of Conduct Handbook.
2. Propose to the executives of each department for consideration.
3. Implementation of the Company regulations.
4. Report the performance to the Risk Management and Corporate Governance Committee for further reporting to the Board of Directors.

Reporting non-compliance with the Code of Conduct

Directors, executives and employees are responsible to report practices that may violate the code of conduct. In the event of seeing or being pressured/forced to do any act that is against the code of conduct shall be reported to the supervisor, executives, Internal Audit Department or the Audit Committee, depending on the case. In addition, complaints can be reported through the Company's website at <https://www.ttwplc.com/en/cg/whistle-blowing>. The information will be passed directly to the Company Secretary and the Audit Committee or by email at cg@ttwplc.com

The Company has a policy to protect whistleblowers and related persons will receive appropriate and fair protection. The Company will keep the information confidential and will not disclose to unrelated people, unless disclosed in accordance with the requirements of the law.

The entire version of Good Corporate Governance Policy and Code of Conduct is disclosed at <https://www.ttwplc.com/storage/cg/cg/files/20200513-ttw-cg-code-of-ethics-en.pdf>

Anti-Corruption

The Company is committed to complying with anti-corruption laws in accordance with the Organic Act on Counter Corruption (No.3) B.E. 2558 (2015) with additional provisions of Section 123/5, which prescribe liability for persons bribe government officials, company personnel at all level, and the company group, this includes employees, representatives, affiliates or any person acting on behalf of the entity, regardless of whether there is authority or not, must follow the guidelines are as follows:

1. Compliance with anti-corruption policy, anti-bribery, code of conduct, including the rules and regulations of the company without being involved in any form of corruption, whether directly or indirectly.

2. Perform duties with transparency as well as preparing for the performance audit of the Company or the Company group or related agencies.
3. Do not act in any manner indicating the intention of corruption, giving or accepting bribes to persons involved in the Company group in which they are responsible, directly or indirectly, in order to obtain benefits to the organization, themselves, or related persons.
4. Do not ignore when witnessing acts of corruption involving the Company and its group companies, it is considered a duty to notify the supervisor or the person in charge and cooperate in investigating various facts.
5. Pay or give valuable items or services such as entertainment gifts, or tourisms for government officials, foreign government officials, or staff of international organizations, either directly or indirectly, in order for that person to act or refrain from doing anything, which is an illegal act which is extremely unreasonable, this include do not encourage or involve other people in doing so. In 2022, the Company has not encountered any corruption incidents.

Communications and activities to support anti-corruption

In 2022, the Company has continuously communicated and trained employees about the Anti-Corruption Policy and guidelines, including related policies. Publish articles and anti-corruption practices to employees at all levels, along with lecturing practices to new employees. In addition, there is pre-post test of the lecture; employees at all levels can access the Anti-Corruption Policy and other through the Company's intranet and website, including the bulletin board within the Company.

Anti-Corruption Measures

The Company has established guidelines for supervision to prevent and monitor risks from fraud and corruption as follows:

1. Provide verification process of the internal control system and risk management covering key work systems, such as procurement system, contract making, budget control system, accounting system, payment, etc. This is to prevent and monitor the risk of fraud and corruption as well as to provide suggestions on appropriate solutions.
2. Provide a channel for receiving information or complaints about violations of the law, code of conduct or guidelines to prevent involvement corruption in financial reports or internal control systems with a policy to protect whistleblowers and keep information confidential, including inspection measures and determining disciplinary penalties of the Company and/or related laws; in the event that a whistleblower or a complainant can be contacted, the Company will notify the result of the operation in writing.
3. Line leader responsible for monitoring operations, correction of errors (if any) and reporting to the authorized person accordingly.

Guidelines for monitoring and evaluating compliance with the prevention of involvement in corruption

1. Requiring executives and employees to self-assess their performance regarding compliance with the Good Corporate Governance Handbook and Code of Conduct, which includes the Good Corporate Governance Policy, guidelines for preventing involvement in corruption and code of conduct/behaviors of employees regularly.

2. Arrange for the Internal Audit Department to examine the internal control system, risk management, corporate governance, and continually feedback. Carry out the audit according to the annual audit plan with the approval of the Audit Committee and report significant results including recommendations to the Audit Committee.
3. The Internal Audit Department is responsible for continually assessing fraud and corruption risks in order to effectively implement anti-corruption measures as well as following up, reviewing and improving measures regularly. The evaluation results will be presented to the Risk Management Committee and the Board of Directors respectively.
4. If the facts are investigated, it is found that information from the audit has reasonable evidence to believe that there is a transaction or action that affects the financial position, significant performance, including a violation of the law, code of conduct or anti-corruption guidelines, or doubts about financial reports or internal control systems; the Audit Committee will report to the Board of Directors for improvement within a reasonable period of time.

The Company has provided communication of guidelines to prevent involvement in corruption, disseminated via various channels, such as intranet and company website for all executives and employees to accept and comply with.

Whistleblowing measures


The Company has measures for complaints and whistleblowing which are published in the Corporate Governance Principles manual and the Company's website with review to ensure complete efficiency. It also examines the performance of directors, executives and employees of the Company and its subsidiaries to be in compliance with the laws, rules and regulations of corporate governance, code of conduct, without any action implying corruption.


Whistleblowing channel

The Board of Directors provides whistleblowing measures for unethical acts or behaviors that imply corruption of individuals in the organization, both employees and other stakeholders, this includes inaccurate financial reports or flawed internal control systems. In addition, there is a mechanism to protect employees and whistleblowers by creating a confidential database accessible only to those involved, this enables stakeholders to participate in effective monitoring of the Company's interests. Matters that can be whistleblowers are as follows:

- Illegal practices in accordance with relevant laws or regulations, including business ethics.
- Fraud and Corruption.
- Suspicious activities related to money laundering, accounting, finance, including control and auditing.


In the event that there is a complaint of wrongdoing, an Investigation Committee will be appointed, which is representative from a department without interest in the matter to consider, investigate and take action in accordance with the regulations. Whistleblowers can report clues to the Audit Committee, the Board of Directors and the Corporate Governance Department through the following 2 channels:





Email :

cg@ttwplc.com



Post: By specifying the envelope to the whistleblower followed by the address as follows:

Office of Managing Director
TTW Public Company Limited,
30/130 Moo 12 Buddha Monthon
Sai 5 Road, Raikhing, Sampran, Nakhon Pathom
Province 73210

Protection of whistleblowers and related persons

Whistleblowers who report violations or non-compliance with the law will receive appropriate and fair protection from the Company, such as no change in position, job description, suspension, intimidation, interference, termination of employment, or any other unfair act. The Company will keep confidential and not disclose to non-related persons unless required by law. The person concerned who is aware of the matter or information related to the complaint must keep the information confidential and not disclose to others unless it is required by law. If there is a willful violation of the disclosure information, the Company will take punitive action in accordance with the Company's Articles of Association and/or take legal action, depending on the case.

Actions taken when a complaint is received

1. An independent director will appoint a working group to collect complaints.
2. The assigned working group will consider the information to propose appropriate procedures and management methods.
3. The assigned working group presents measures for violations or non-compliance with the Code of Conduct to the Board of Directors for consideration, taking into account all overall damages.
4. The Chairman of the Audit Committee or Independent Director, the Company Secretary shall report to the Board of Directors and report the results to the complainant, in case of anonymity.

In 2022, there were no complaints from stakeholders.

Personal Data Protection

The Company recognizes the importance and obligations under the Personal Data Protection Act B.E.2562 (2019) by placing importance on respecting the privacy rights and protecting the personal data of employees and stakeholders to ensure the security.

At the Board of Directors' meeting No 3/2022 held on June 9, 2022 resolved to approve the appointment of Data Protection Officer (DPO) to deal with related matters and publish the Personal Data Protection Policy on the Company's website, communicate with employees about law enforcement through channels and activities, such as disseminating information via electronic mail, internal communication on CG Corner, bulletin board and training, etc. The Personal Data Protection Policy as disclosed on the website <https://www.ttwplc.com/storage/about/policy/ttw-pdpa-policy-en.pdf>.

In 2022, there were no complaints about personal data breaches of stakeholders.

Information Management and Information Technology Systems (IT Security)

Information Security Policy and Information Technology System (IT Security Policy)

1. The Board of Directors and executives are responsible for overseeing the Information Technology System Security Policy by assigning relevant departments to prepare the IT security operation manual and sign the approval to be used between IT departments and internal business entities in order to achieve business goals. The Information Technology System Security Policy (IT Security Policy) covers the following:



2. The Company has assessed the effectiveness of the IT Security Policy with an internal and external audit of ISO 9001:2015 at least once a year to improve the security flaws of the company's information technology system.
3. The Company has used outsourcing information technology service providers with a policy to support the use of service, by appointing a committee to select and consider the qualifications of service providers, there are requirements for using the service by making agreements to reduce the risk of improper access to information assets, including provisions on information confidentiality and non-disclosure of confidential information.

3. The Down Time Reduction

The number of down time and recovery time by defining the indicators as follows:

- The number of down time is less than or equal to once a month.
- Network recovery time within 48 hours.

Major changes and developments in information management and information technology systems through the past year

In 2022, large computing systems (clouds) are being used by changing mail and application of the organization to the Microsoft 365 (MS 365) system; it is convenient and flexible for users to work outside the office during the COVID-19 pandemic, as well as enabling meeting via the MS Team system.

Performance Goals for year 2022

1. The Service Efficiency

The number of repairs can be made not less than 90% of the monthly repair notice.

2. The Preventive Maintenance: PM

- 2.1 PM with Amata City Industrial Estate, Chonburi and Rayong two months per time.
- 2.2 PM with other business areas once a month.

Work Process Development

1. Improved server and storage, which can reduced backup time and improves performance both speed and storage space.
2. Improve the internal and external networks of the water treatment plant to be faster and cover more areas, and choose an internet system that is suitable for both cost and efficiency in order to reduce monthly expenses.

Training Course

1. Training courses for information and technology responsible person.
 - 1.1 Firewall Fortinet Usage Course.
 - 1.2 MS 365 System Management Course.
 - 1.3 Cyber Defense Course.
2. Training courses for employees and executives
 - 2.1 MS 365 Basic Courses.
 - 2.2 Power point presentation courses.

Measures to Prevent Disruption of Information Technology Systems and Cyber Security

1. Regularly improve the vulnerability of the information technology system of the security program.
2. Follow news and preventive measures to keep up with the situation.

Information Risk Management and Information Technology Systems

The Company's information technology risk management includes Preventive Maintenance (PM) such as Fire Wall, Antivirus Program, and Policy formulation of access to significant information. As for the Corrective Maintenance, there is a Backup Solution for data recovery as well as insurance for critical equipment that can be replaced within 24 hours.

Performance in 2022

Goals	Key Performance Indicators	2021	2022	Result
The Service Efficiency	The number of repairs can be made not less than 90% of the monthly repair notice.	100%	100%	Achieved the Goal
The Preventive Maintenance: PM	• PM to Amata City Industrial Estate, Chonburi and Rayong two months per time.	1 Time / 2 Months	1 Time / 2 Months	Achieved the Goal
	• PM to other business areas once a month.	1 Time / Month	1 Time / Month	Achieved the Goal
The Down Time Reduction	The number of down time and recovery time by defining the indicators as follows:	Less than or equal to 1 Time / Month Within	Less than or equal to 1 Time / Month Within	Achieved the Goal
	• The number of down time is less than or equal to once a month. • Network recovery time within 48 hours less than or equal to once a month.	Within 12 Hours / Time	Within 12 Hours / Time	Achieved the Goal

Risk Management and Business Continuity

The Company continually recognizes the organization's risk management, regards risk management as an essential component of every business process. The circumstance change and uncertainty caused by many internal and external factors affecting the organization makes it challenging to achieve business goals. Due to recent unforeseen crises, including natural disasters, affecting business ability and causing major disruptions in production processes. The Company has a business risk management in order to reduce all levels of risk to be manageable as well as drive various operations to achieve success and measure the results as specified. The Company has established the risk management policy which disclosed on the website <https://www.ttwplc.com/storage/about/policy/policy-risk-en.pdf>.

Operating Guideline

1. The Risk Management Officer is derived from all relevant departments of the Company to systematically control and limit the risk exposure activities to an acceptable level in accordance with the risk management policy, covering all risks that may affect the achievement of the Company's objectives, which must be identified and assessed in a timely manner, both in terms of opportunity and impact, as well as monitoring risk management continually.
2. Give recommendations to the Risk Management and Corporate Governance Committee on the suitability and sufficiency of the Company's risk management system, as well as to develop a more efficient risk management system.
3. Continuously campaign for all employees to understand and realize the importance of risk management.

4. Report the performance of the implementation risk management policy of control activities, including recommendations to the Risk Management and Corporate Governance Committee quarterly and report to the Board of Directors.

Risk Management

Throughout the period of operation, the Company has applied the risk management framework within the organization by applying the international standard COSO ERM 2017 as management guidelines, with objective is to prevent and mitigate the risks that may cause the organization fail to achieve the objectives, to increase stakeholder's confidence that the Company able to operate business under the currently rapid change, in conditions by the Board of Directors, executives, employees, and joint ventures company are involved in a standardized risk management system as well as the strategic planning process, along with environmental stewardship and social responsibility, is carried out by the Risk Management and Corporate Governance Committee in order to achieve goals according to the risk management structure.

Risk Management Structure

The Company has appointed a Risk Management Officer (RMO) from all departments, who must propose measures to mitigate risks affecting the operating performance, formulate a plan and report on the risk management performance quarterly to the RMO and summarize performance report to the Risk Management and Corporate Governance Committee (RM&CGC) , then submit to the Board of Directors on a quarterly basis and/or in the event of a rapidly changing political, economic, social and environmental situation related to natural disasters.

The Company is constantly reviewing its risks to keep up with current events. If the Company is always prepared, it will be able to adjust strategies or operational plans in a timely manner, able to correct or mitigate the severity of the impact in various fields and regard it as an opportunity to turn the crisis into an opportunity.

The Company has defined the risk management structure in the 2022 Annual Report (Form 56-1 One report) with the “Risk Management and Corporate Governance Committee” with 5 members, comprising: 2 independent directors, 2 non-executive directors, 1 executive director. There is Managing Director as the chairman, responsible for determining the structure and

responsible person, consider and approve policies, strategies, risk management frameworks and risk management plans, as well as to review and monitor risks throughout the organization.

Major changes and developments in reviewing policies, practices and risk management through the past year

In 2022, a review of the corporate risk register was conducted to consider the changing environmental factors and the impact on the Company’s operations, which defined the risk factors and risk control implemented, as well as risk management measures. The Company has established a risk management process in 3 states as follows:



The Company has a process for determining various risk factors involved, analyzing the impacts and opportunities that will occur, including determining the acceptable level of risk and determining the risk management at the enterprise level, as well as regularly assessing and monitoring risk management measures. In 2022, it was found that the risk can be managed to an acceptable level.

The Company has implemented corporate risk management in accordance with the risk management framework and strategies to ensure that the risk level is within the acceptable level by establishing the “Corporate Risk Register” consisting of a list of risks as well as establishing risk control measures, management, follow-up, and the implementation of risk management according to the plan that has been established on an ongoing basis. Details are as follows:

Economic Risk

Risk Issues	Risk Mitigation Measures
Strategic Risk Strategic risks are affecting the Company's operational strategy, which may cause damage to the management of the organization due to the Company's tap water contracts with the PWA, relying on PWA policies, as well as limited opportunities for business expansion in the current business area.	
<ul style="list-style-type: none"> The distribution of tap water is not in accordance with the target 	<ul style="list-style-type: none"> The Company has measures in place to support the pressurized pipe laying project and/or expand its scope to increase sales of PWA's tap water in the service area according to the contract. This includes monitor the movements of other tap water producers, both government and private sectors, that may affect the Company's current and future tap water distribution volumes. Carry out the management to supervise the machinery, main equipment and electrical system, as well as to determine the solution and preventive measures for continuity in the production and distribution of tap water.
Operational Risk Operational risks arise from the Company's operations, including natural disasters beyond its control. At present, climate change has a high probability of becoming more severe and the impact from such changes affects the quality of raw water used in the production process.	
<ul style="list-style-type: none"> Change of raw water quality 	<ul style="list-style-type: none"> The Company has set up an appropriate surveillance and monitoring plan for raw water quality, including random water sampling for water quality analysis, adjusting the water production plan to keep up with changes in raw water quality, and coordinating and exchanging information from relevant agencies. namely Royal Irrigation Department, Metropolitan Waterworks Authority, Provincial Waterworks Authority, and Environment and Pollution Control Office 5.
Financial Risk Financial risk is the risk associated with management or the potential impact of an external financial situation. This may affect the income and expenses of the Company, including the contract granting the right to produce and sell tap water between the PWA and Pathum Thani Water Company Limited (subsidiary) will expire in October 2023, which is the proportion of revenue of about 30% of the Company. The Company has therefore sought new businesses in water, energy and environment to compensate for lost revenue.	
<ul style="list-style-type: none"> Expanding new businesses in water, energy and environment 	<ul style="list-style-type: none"> The Company follows up on news and movements in business related to the Company both domestically and internationally, including changes in government laws. Study and develop investment projects in utility businesses according to the government's policies and investment plans and seek allies.

In addition, the Company has control and monitoring of social and environmental risks at the department level, including emerging risk, by establishing the following measures:

Social and Environmental Risk

Risk Issues	Risk Mitigation Measures
Personal Risk	
<ul style="list-style-type: none"> • HR management to support the Company's business expansion. • Risk of human rights violation. 	<ul style="list-style-type: none"> • Develop knowledge and compensation plans for high-potential employees to be different from general employees. • Comply with safety, occupational health and working environment laws for employees and contractors. • Establish the personal data protection policy as the operating guidelines for employees and stakeholders. • Evaluate ESG with key business partners. • Communicate to customers and communities before maintenance is closed and resume operations. • Mechanism complaints receiving from customers and guarantee damage from the Company's operations.
Communities Risks	
<ul style="list-style-type: none"> • Complaints from communities affected by the Company's business operations. 	<ul style="list-style-type: none"> • Communities visit for listening to suggestions and needs. • Establish a social responsibility project with the community.
Environmental Risks	
<ul style="list-style-type: none"> • Raw water in the Tha Chin and Chao Phraya rivers is of low quality and insufficient quantity. • Chlorine leaks in the process of chlorine transportation or dosing, resulting to workers and nearby communities inhalation hazards. • Sludge from the tap water production process affect the community and environment. 	<ul style="list-style-type: none"> • Protect and maintain raw water sources with relevant government and private agencies. • Wastewater is brought in to the new tap water producing process. • Control the transportation and distribution of chlorine in accordance with safety measures and required laws. • Dispose of waste according to the regulations of the Department of Industrial Works. • The product obtained from the waste research (Sludge) are taken advantage to the society.

Emerging risks

Risk Issues	Risk Mitigation Measures
Information Technology Risk	
<ul style="list-style-type: none"> • Information Technology Security Network Risk • Information system and database risks • Physical and environmental risks • Personnel risk 	<ul style="list-style-type: none"> • Firewall & IPS Policy. • Emergency response plan from information technology disasters in case of hacking and computer threats. • Policy Network Access Control. • Check the availability of uninterruptible power supplies and generators. • Provide redundant systems to enable information systems to work. • Disseminate information to create awareness about information security to personnel of the agency. • Strictly supervise the implementation of information security guidelines. • Define security device policies and regularly monitor system operation and open ports as necessary.

Risk Issues	Risk Mitigation Measures
Risks of Climate Change	
<ul style="list-style-type: none"> The flood or drought in the service area affected the production and distribution of tap water below the specified target. The problem of saltwater encroachment on freshwater lasts longer. The Greenhouse Gas TAX Act from emission Greenhouse Gas (Carbon Tax) , which affects to increasing in production tap water cost in the future. 	<ul style="list-style-type: none"> Monitoring news and coordinate with the relevant departments closely such as Department of Water Resources, the Environment and Pollution Control Office 5, MWA, PWA, Local environmental departments. Monitor the Greenhouse Gas TAX Act from emission Greenhouse Gas (Carbon Tax), on the issues related to or affecting the Company's business operations. Develop the Company's future cost management plan. Established the "Greenhouse Gas Emission Assessment from the Business Process Project" for plan to reduce GHG emission from the business process.

Risk Management System Communication

The Company regularly communicates understanding of the risk management system to all employees from the orientation of new employees, communication via electronic mail, employees and executives meetings, as well as defining risk as one of the issues that all departments have to consider during the annual planning to ensure that employees at all levels receive thorough risk management information.

Training

The Company provides internal training course for employees at all levels as appropriate and in line with the current situation. Therefore, the Company allocates the budget for a risk management training course in the annual work plan and sends employees to outside training for continuous development potential.

For the year 2022, the Company has organized risk training for executives and employees to create understanding of corporate risk management with the following courses:

1. COSO ERM 2017 Risk Management Framework Course.
2. Training course and practicing to suppress chlorine leak with KIT-B device, maintenance of chlorine

system and use of SCBA breathing apparatus.

3. Crane operator duty course, giving signals to crane operators, holding materials or crane operators.
4. Safety courses for working with electricity and helping people who suffer from electrical hazards.
5. Basic firefighting training courses and fire drills and fire evacuation drills.

Building Corporate Culture

The Company instills its employees with a sense of the risk and mitigation in activities of their own responsibility to ensure that the Company's business operations have sustainable growth based on management efficiency. Therefore, the Company aims to promote the organizational culture of risk management through risk governance guidelines, risk management structure, risk communication, and disseminating knowledge on risk management to employees at all levels appropriately and continuously. The Company has fostered a risk culture throughout the organization as follows:

- **Executive level:** It is responsible for advising on risk management practices throughout the organization and supporting the operations of the Risk Management and Corporate Governance Committee in accordance with the risk management policies and manuals.

- **Operational level:** It is responsible for following the risk management policies and manuals established by the Company until it becomes a habit and the corporate culture.

Risk Information Report to the Board of Directors

The Board of Directors has established the risk management policy by continually developing and reviewing the Company's risk management for efficiency, including ensuring continuous cooperation in risk management toward employees at all levels.

At the Board of Directors' meetings, the risk management and monitoring process is reported by the Risk Management and Corporate Governance Committee, which is held quarterly before the Board of Directors' meeting.

In 2022, the Company held 5 meetings of the risk management team to report the results of the risk management plan as well as the forecast of potential risk situations to the Risk Management and Corporate Governance Committee for acknowledgment 4 times, presented to the Board of Directors' meeting for acknowledgment on such matter quarterly.

Business Continuity

The Company realizes the importance of the business continuity in order to not affect the organization and the stakeholders. Therefore, the Company has a


risk management policy by establishing a business continuity plan to ensure that when an unexpected event occurs, the Company able recover its business quickly and minimizes any impact. The Company establishes "Incident Management Manual" with the objectives to effectively returning operations to normal conditions under the control and responsibility according to the incident management structure with fast process and appropriate to the situation. The severity is divided into four levels are as follows:

1. Informative situation
2. General unusual situation
3. Severely emergency situation
4. Crisis Situation

This Management Manual describes in detail the practice and control of the various situation, it will show the steps that employees must carry out when an incident occurs by focusing on the prevention of death, damage as well as control the overall situation. In 2022, the epidemic of COVID-19 is severe and continually mutating, the Company was affected by the incident but the business was able to proceed normally without affecting the stakeholders.

The Company analyzes the risks from the main activities of the tap water production process that may affect the organization and stakeholders as shown in the table below:

Risks from the Main Activities of the Tap Water Production Process

Main Activity	Risk Issues	Risk Mitigation Measures
Raw Water Pumping 	<ul style="list-style-type: none"> • Heat from the sun, fall into the water, and machine and equipment hazards. • Broken machine, and broken pipe or burst pipe. • Using electricity, lubricant, and sound machine. 	<ul style="list-style-type: none"> • Training, educating and wearing personal protective equipment (PPE). • Preventive Maintenance (PM) according to the plan. • Install a sound shield.

Main Activity	Risk Issues	Risk Mitigation Measures
Flash Mixing 	<ul style="list-style-type: none"> Chemical exposure, heat from the sun, fall into the water, and injury from handling of packaging. Chemical spills contaminate water and damage the machines. The use of electricity and chemicals affects the environment. 	<ul style="list-style-type: none"> Training, educating and wearing personal protective equipment (PPE). Preventive Maintenance (PM) according to the plan.
Sedimentation 	<ul style="list-style-type: none"> Heat from the sun, fall into the water, and injuries from ropes or slings. Broken machine. Liquid sludge affects the environment. 	<ul style="list-style-type: none"> Training, educating and wearing personal protective equipment (PPE). Preventive Maintenance (PM) according to the plan. Establish a manual handling waste or unused material.
Filtration 	<ul style="list-style-type: none"> Heat from the sun, fall into the water, and injury from a pinched or pushed sluice. Broken of machine, filter equipment, and sand. Sound from the water gate opens - closes. 	<ul style="list-style-type: none"> Training, educating and wearing personal protective equipment (PPE). Preventive Maintenance (PM) according to the plan.
Chlorine Mixture 	<ul style="list-style-type: none"> Chemical exposure, machine or equipment injury, and injury from handling of packaging. Broken chlorine dosing system equipment. Gases formed by chlorine. 	<ul style="list-style-type: none"> Training, educating and wearing personal protective equipment (PPE). Preventive Maintenance (PM) according to the plan. Self Contained Breathing Apparatus : SCBA Install a Chlorine Scrubber.
Waste Management 	<ul style="list-style-type: none"> Waste management and crash trucks. Broken sludge dewatering machine. Using electricity, chemicals for sludge removal, and fuel from trucks. 	<ul style="list-style-type: none"> Preventive Maintenance (PM) according to the plan. Establish a manual handling waste or unused material.
Transfer and Metering Pump 	<ul style="list-style-type: none"> The effects of noise and injury from machinery. Broken of transfer and metering pump, broken pipe, and burst pipe. Using electricity from machine. 	<ul style="list-style-type: none"> Training, educating and wearing personal protective equipment (PPE). Preventive Maintenance (PM) according to the plan.

Crisis Management from the COVID-19 Situation

The Company has considered “Crisis Management from the COVID-19 Situation” is the Company’s sustainability issue for the third year in a row. Since the COVID-19 epidemic has not resolved, the Company is affected by the situation, but the business able to operate normally without affecting stakeholders. The Company has established measures to prevent the spread of COVID-19 within the organization included budget allocation, Protective equipment. In addition, the Company is involved in preventing the spread of COVID-19 for stakeholders, government agencies, and hospitals affected by such situations in order to effectively prevent and control the spread of

COVID-19, which is considered sharing with society in a crisis.

Board of Directors’ Roles

Crisis management from the COVID-19 situation within the organization starts with the executives jointly assessing the potential risk situation from the COVID-19, then formulating Business Continuity Plan (BCP) to enable the business operation continuously, where the Risk Management Officer held the meeting to analyze and report to the Risk Management and Corporate Governance Committee and submit to the Board of Directors for further recommendations and improves the operational plan to be appropriate according to the circumstance change.



Epidemic Management the COVID-19

Year 2022, the Coronavirus Disease 2019 (COVID-19) continues to spread, the Company is concerned about the health of employees, therefore, there are preventive measures in the workplace, such as testing for the Coronavirus 2019 for employees by the Antigen Test Kit (ATK), temperature checks before entering work, social

distancing in the workplace, wear masks at all times within the office. The Company has provided sufficient alcohol gel and masks to employees. Disinfectants are sprayed around the workplace and the tap water plant to ensure that employees are safe from the spread of COVID-19.

Supply Chain Management

Supply chain management is one of the key strategies for operating a sustainable business in order to be efficient in providing quality, timely, and economically cost-effective products or services both the budget and the using of operating resources of the company, with partner risk management and strategic purchasing and green procurement under the principle of operating with good governance principles, anti-corruption, labor care, safety, social responsibility and environmental stewardship.

Operating policy

1

The Procurement must be performed with honesty, fairness, and verifiable in order to management of supplier screening and auditing to be accurate, transparent in accordance with the good corporate governance principles, by operating with the relevant laws in screening business partners to carry out activities with the organization.



2

Procurement of goods and services must comply with the Company's Quality, Environment, Occupational Health, and Safety Policy.

3

Procurement has clear rules and procedures in accordance with the laws and regulations of society.

4

Procurement of the supplies is done in the best interest of the TTW's Company Group.

5

Supporting Green Procurement of products and services.

6

Strengthen and maintain relationships with business partners and stakeholders for the Company's business development.

Supplier Code of Conduct

The Company has established the Supplier Code of Conduct (SCOC) adheres to environmental, social and governance principles (ESG) which disclosed on the website <https://www.ttwplc.com/storage/about/policy/20220124-ttw-supplier-coc-en.pdf>, in order to conduct business in a sustainable manner and to formulate anti-corruption policy for conducting business together with fairness under the principles of good governance. The business partner code of conduct divided in to five categories are as follows:



Supply Chain Management Strategy



Performance Goals for year 2022



Receiving goods on time as agreed with the buyer and seller or by the date specified in the purchase order, not less than

90%

Control the amount of chemical reserve (Liquid alum)

The Bang Len Water Treatment Plant

Maximum volume control (Max)

633.60k Kilogram

Minimum volume control (Min)

264k Kilogram

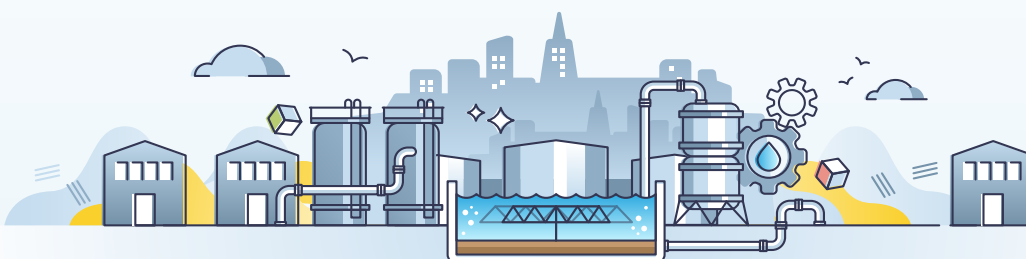
The Pathum Thani Water Treatment Plan

Maximum volume control (Max)

580.80k Kilogram

Minimum volume control (Min)

396k Kilogram

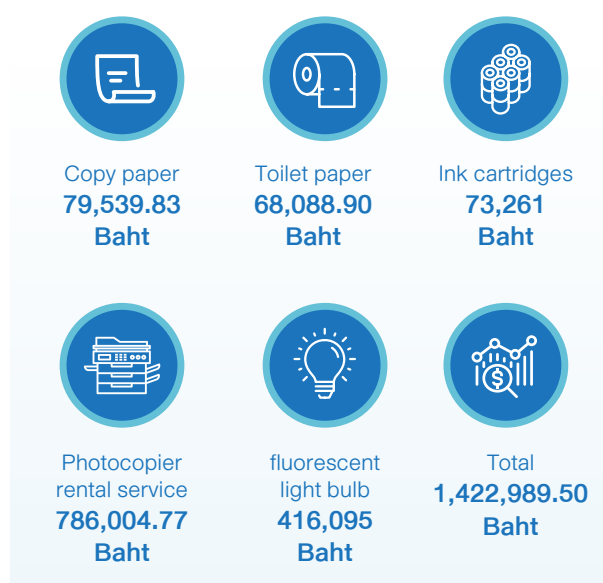


Major changes and developments in policy reviews and supply chain management through the past year

In 2022, the Company will continue to focus on jointly supporting environmentally friendly procurement and joint procurement of products and services among its group companies to maximize the benefits of business operations, including managing the risks of business partners under the principle of good governance, anti-corruption, fair employment, occupational health and safety, social responsibility, and environmental stewardship.

Green Procurement

In 2022, the Company has conducted strategic procurement of business operations and procurement in accordance with the criteria for environmentally friendly products and services of the Pollution Control Department, such as procurement of raw materials, products, services, transportation that meet the criteria for products and services, which can be summarized as a procurement that is environmentally friendly as follows:



Business Partners Risk Management The Process of Analyzing the Risks of the Supply Chain

1. Analyze key business partners

The Company defines three criteria for the analysis of key business partners are as follows:

- Business partner with a high contract volume (Classified by business partners group).
- Business partners selling raw materials, products and services those are important to the Company's business processes and contact directly.
- They are the few partners in the market

2. Risk Assessment

The Company assesses its sustainability risks for all business partners in a range of critical, high, medium, and low-level risks.

- Identify the economic impact
- Identify the environmental impact
- Identify the social impact

3. Risk mitigation measures

The Company defines three aspects of risk mitigation with business partners are as below:

Risks	Probability of Occurrence	Level	Risk Mitigation Measures	2020	2021	2022
1. Economy						
1.1 The business partner is the only manufacturer and agent in Thailand.	Low	High	• Establish a contract purchase agreement and guaranteed delay.	Acceptable	Acceptable	Acceptable
1.2 The product delivery is not as expected.	Low	High		Acceptable	Acceptable	Acceptable
2. Social and Human Right						
2.1 Business partners engage in child labor or illegal labor.	Low	High	• Employment criteria must not be employed by child labor under the age of 15 years and must not employ all forms of forced or unwilling labor.	Acceptable	Acceptable	Acceptable

Risks	Probability of Occurrence	Level	Risk Mitigation Measures	2020	2021	2022
2.2 Occupational health and safety of partners.	Low	High	<ul style="list-style-type: none"> The business partners working conditions must clearly define working hours, compensation, and termination. The business partners are required to comply with local laws and company regulations to handle emergencies. The business partners are required to provide protection of health, occupational health, and safety as well as adequate and appropriate personal protection for employees. Employees able to propose work safety issues that are not considered contrary to discipline. 	Acceptable	Acceptable	Acceptable
3. Environment						
Management of toxic transportation and waste disposal.	Low	High	<ul style="list-style-type: none"> Specify the environmental criteria of the business partners/ contractors. Verify the license of the Contractor / Business Partners. Review the employment contract with concise and secure adequate standards. 	Acceptable	Acceptable	Acceptable

The Company has established a supply chain management strategy that emphasizes the efficient use of resources, the production of health and environment friendly products including emphasizes on communicating sustainable social responsibility in all dimensions, including economic, social, and environmental aspects to business partners in the supply chain, as well as promotes green procurement in addition to quality, price and on-time delivery in accordance with general procurement rules to create mutual value for consumers and society as a leader in the private sector in domestic tap water production.

Business Partners Sustainability Risk Management

“Sustainability high-risk business partners” mean the significant business partners are fail to comply with the sustainable practices within the framework, rules, regulations, occupational health and safety of employees as well as social responsibility and environmental stewardship through the supervision of TTW group business partners, consisting of the following:

1. Quality standards mean the delivery of products and services in accordance with the requirements and responsibility for the quality of the products supplied to the TTW Group.
2. Providing supported products or services in case of urgent orders and cooperation with the TTW Group.
3. Comply with relevant legal requirements, such as having the necessary licenses to perform the job legally.
4. Business partners or contractors shall comply with appropriate and safe standards for both business partners and others, including having preventive measures in the management system and continually monitoring work reports when non-standard incidents occur with employees and contractors.
5. Having a code of conduct in conducting business with transparency and maintaining a high standard of integrity with contract parties.
6. Comply with the supplier code of conduct (SCOC); adhere to the principles of social, environmental and good corporate governance.

Business Partners Sustainability Risk Assessment

Type of Business Partners	ESG Audit in 2022	Proportion of ESG assessed business partners compared to the total number each category (%)
General Business Partners	7 Partners	0.47%
Significant Business Partners	8 Partners	0.53%
Total	15 Partners	1 %

Proportion of Sustainability High-Risk Business Partners

Type of Business Partners	Number of sustainability high-risk	Proportion of sustainability high-risk business partners compared to the total number each category (%)
General Business Partners	0 Partners	0%
Significant Business Partners	0 Partners	0%
Total	0 Partners	0%

Criteria for selecting business partners with sustainability audits in the workplace

The Company determines criteria for selecting business partners who have audited sustainability in the workplace (On-site ESG Audit) as follows:

1. Business partner companies have established goals or risk management policies that may affect the organization.
2. Business partner companies have an environmental management system supported by standards, such as ISO 14001: 2015
3. Business partner companies have properly defined waste management and disposal practices.
4. Business partner companies have established environmental policies covering business groups.
5. Business partner companies have safety and occupational health management, including the risk of accidents or involvement in causing accidents.
6. Business partner companies have risk management policies, follow up results, and improve risk management.
7. Business partner companies allocate funds for community-related projects.
8. Business partner companies have a policy against child labor and follow up.

9. Business partner companies communicate risk management systems to employees, such as electronic communication and staff meetings, etc.
10. Business partner companies disclose environmental reports by stretching them into corporate goals, such as environmental indicators.

Business Partners Visit

The Company has organized visit to business partners in the workplace to promote the development and improvement of work processes, including products and services to create confidence and good relationships in business cooperation among TTW and business partners. In 2022, the Company visited 15 business partners as follows:

No.	Business Partners	Nature of Business	Type of business partners		Objectives	
			General	Significant	On-site visit	ESG Audit
1	Performance Industrial Services Co., Ltd.	Pump and motor repair service		✓	✓	✓
2	Marshal Fluid Co.,Ltd.	Pump and motor repair service	✓		✓	✓
3	Sunco Engineering Co., Ltd.	Pump and motor repair service	✓		✓	✓
4	Hydro X Co., Ltd.	Distributor of chemicals	✓		✓	✓
5	C.S.T. Motor Service Co., Ltd.	Pump and motor repair service	✓		✓	✓
6	RSPM Pump and Motor Service Co., Ltd.	Pump and motor repair service	✓		✓	✓
7	Golden Lime Public Co., Ltd.	Produce and Distributor of chemical		✓	✓	✓
8	Mahachai Chemical Co., Ltd.	Produce and Distributor of chemical		✓	✓	✓
9	Namchai Industry Co., Ltd.	Produce and Distributor of chemical	✓		✓	✓
10	Siam Chemicals Pub Co., Ltd.	Produce and Distributor of chemical		✓	✓	✓

No.	Business Partners	Nature of Business	Type of business partners		Objectives	
			General	Significant	On-site visit	ESG Audit
11	Paradise Service Center Co., Ltd.	Produce and Distributor of chemical		✓	✓	✓
12	Max Motor Service Center Co., Ltd.	Pump and motor repair service		✓	✓	✓
13	Kaowna Electric and Business Co., Ltd.	Pump and motor repair service		✓	✓	✓
14	Well Engineering Service Co., Ltd.	Pump and motor repair service	✓		✓	✓
15	Herricane Corporation (Thailand) Co., Ltd.	Distributor of chemicals		✓	✓	✓



Business Partners Training

In 2022, the Company and business partners jointly organized training and refresher skills for company staff by organizing 4 related training courses as follows:

1. Training course and practicing to suppress chlorine leak with KIT-B device, maintenance of chlorine system and use of SCBA breathing apparatus from Thai Asahi Chemicals Co., Ltd. on May 24 and 27, 2022, with 28 participants.
2. Energy Conservation Course: energy management system from Sirawit (1994) Co., Ltd. on August 9, 2022, with 30 participants.
3. Energy Conservation Course: internal energy management auditor from Sirawit (1994) Co., Ltd. on September 23, 2022, with 30 participants.
4. Basic of Mechanical Seal course from Marshal Fluid Co., Ltd. on December 22, 2022, with 28 participants.



Performance in 2022

Goals	Key Performance Indicators (KPI)	2022	Result
Receiving goods on time as agreed with the buyer and seller or by the date specified in the purchase order	Not less than 90%	95%	Achieved the Goal
Control the amount of liquid alum reserve (Chemical) to be in the (Max) and (Min) as specified The Banglen Water Treatment Plant <ul style="list-style-type: none"> • Maximum volume control (Max) • Minimum volume control (Min) 	633.60k Kilogram 264k Kilogram	633k Kilogram 344k Kilogram	Achieved the Goal Achieved the Goal
The Pathum Thani Water Treatment Plan <ul style="list-style-type: none"> • Maximum volume control (Max) • Minimum volume control (Min) 	580.80k Kilogram 396k Kilogram	580k Kilogram 440k Kilogram	Achieved the Goal Achieved the Goal

Other Performance in 2022

Other Performance	2019	2020	2021	2022	Results compared to 2021
Cost of purchasing chemicals	100,412,916.40 Baht	102,589,855 Baht	82,729,530 Baht	95,202,743 Baht	Increased 15.07%
Business partners assessment in ESG	15 Partners	20 Partners	21 Partners	15 Partners	Decreased 28.57%
Disputes between the Company and subsidiaries, business partners, or partners of contract	0 Time	0 Time	0 Time	0 Time	Invariable 100%

Business Partners Information

Business Partners List	2019	2020	2021	2022	Results compared to 2021
All Business Partners	1,036 Partners	1,125 Partners	1,166 Partners	1,227 Partners	Increased 5.23%
General Business Partners	774 Partners	954 Partners	974 Partners	1,024 Partners	Increased 5.13%
Significant Business Partners	262 Partners	171 Partners	192 Partners	203 Partners	Increased 5.73%
Domestic Business Partners	1,036 Partners	1,125 Partners	1,166 Partners	1,227 Partners	Increased 5.23%
Overseas Business Partners	0 Partner	0 Partner	0 Partner	0 Partner	Invariable 100%
Old Business Partners	929 Partners	1,036 Partners	1,125 Partners	1,166 Partners	Increased 3.64%
New Business Partners	107 Partners	89 Partners	41 Partners	61 Partners	Increased 48.78%
Domestic Business Partners					
• Bangkok	391 Partners	438 Partners	466 Partners	497 Partners	Increased 6.65%
• Business areas (Nakhon Pathom, Samut Sakhon, Pathum Thani, Ayuthaya, Rayong, and Chonburi)	157 Partners	176 Partners	183 Partners	202 Partners	Increased 10.38%
• Other areas	488 Partners	511 Partners	517 Partners	528 Partners	Increased 2.13%

Products and Services Responsibility

The Company realizes the importance of producing products and services that meet the specified standards before delivering to customers (PWA) in order to serve the customers' satisfactions and expectations. The company has both proactive and reactive relationship management with Customers as well as building a relationship with tap water users as their customers to get the highest satisfaction by dividing tap water users into three groups which are: industrial tap water users, commercial tap water users, and household tap water users.



Operating Policy

The Company regards to the operation responsibility for products and services to ensure that tap water delivered to customers is "Quality, Sufficiency and Continuity". Therefore the Company aims to operate with the standards specified in the tap water purchase contract by prescribe the policy on product and service qualities are as follows:



1. Quality

The quality and cleanliness of the tap water meet the Industrial Standard 257, Part 1-2521

100%



2. Sufficiency

Sufficient water pressure at the end of tap water distribution pipes at not less than 27 meters water

100%



3. Continuity

The continuous flow of tap water distribution

99.97%

Performance Goals for year 2022



Customer Satisfaction

The customers are satisfied with the Company's service not less than

90%

Tap water distribution volume

TTW Public Company Limited

Tap water distribution volume not less than **157.10** Million cubic meters

Pathum Thani Water Company Limited

Tap water distribution volume not less than **140.25** Million cubic meters

Development of Operational Process with Customers

1. Improve and develop operational processes

In 2022, in order to create customers satisfaction (PWA) with the Company' service as follows:

- 1.1 The management of the tap water pressure from the Company's water distribution station during various periods is carried out under the contract with PWA, in accordance with the approval of PWA and those who have assigned to supervise the management of pressure control.
- 1.2 Continuity of tap water in case of power outage, the Company has an automatic backup power system for machine operation and bypass from the tap water pipe system to the tap water distribution system to continuously pump and distribute tap water to customers. There are also cycles Preventive Maintenance (PM) to avoid affecting the water production and distribution system. If there is a plan to stop the tap water, it will be discussed and notified to PWA in advance to publicize the water users for acknowledge and reserve tap water for emergency use.
- 1.3 Documentation services, the Company has established a plan to assign personnel responsible for the preparation of information, inspection and delivery clearly for convenience of service, with measures to increase channels for document and information delivery via e-mail and Line application.

- 1.4 Supporting various activities of PWA covers all levels of PWA staff appropriately and continuously, such as financial support was given to PWA for joining the Government Easy Contact Center (GECC). It also focus on activities that have been carried out continuously, including: giving scholarships to children of PWA staff and employees in Pathum Thani - Rangsit area and Nakhon Pathom - Samut Sakhon to create good relationships as business partners for a long time.

2. Maintain the tap water distribution in 2022 serve the target

The Company has established measures and policies as follows:

- 2.1 Support the budget and follow up on the installation of pressure pipes and/or expand the area to increase the amount of tap water for distribution of PWA in the service area according to the contract.
- 2.2 Monitor the movement of construction projects / improvements of the production system, transmission system and distribution system of PWA and other tap water distributors, both government and private sectors, may affect the amount of the Company's tap water at present and in the future.
- 2.3 Monitor the water leakage management in the Company's service area, both the PWA operation and the hiring of a water leakage management company.

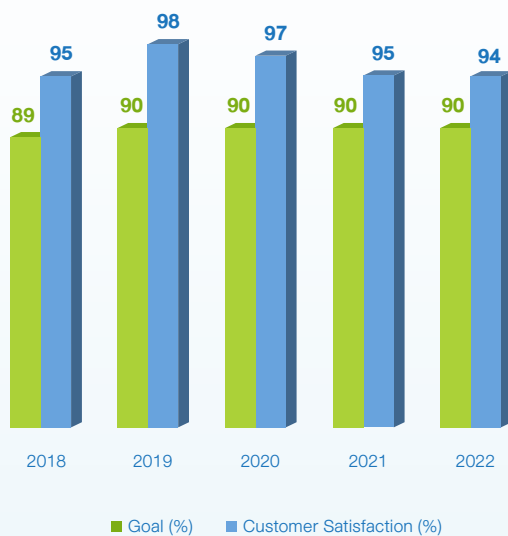
In this regards, the performance will be continuously reported to chief executives at the monthly meetings and the Risk Management and Corporate Governance Committee's meeting.



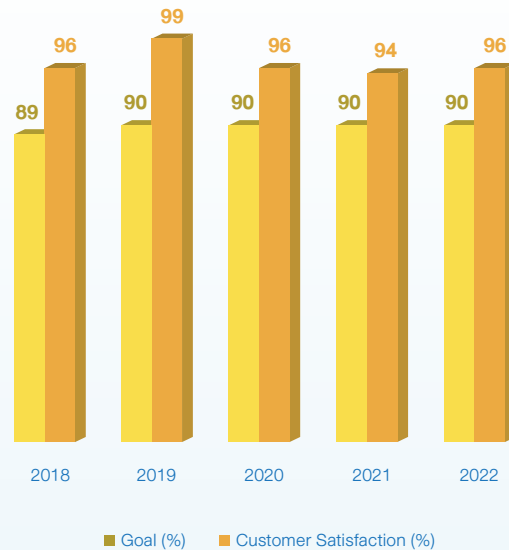
3. Customer Satisfaction Survey

The Company annually surveys the customer satisfaction specifying the survey frequency twice a year, during June and December of each year. The results of the customer satisfaction survey were analyzed and presented to the executives to consider improving and developing work processes in order to increase work efficiency and increase customer satisfaction.

**Customer Satisfaction Survey Results
Nakhon Pathom – Samut Sakhon Area,
Year 2018 – 2022**



**Customer Satisfaction Survey Results
Pathum Thani – Rangsit Area,
Year 2018 – 2022**



Customer Satisfaction Survey Results Nakhon Pathom – Samut Sakhon Area, Year 2018 – 2022

	2018	2019	2020	2021	2022	Results compared to 2021
Goal (%)	89	90	90	90	90	-
Customer Satisfaction (%)	95	98	97	95	94	Decreased 1.05%

Customer Satisfaction Survey Results Pathum Thani – Rangsit Area, Year 2018 – 2022

	2018	2019	2020	2021	2022	Results compared to 2021
Goal (%)	89	90	90	90	90	-
Customer Satisfaction (%)	96	99	96	94	96	Increased 2.13%

The Company has improved operational processes serve the customer satisfaction.

3.1 Quality : Conducting tap water quality inspections and submitting reports to customers on a regular basis. In addition, the chlorine content of all tap water stations is maintained as required by the customer to confidence in tap water users.

3.2 Sufficiency : Maintain the tap water pressure as requested by the customer for each water supply interval.

3.3 Continuity : In the event of a power outage, the customer will be informed immediately or in the event of a shutdown of tap water for regular maintenance and a work plan will be made to notify the customer in advance every time.

4. Customer Complaints Management

The Company has a process to receive customer complaints under the quality management system standard ISO 9001:2015 by handling under established measures and sending summary complaints response letters to customers at the customer's meeting. The process of receiving customer complaints starting from the source of complaints, taking care of customer complaints letter, including responding complaints to create confidence in the quality of products and services.

In 2022, customers complained about the water quality with conductivity of 645 microsiemens per centimeter and hardness of tap water at 186 milligrams per liter, affecting the production process of industrial factories, causing slag to machine equipment and may affect consumption in the Nakhon Pathom-Samut Sakhon area. The Company met and prepared a letter clarifying that the tap water standard produced by the Company meets the industrial water product standards of Thai Industrial Standards Institute (TISI). For some industries, it is necessary to improve the quality of tap water to meet the criteria set by that industry for use in the production process.

5. The Prevention of Epidemic COVID-19

Situation for Customers

The Company has prevented the spread of COVID-19 and has responsibility for the products and services as follows:

- 5.1 Follow the recommendations of the WHO on disinfection of tap water.
- 5.2 Increasing the chlorine addition rate in tap water to maintain the remaining free chlorine content of more than 0.8 milligrams per liter.
- 5.3 Adjust the pressure to be suitable for the area using the tap water.
- 5.4 Adjust the meeting format to be online, refrain from activities related to customers until the COVID-19 situation resolves.
- 5.5 Deliver the medical equipment to the customers and closely monitor the COVID-19 situation.
- 5.6 Producing bottled water to support activities to prevent the spread of COVID-19 for customers, hospitals, government agencies and communities.

6. Customers Risk Management

The Company manages risks from customers in the issues of affecting the quantity of tap water distribution that does not comply with the Company's business plan are as follows:

- 6.1 Support the customer to increasing tap water sales to potential areas or service areas under the contract in Nakhon Pathom - Samut Sakhon and Pathum Thani - Rangsit areas.
- 6.2 Monitoring the movement of other water producers, both public and private sectors that may affect the current and future of the Company's tap water distribution.
- 6.3 Monitoring Non-revenue water (NRW) management in the Company's service area.
- 6.4 Monitoring and analyzing the malfunction of the amount Company's tap water distribution.

7. Promote Use of Tap Water Activity

7.1 Efficiency pipe laying project to receive water users transfer of Muang Raikhing municipality, Moo 11-13. In the past, underground water was used and changed to tap water of PWA, Om Noi branch and Sampran branch, totaling 988 cases, which has been completed and started selling tap water in August 2022.

7.2 Pipe laying project to enhance the efficiency of water distribution in the area of Salaya Subdistrict, it is a project that provides support to PWA Om noi Branch laying pressure booster pipes for tap water with a size of 160 millimeters a distance of 600 meters, at Soi Tang Sin and a size of 315 millimeters a distance of 500 meters on Salaya-Nakhon Chaisri Road. This is to increase the amount of tap water distribution in the service area to serve the demand of real estate development projects and commercial development areas. The project was initiated in 2022 and it is expected that the pipe laying will be completed and the tap water will begin to be supplied to the service area around February 2023.

8. Customers Personal Data Protection Measures

The Company is aware of the security of the customer's personal information in order to collect, use and disclose the customer's information in a strict manner and with the utmost security. Therefore, the Company's personal data protection policies and practices are appropriate and consistent with the Personal Data Protection Act B.E. 2562 (2019) in accordance with the Personal Data Protection Policy announced on June 1, 2022.

9. Customer Relations Activities

The Company held customers relations activities annually on a regular basis such as giving scholarships to customers' children, organize office merit-making for customers of all branches, held off-site meeting, and others in order to encourage and support the customers' work to be more efficient.

9.1 The Company gives scholarships to employees' children of customers (PWA) in Pathum Thani - Rangsit area and Nakhon Pathom - Samut Sakhon area for the year 2022. Due to the epidemic of COVID-19 to prevent and reduce the impact of

the risk according to the government's policy, the Company traveled to give scholarships at the PWA's departments, where the executives of each department were representatives, and employees' children came to receive scholarships.



On May 11, 2022, the pictures for scholarship support ceremony in the area of PWA Region 3



On May 25, 2022, the pictures for scholarship support ceremony in the area of PWA Region 2

9.2 The Company supports the Government Easy Contact Center (GECC) for the year 2022 to PWA Om Noi branch to prepare for the project assessment to obtain the GECC certification for PWA toward excellence.



PWA Omnoi Branch



PWA Nakhon Pathom Branch

In 2022, the Company provided customer support (PWA), Om Noi branch and Nakhon Pathom branch to improve the office in order to facilitate the service users, as well as preparing for the submission of the Government Easy Contact Center (GECC) for the year 2022 as follows:

- Hand over the parking garage and reinforced concrete floor (parking lot) to PWA Om noi branch.
- Delivered the work of office signs in the learning center building, office equipment and glass door structures in the office to PWA Nakhon Pathom branch.

Performance in 2022

Goals	Key Performance Indicators (KPI)	2022	Result
The customers satisfied with the Company's service	Not less than 90%	95%	Achieved the Goal
TTW Public Company Limited Tap water distribution volume	Not less than 157.10 Million cubic meters	141.88 Million cubic meters	Less than the Goal
Pathum Thani Water Company Limited Tap water distribution volume	Not less than 140.25 Million cubic meters	133.54 Million cubic meters	Less than the Goal

Innovation and Technology

Currently, the innovation is important to business development and operation in order to increase competitiveness and create sustainability for the organization. The company realizes the importance of business innovation development in line with corporate values, as well as developing the Kaizen project and improving working conditions in order to promote a learning environment and innovation of technology both the development of research support processes and support for technology and working tools.

Operating Policy

1. Corporate Values

Running business to achieve the vision and mission based on the satisfaction and the utmost benefit of the stakeholders by means of:

- Continuous Improvement
- Proactive & Initiative
- Teamwork

2. Sustainable Development Policy

The Company's innovation promotion is stated in the Sustainable Development Policy section "Continuity

business process development" as published on the website: <https://www.ttwplc.com/storage/about/policy/sustainable-development-policy-en.pdf>.

Innovation and Technology Operations

1. Technology

The Company uses Membrane technology, which is the most modern and internationally accepted standard of tap water production technology in the water production process at Krathum Baen Water Treatment Plant, Samut Sakhon Province, it uses Ultra Filtration (UF) system and Membrane technology to separate suspended solids or dissolved solids from liquids by pumping raw water through a membrane with openings (Pore Size) only 0.01 microns which can effectively remove contaminants, germs, viruses and bacteria, resulting in tap water quality is cleaner and safer, as well as reducing the use of chemicals in the production process. Membrane are a world-class standard technology, similar to use in the US, Singapore, and European Union. It can be considered that the Krathum Baen Water Treatment Plant is the largest commercial tap water production in Thailand that has chosen Ultra Filtration (UF), which serves the demand

for tap water of industrial, commercial, and household sectors with full efficiency.

2. Innovation

The Company invents an innovative manufacturing process that incorporates Conventional technology with Ultra Filtration Membrane (UF) technology, thus becoming “Hybrid Technology” at Krathum Baen Water Treatment Plant, the largest commercial tap water production plant in Thailand and the only tap water treatment plant to use hybrid filtration. The Company’s tap water treatment plant is located near the service area with heavy tap water users in Krathum Baen, Samut Sakhon Province, this can reduce electricity costs by reducing the distance of pumping water approximately 40 kilometers and reducing the cost of chemicals in the production process. The Company is able to manage the seasonal fluctuation of raw water quality while keeping production costs low, as well as serve the continually increasing demand for tap water in both the household, commercial and industrial sectors at full efficiency.

Innovation and Technology Management

1. Promote both internal and external training for operational employees as well as sharing experiences through Kaizen or Exchange Program and work visits between departments to develop their skills, knowledge and increase work efficiency.

In 2022, 11 employees at the level of sector managers and engineers were sent to attend the Kaizen Master Certificate Program, Class 10, in order to develop knowledge and understanding and to serve as consultants for fellow employees in further Kaizen projects.

2. Organize a Kaizen contest by promoting employees of all levels to participate in activities where employees able to develop innovative ideas and present their work both individually

and groups. In 2022, there were 534 Kaizen contributions created by employees.

3. Presenting work to employees and executives, any work can be used to improve the work process and the results have been tested, the Company will actually use in work.
4. Establish a “Kaizen Committee” to provide guidance to employees on innovation within the organization, in addition to supervisors who provide basic advice to employees.
5. Open communication within the organization about the work created by employees in order to convey and disseminate knowledge to employees for the best benefit.
6. Giving emphasis on developing employee skills without adhering to the success of innovation, even if the work is not awarded in both internal and external contests.
7. The information of all employees that has been presented is systematically collected and the results that have been summarized are put into practice in the work.

Kaizen Examples

1. Bao-Bao Project

Replacing the Suction butterfly valve Distribution pump of the Muang Ake Village Water Distribution Station (R-5), Pathum Thani Water Treatment Plan requires a lot of operators and force to open - close the sliding doors, this results in operator fatigue because it takes more than 180 minutes (three hours), with 102 Newton meter (Nm), thus changing the use of the operator’s force to be used as an existing impact block in the maintenance work to be applied to rotate, open - close the sliding door instead.

From the improved design and testing, it was found that the operating time was reduced to 40 minutes and the operator did not need to use torque to open - close the sluice gate, which could be operated by only one operator.

Before improvement



Use the worker's torque used for open-close the sluice gate

After improvement



Reduce the worker's torque

A Performance Comparison Before - After

Details	Before	After	Result
Number of operators	13 Persons	1 Person	Decreased 92%
Torque used for open-close	102 Newton Meters	0 Newton Meters	Decreased 100%
Operating period	180 Minutes	40 Minutes	Decreased 78%

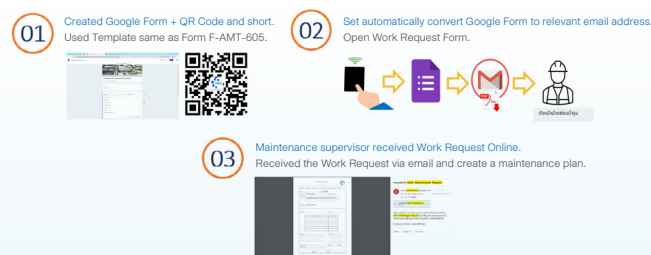
2. Maintenance Request Online Project

The wastewater collection system within the Amata City Rayong Industrial Estate, consists of 55 wastewater pumping stations (LS) in a total area of 16,483 rai and a total road length of 51.3 kilometers, each LS has a distance of 1-8 kilometers from WTP-1/1, which is the project office location, with employees inspecting the operation of the machines daily. When the machine has abnormal operation or break down, employees must travel to write a Maintenance Request form for Work Request at the WT P- 1 / 1 maintenance unit every time.

The average time spent was about 24 minutes, with total time of traveling for receiving and sending forms was 18 minutes. The group members therefore had an idea to reduce working time in that process.

A Google form has been created in conjunction with the line Notification program to improve the repair notification process. It was found that the work time can be reduced from 24 minutes to 4 minutes and the work process can also be reduced from 4 steps to 2 steps.

Before improvement



After improvement



A Performance Comparison Before - After

Details	Before	After	Result
Operational procedures	4 Steps	2 Steps	Decreased 50%
Operating period	24 Minutes	4 Minutes	Decreased 83%

Quality of Life



Employee Stewardship and Development

The Importance of Employees

The Company regards its employees driving the organization to success, therefore manpower planning is in line with the business strategy by developing capability and potential employees including recruiting external personnel join the Company based on those who are both “Good and Talent people”, adhering the ethical principles, it does not discriminate on race, religion, skin color, gender or physical disabilities considering by knowledge suitability, ability, and behavior. The employment must be in accordance with the law, and defines the employees’ stewardship and development goals are as follows:

Operational Goals

1. Manpower with sufficient potential for business operations.
2. There is a hiring system, personnel management, fair performance and compensation.
3. Being leading organization that the new generation purpose to work with.

Operating Guidelines

1. Develop personnel knowledge and competence thoroughly and consistently.
2. Fair compensation and benefits compared to other leading companies.
3. Strictly comply with all laws and regulations applicable to employees.
4. The workplace environment is safe in accordance with the principles of occupational health and conducive to work.
5. Appoint, transfer, reward and punish employees with equality, honesty, and fairness based on the knowledge, abilities and suitability of the employees.
6. Listen to opinions and suggestions based on the professional knowledge of employees.
7. Treat employees with respect to individuality and human dignity.
8. Avoid unfair conduct that affects the employee’s job security, threatens, or puts pressure on the employee’s mental state.
9. The employees able to compliant in case of unfairness in accordance with the established systems and processes.

Performance Goals for year 2022

1. Successful employment rate according to plan not less than 80%.
2. Employee turnover rate not more than 4%.
3. Result of employee satisfaction assessment for working not less than 80%.
4. Provide training course according to the Company's safety training plan 100%.

Major changes and developments regarding the review of policies, practices and processes for employee stewardship and personnel development through the past year

In 2022, the Company has reviewed employee welfare by increasing the amount of medical expenses and the scope of reimbursement for eyeglasses to encourage employees better eye health and support the age of employees, including increasing of work efficiency. In addition, in the economic situation at the end of the year where the cost of living is increasing due to the price of goods and services rising, the Company has provided special subsidies for the cost of living for employees.

Employee Stewardship

The Company has established a policy and prepared a handbook for all employees to acknowledge the policies and welfare. Employees are treated equally and fairly without exceptions in terms of origin, race, religion, gender, and marital status, language or position, does not support child labor, human trafficking, fraud, and corruption in any form as well as providing opportunities for people with disabilities. The Company emphasizes human resource management based on morality and equality, instilling all employees to adhere to the norms, values, rules, legal requirements and corporate governance, to create strength and encouragement in leading the organization to achieve its goals "To be Thailand's Leading Company in Water, Energy and Eco-Friendly Businesses."

In addition, the Company states its policy regarding remuneration and welfare of employees by paying appropriate and fair remuneration at a competitive level in the same industry. The personnel strategy is set as follows:

1. Develop and strengthen employees' knowledge and competence continuously and consistently. Organize job positions and employee career development plans for higher positions.
2. Take various actions regarding fair employment without discrimination against gender, race, religion in consideration of promotion, transfer and giving opportunities to employees with good performance, able to develop potential according to job position, be considered as a candidate for appointment by the management team with transparency and fairness.
3. Provide welfare as required by law and additional welfare serve the needs of employees, such as medical expenses, life and health insurance, provident fund, and scholarships for employees' children, etc.
4. Give importance to the safety of employees by providing training on various aspects of safety.
5. Compensation management is linked to individual performance by annually comparing with companies in the same industry to keep it at a competitive level align with the Company's performance.

Inequality and Discrimination Issues

The Company expresses its intention to avoid or encourage employment discrimination, compensation and benefits payment, training and development opportunities, promotion or position, this includes termination or retirement from work due to differences in nationality, race, religion, language, age, gender, marital status, personal attitudes towards sex, disability, HIV infection, popularity in a political parties or other personal opinion. The Company does not hinder, interfere or take any action that will affect the activities of exercising rights or employment practices concerning the above issues without prejudice to the Company's damage.

Employee Engagement Support

The Company became the leader in the private sector in operating tap water business, partly from personnel who are committed to their work which through taken care of by the organization from the beginning until the retirement day. The Company has established employee welfare policy toward TTW Group with annual health check-ups, free medical care under the health insurance scheme, maintaining the working environment, there are also policies and guidelines regarding workplace occupational health and safety.

The year 2022 is marked by the spread and mutation of COVID-19, the company was very concerned about the health of employees. Therefore, preventive measures have been provided in the workplace such as coronavirus 2019 detection for employees by using the Antigen Test Kit (ATK), temperature check before entering work, social distancing in the workplace, have employees wear masks at all times when they were at work, including providing alcohol gel, sufficient masks distributed to employees adequately. There were disinfectant sprays around the work area and the water treatment plant to ensure that employees were safe from the spread of COVID-19.

Employee Satisfaction Survey

In 2022, the employee satisfaction survey with the organization was 92% of the total number of employees surveyed of 297, representing 92% of all eligible employees. (Employees eligible to fill out the survey must have been employed for at least 6 months).



Compensation, Welfare and Employee Benefits

The Company believes that “Employees” are the key to developing business strategies and driving the Company’s operations toward achievement. Therefore, promoting and developing professional skills, balancing between personal life and work, the ability to contribute equally as part of a diverse workforce is a priority for the Company.

The Company establishes employee welfare policies communicated to TTW Group. Providing more welfare than those required by law, comprising the establishment of a provident fund, annual health check-ups, free medical care under the health insurance scheme, Including providing for central car and position car to the Executives were able to work flexibly. Encourage employees to have various activities such as establishing the TTW Running Club and participating in various running events. organized by external departments. Including providing the First Aid Room, Gym and exercise equipment for employees to encouraged employees to have good health, etc. During the epidemic of COVID-19, the Company has allocated the budget and resources necessary to prevent and reduce the risk of the spread of COVID-19 to employees in all business areas, which is considered as a morale booster for employees. The example of compensation welfare and employee benefits as follows:



Types of Leaves

- | | |
|-----------------------|--|
| • Sick Leave | • Ordination Leave |
| • Maternity Leave | • Leave for Hajj Pilgrimage |
| • Personal Leave | • Military Service Leave |
| • Sterilisation Leave | • Leave for Study, Seminar or Training |
| • Annual Leave | • Funeral Leave |

Saving and Investment Support

The Company participated in the Retirement Readiness Index project of Faculty of Commerce and Accountancy, Chulalongkorn University for the employees to inform employees about their readiness for retirement and listen to knowledge of saving and investing for retirement. Retirement Readiness Index is a tool and benchmark for measuring retirement readiness and raising awareness of the importance of saving, efficient financial planning for employees as well as it is also an index that focuses on the holistic assessment of retirement readiness, taking into account both financial and health and well-being factors.

Performance Evaluation

Performance evaluation is the process by which executives determine the level of employee performance in order to compare to set standards and to improve their performance efficiency. The Company has assessed the performance of its employees by ranking and comparing them among the same group of employees.

Long - Term Employee Incentives

The Company emphasizes to long-term human resource development with policies and guidelines on developing employee learning opportunities, we believe that personnel are the most valuable resource in driving the organization towards its goals. Therefore, it aims to develop knowledge, competency and good quality of life by applying the human resource management system to enhance the potential and competence of employees for maximum benefits. There is an appropriate learning program from the beginning of employment until the date of retirement, encourage employees at all levels to acquire new knowledge and skills, including attending seminars with leading institutions. In addition, the Company has continuously improved employee engagement by Employee Satisfaction Survey, Employee Engagement Survey, employee participation in welfare management, and Occupational health and safety. The Company has established policies and guidelines regarding

safety and hygiene through the Occupational Safety and Health Committee to ensure the safety of life and property of employees and the Company, taking into account the safety of both employees and utility users by providing training to technicians and engineers as well as staff working in the tap water production process regularly in order to perform their duties efficiently with attention to employees.

In addition, the Company provides benefits exceed those required by law, such as provident fund by the Company contribute an appropriate rate at 5-10% based on year's experience. In addition, there is a reward for employees 15 years' experience to encourage them to work, where experience of the employee will be part of the consideration for the position adjustment.

Freedom of Association and Consolidation for Negotiation

The Company provides communication between executives and employees in collective bargaining of employee benefits through the Welfare Committee, Human Resources and Administration Department. The meeting is regularly held, reflecting to support the rights to work consistent with Universal Declaration of Human Rights (UNGP) to develop employees' welfare and benefits of together with management representatives, resulting employees receive expectations welfare that meets their needs and appropriately.

In addition, the Company provides complaints channel regarding human rights, for issues that violate legal ethics both from employees and stakeholders, there is a mechanism to protect employees and those who report the clues by creating a secret database system able accessed by relevant parties. A committee will be appointed to handle the case, committee members include representatives from different departments who have no vested interest in the cases to investigation proceeds in line with the regulations and will report results to those who filed the complaint. Channels of receiving complaints and clues are as follows:

**Post :**

Office of Managing Director, TTW Public Company Limited
30/130 Moo 12 Buddha Monthon Sai 5 Road Raikhing, Sampran,
Nakhon Pathom Province 73210

**Email :**

cg@ttwplc.com

**Phone :**

(+66) 2019 9490-3
(+66) 2019 9484-9
Cont. 1103, 1106



In 2022, the Company and subsidiaries did not have any disputes lawsuits or complaints between the Company employees, including no accidents to lost time an accident and illness from work.

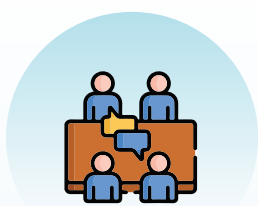
Employee Development

The Company regarded human resource development in terms of professional skills, focusing on Functional and Technical Competency through the Learning Center in the tap water production line covering the business area to support the development of in-depth personnel skills in the Company's important businesses, including the development of leadership for executives and employees in each business area to have more knowledge and management ability in the responsible line.

The Company promotes and develops the executives' capacity and employees able to perform their work efficiently, responding to the Company's strategies and goals with maximum efficiency. The Company therefore establishes a human resource development framework for each department, which is shown in the following chart:

In 2022, the Company organized training courses to develop and promote personal competency as follows:

1. Design Thinking Course
2. Basic of Mechanical Seal Course
3. Water Gate in the System of Production and Distribution of Tap Water Course
4. Business PowerPoint Course



Organization Level

1. Corporate Culture Program
2. Management Program
3. Leadership/Supervisor Program



Individual Level

1. Functional Training
2. Related Training
3. Enable Training



Primary Level

1. Quality Concept and Standard
2. Safety and Health
3. Environment


Training Courses	Number of participants (person)	Training proportion compared to the total number of employees (%)
Design Thinking	40	12%
Basic of Mechanical Seal	28	9%
Water Gate in the System of Production and Distribution of Tap Water	25	8%
Business use of Powerpoint	30	9%

Training

In 2022, the company has trained a total of 6,117 hours of staff, with the proportion of training hours increasing by 87% from 2021.

1. The number of training hours classified by gender

(Unit : Hour)

Gender	2018	2019	2020	2021	2022
 Male	3,712	3,768	2,636	2,544	4,788
 Female	1,007	730	541	729	1,329
Total	4,719	4,498	3,177	3,273	6,117




2. The number of training hours classified by gender and position

(Unit : Hour)

Position	Gender	2018	2019	2020	2021	2022
 Executive Level	Male	925	495	309	157	331.50
	Female	432	252	193	221	370.50
	Total	1,357	747	502	378	702
 Employee Level	Male	2,378	2,456	1,985	2,387	4,456.50
	Female	984	1,295	690	508	958.50
	Total	3,362	3,751	2,675	2,895	5,415

3. The number of training hours classified by gender and course

(Unit : Hour)

Courses	Gender	2018	2019	2020	2021	2022
Professional Course 	Male	1,645	1,590	1,084.50	456	1,667
	Female	808	433	270.50	381	801
	Total	2,453	2,023	1,355	837	2,468
Vocational Course (Optional) 	Male	410	386.50	102	75	157
	Female	52	26.50	33	39	135
	Total	462	413	135	114	292
Safety Course 	Male	1,657	1,791.50	1,449.50	2,013	2,964
	Female	147	270.50	237.50	309	393
	Total	1,804	2,062	1,687	2,322	3,357

4. The Average number of training hours

(Unit : Hour/Person)

	2018	2019	2020	2021	2022
	15	14	10	10	19

Performance in 2022

Goals	Key Performance Indicators (KPI)	2019	2020	2021	2022	Result
Successful employment rate according to plan	Not less than 80%	80%	92%	83%	84%	Achieved the Goals
Employee turnover rate	Not more than 4%	0.37%	0.18%	0.22%	0.44%	Achieved the Goals
Result of employee satisfaction assessment for working	Not less than 80%	75%	78%	72%	92%	Achieved the Goals
Provide training course according to the Company's safety training plan	100%	100%	100%	100%	100%	Achieved the Goals

Occupational Health and Safety

Occupational Health, Safety and Security are important to the Company's operation and stakeholders thus established the Company's Quality, Environment, Occupational Health, and Safety Policy disclosed on the Company's website <https://www.ttwplc.com/storage/about/policy/policy-environment-en.pdf> by prescribed employees and stakeholders responsible for both themselves and their associates according to the established laws and standards.

Performance Goals for year 2022

1. Zero of Injury & Illness Free Operation.
2. Practice emergency plans at least once a year.

Occupational Health and Safety Strategy

1



Building occupational health and safety standards for employees at all levels.

Increase the potential and awareness of work safety.

2



3



Strictly comply with the laws and regulations applicable to employees.

Occupational Health and Safety Operations

The Company appoints the Occupational Health, Safety and Environment Committee, responsible for considering the policy, operation plan, and occupational safety training plan to prevent and reduce the occurrence of accidents or problems caused by work, report and suggest measures or solutions to correct the laws related to occupational safety and work safety standards to the executives in order to safety for employees, contractors and third parties who come to the Company area including a survey of safety in the workplace, verify the accident statistics, set up an unsafe work reporting system to be the duty of all employees at all levels.

The Company uses safety principles as a criterion for all stakeholders to strictly abide by in addition to complying with the specified laws. Therefore, the Company established a framework for operating safety, occupational health and working environment in written form as well as applying international standards in the Company's ethical which defines the criteria for implementation and guidelines for operational excellence covering safety practices, which are summarized as follows:



1. Safety, Occupational Health and Working Environment

- 1.1 Establish regulations and standards that have measures not less than laws and international standards, which employees must strictly comply with the relevant laws, policies, requirements and standards.
- 1.2 Safety management regarding to audit of the latest law and the status of the formerly law in order to comply with various relevant laws, review the measures of safety work supervision (Rule, Regulations and manuals), review the contingency plan for efficiency in line with actual operations, review and establish an annual safety plan reports to government agencies.
- 1.3 Examine the safety and working environment such as machine, tools and electrical systems, crane (by an external agency), vehicle safety, mobile machine, e.g. forklift, and dump truck as well as requesting for permission to work according to the specified job description, inspection of the working area, label, various safety symbols, maintenance system, fire suppression system, storage, receiving flammable and chemical materials, measure the intensity of light both day and night, measure the noise and heat in the work area, and measure the amount of dust and chemicals in the atmosphere.
- 1.4 Provide safety equipment such as various safety symbols, symbol color as well as provide personal protective equipment, e.g. safety hat, safety shoe, other personal protective equipment according to the nature of work for which permission is granted, provide emergency notification equipment, emergency suppression device, and calibration of various gas meter equipment in the work.
- 1.5 Control and prevent the various forms of loss caused by accident, fire, work-related illness, lost or damaged property, Security violation, and not working properly as well as various mistakes, provide a safe working environment, appropriate

and adequate safety equipment, this include the executives and employees are required to report accidents and incidents according to the specified steps.

- 1.6 Public relations and communication about policies, regulations, procedures, methods and safety precautions to employees, contractor, and stakeholders In order to operate properly, it does not pose a danger to health, property and the environment.
- 1.7 Any operation that is unsafe or fails to comply with regulations and safety standards, temporarily stop that work and inform the relevant persons, supervisors and the responsible department for further corrections.

2. Requesting Permission to Work at Risk and Contractor's Work

Requesting permission to work in the matter of safety is the matter of risk which requires verification of worker readiness, availability of equipment, tools, and machines including the readiness of the environment to be ready and secure enough before being allowed to start working by specifying the type of license are as follows:

2.1 General Entry Permit

For general entry operation such as cleaning, painting, and / or others that does not involve the system or the shutdown of all systems within the water production plant and the work of the contractor.

2.2 Hot Work Permit

For work that generates sparks such as electric welding, gas welding, and / or others where sparks or heat are generated inside the water treatment plant.

2.3 Shut down Electrical System Permit

For work that requires shut down the electrical system, both high voltage system and low voltage system within the water treatment plant.

2.4 Excavation Permit

For the work that requires drilling by drilling equipment such as hoe, and spade as well as heavy machinery such as backhoe, or drilling machine in the water treatment plant.

2.5 Mechanical Isolation Permit

For applications where pressure is required to cut off the pipe system and testing of various systems and pressures in the water treatment plant, consist of water, air and chemical systems.

2.6 Confined Space Entry Permit

For work that requires entering a confined space (According to the Ministerial Regulation prescribing administrative and management standards for occupational safety, health and working environment in confined spaces, C.E. 2004) within the water treatment plant.

3. Risk Assessment and Incident Investigation

The Company is aware of operational risks that can arise at any time without regular risk management and assessment systems. Therefore, the Company has assessed two types of occupational health and safety risks which are: risk of chemical spills namely chlorine, and risk from work accidents. The risk management guidelines have been defined as follows:



Occupational Health and Safety Risks

- Chemical spills (chlorine)
- Work accident

Risk management methods

- Install the Chlorine Scrubber system.
- Follow the operational plan manual.
- Strictly follow the rules or regulations on occupational health and safety.
- Work training.
- Practicing emergency response, work accidents according to the operational plan.
- Assess risks regularly.

4. Occupational Health and Safety Services

The Company regards to the employees' good quality of life, thus providing occupational health and safety services such as annual health check-up, health insurance, life insurance, COVID-19 insurance, providing first aid equipment, hazard warning labeling including defines operating procedures and strictly supervises to provide employees with safety in terms of life and property as well as good physical and mental health as a result, the employees have the strength to work with the engagement.

5. Employee Participation in Occupational Health and Safety

Employee participation is a key strategy, we believe that employee participation will ensure the credibility of the organization. Enthusiasm and cooperation will result in the achievement of its intended objectives: "Zero" Injury & Illness Free Operation by creating facilitates system that continued participation in safety activities of all employees at all levels. The participation activities are as follows:

5.1 Searching for the environment, circumstances and unsafe behavior of employees' activity.

Measure the working environment, including light, heat, and sound as well as chemical hazards such as chemical vapors in the work area and environmental hazards, including the exhaust from electric generator, and wastewater from the toilet, etc. The measured value must not exceed the standards of the Ministry of Industry.

5.2 Safety Man activity

Assign all operational employees to act as a "Safety Man", who will act as a safety officer per week. The objective is to ensure that employees are involved in taking care of safety by responsible for identify unsafe working behaviors, risk assessment, figure out the hazards prevention submit to the Occupational Safety, Health and Environment Committee and Senior Executives to adopt the meeting resolution as a guideline for further safety operations. The activity focuses on the leadership

of safety of the executives (Safety Role Model) in order to communicate important safety policies or activities, listening to safety issues or suggestions, and workers involvement in safety activities.

5.3 Leisure activity

Promote corporate culture, attitude, belief, work values without stress such as promoting exercise, and improve the workplace to facilitate the employees including improve the lobby for employees using to relax during working time. The objective is to enable all employees working together with love and engagement.

6. Occupational Health and Safety Training

The Company realizes the importance of occupational health and safety knowledge of employees and stakeholders, thus training on safety is held regularly such as safety orientation for new employees or employees who have to change their workplace and new job duties including training and drills for prevention and emergency response.

In addition, the company has prepared an annual occupational health and safety training plan. In 2022, the internal training courses are set as follows:

Training Courses	Participants (Person)	Training proportion compared to the total number of employees (%)
1. Training and practicing to suppress chlorine leak with KIT-B device, maintenance of chlorine system and use of SCBA breathing apparatus.	28	8.67%
2. Crane operator duty, giving signals to crane operators, holding materials or crane operators.	25	7.74%
3. Safety for working with electricity and helping people who suffer from electrical hazards.	25	7.73%
4. Safety for working at height.	25	7.73%
5. Energy Conservation, Internal Energy Management Auditor.	30	9.29%
6. Basic firefighting and fire evacuation training.	177	54.80%

There are 17 internal and external training courses and 3,357 hours of occupational health and safety training in 2022 compared to 2021, an increased of 1,035 hours or 45% (calculated from the number of training hours x the number of participants).

7. Employee Stewardship in Occupational Health and Safety

Operational safety and employees' health are important, therefore, the Company has continuously provided employee stewardship in occupational health and safety on an annual basis, such as safety training and annual health check-ups etc.



Safety Training

Accident statistics from Operation

Items	2018	2019	2020	2021	2022	Unit
Employees	0	0	0	1	0	Time
Contractors	0	0	0	0	0	Time

Accident statistics from Chemical Spills

1. Employees

Items	2018	2019	2020	2021	2022	Unit
Lost time accident	0	0	0	0	0	Time
Accident to medical treatment	0	0	0	0	0	Time
Accident to death	0	0	0	0	0	Time

2. Contractors

Items	2018	2019	2020	2021	2022	Unit
Lost time accident	0	0	0	0	0	Time
Accident to medical treatment	0	0	0	0	0	Time
Accident to death	0	0	0	0	0	Time

In 2022, there were no incidents of accidental leaks of hazardous chemicals as required by law and non-hazardous substances within the Company that caused lost time or death of employees, contractors, or outsiders admitted to hospital, died, or evacuate the community from the area where the fire caused damage worth 3,000,000 Baht or more, or there was a chemical leakage into public water sources.

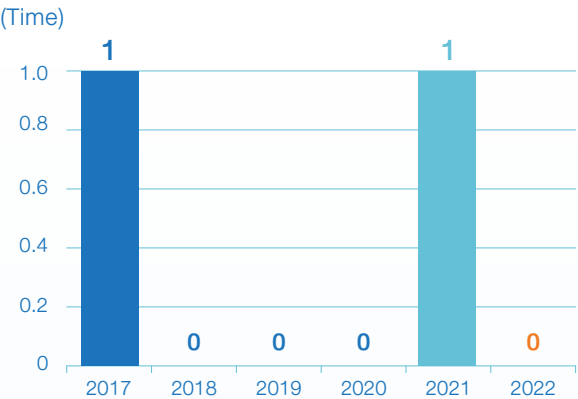
Performance in 2022

Goals	Key Performance Indicators (KPI)	2019	2020	2021	2022	Result
1. Injuries, Illnesses, and Deaths from Operation						
1.1 Employees						
No Injuries, Illnesses, and Deaths from Operation	1) Zero Time of Injuries, Illnesses, and Deaths from Operation	0 Time	0 Time	1 Time	0 Time	Decreased 100%
	2) Zero Person of Injuries, Illnesses, and Deaths from Operation	0 Person	0 Person	1 Person	0 Person	Decreased 100%
1.2 Contractors						
No Injuries, Illnesses, and Deaths from Operation	1) Zero Time of Injuries, Illnesses, and Deaths from Operation	0 Time	0 Time	0 Time	0 Time	Invariable (100%)
	2) Zero Person of Injuries, Illnesses, and Deaths from Operation	0 Person	0 Person	0 Person	0 Person	Invariable (100%)
2. Injuries, Illnesses, and Deaths from Chemical Spills						
2.1 Employees						
No Injuries, Illnesses, and Deaths from Chemical Spills	1) Zero Time of Injuries, Illnesses, and Deaths from Chemical Spills	0 Time	0 Time	0 Time	0 Time	Invariable (100%)
	2) Zero Person of Injuries, Illnesses, and Deaths from Chemical Spills	0 Person	0 Person	0 Person	0 Person	Invariable (100%)
2.2 Contractors						
No Injuries, Illnesses, and Deaths from Chemical Spills	1) Zero Time of Injuries, Illnesses, and Deaths from Chemical Spills	0 Time	0 Time	0 Time	0 Time	Invariable (100%)
	2) Zero Person of Injuries, Illnesses, and Deaths from Chemical Spills	0 Person	0 Person	0 Person	0 Person	Invariable (100%)
3. Practice according to the emergency plan						
Able to practice according to the emergency plan	The number of practices according to the emergency plan at least once a year	1 Time	1 Time	1 Time	1 Time	Invariable (100%)

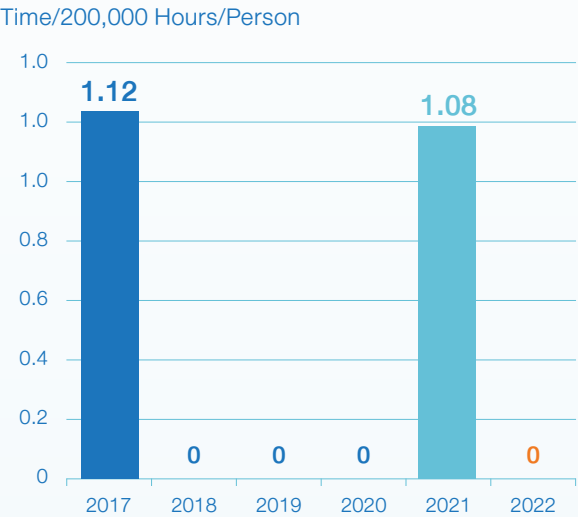
Accident statistics from Operation

1. Employees

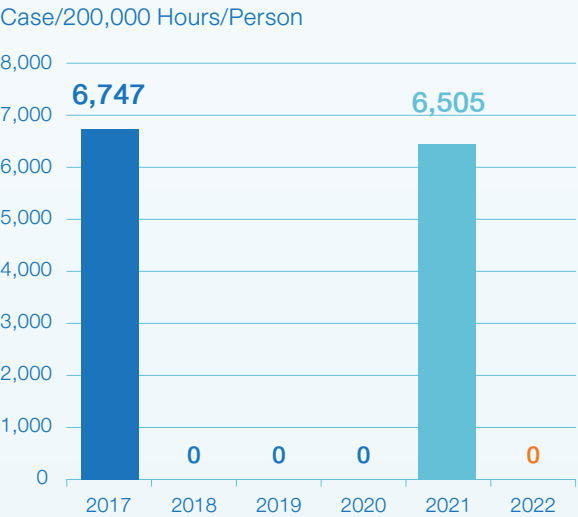
Accident statistics



Accident frequency rate

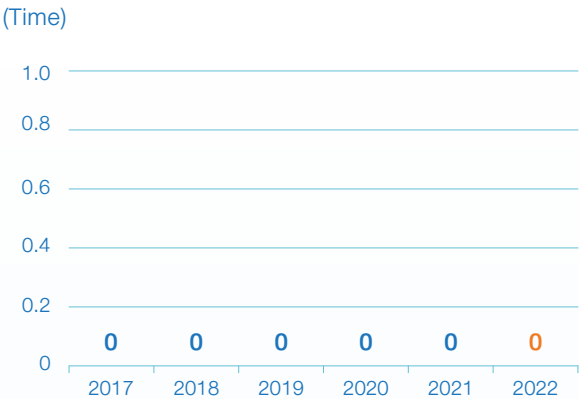


Accident severity rate

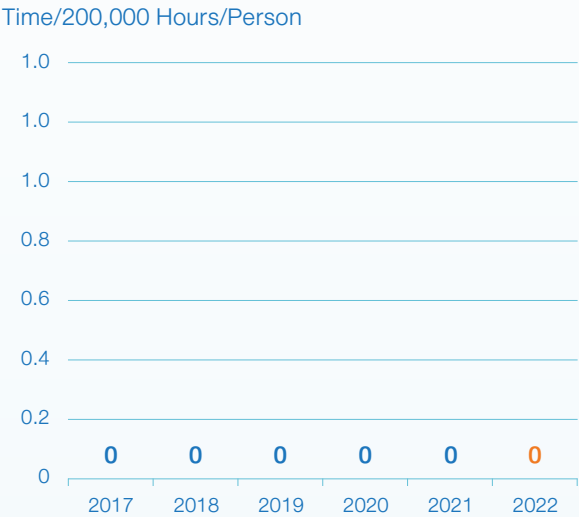


2. Contractors

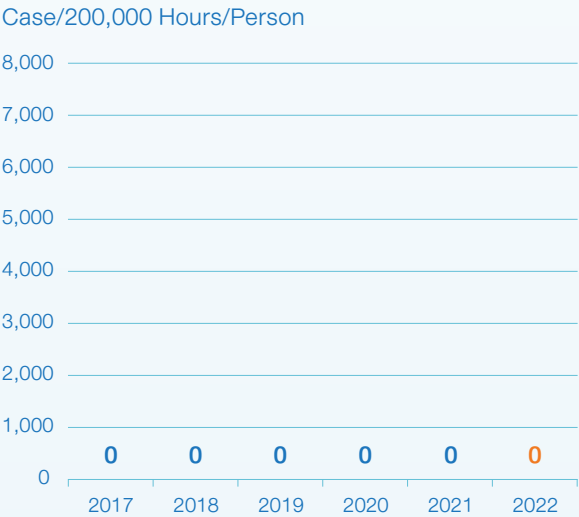
Accident statistics



Accident frequency rate



Accident severity rate

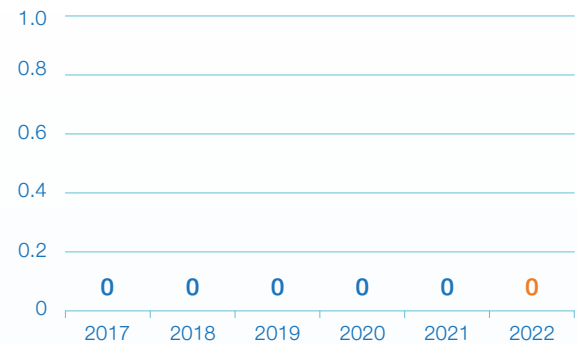


Accident statistics from Chemical Spills

1. Employees

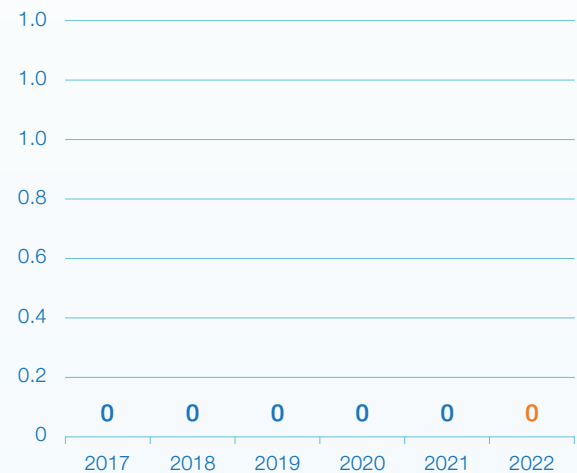
Accident statistics

(Time)



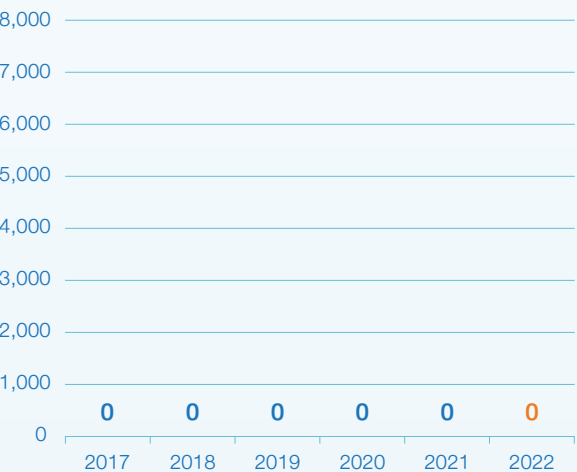
Accident frequency rate

Time/200,000 Hours/Person



Accident severity rate

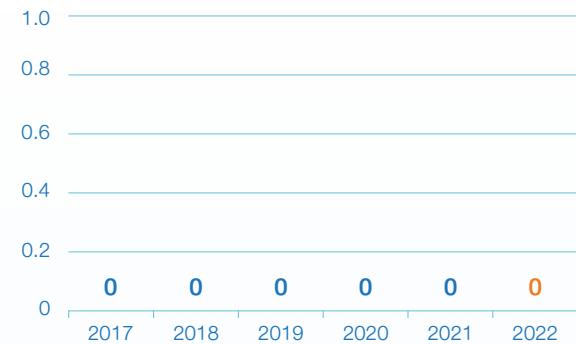
Case/200,000 Hours/Person



2. Contractors

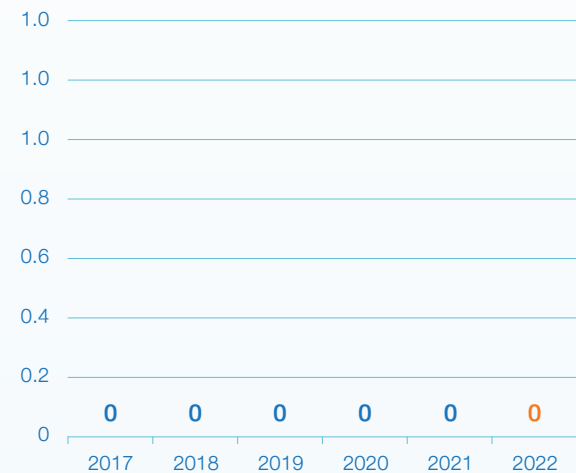
Accident statistics

(Time)



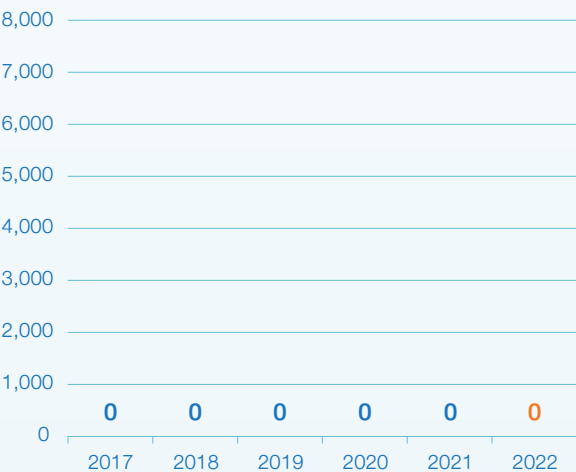
Accident frequency rate

Time/200,000 Hours/Person



Accident severity rate

Case/200,000 Hours/Person



Social and Community Stewardship

TTW and Community

The Company believes that a tough society and community is the foundation for the development of the country to progress and keep up with the changes. Therefore, the Company aims to create sustainable prosperity nationwide and in all operation communities, focusing on sustainable development of quality of life and society.

“**Social Responsibility**” is the Company’s intention to adhere as a guideline for its business operations. The Company is dedicated to growing business parallel with social development and quality of life, focusing on tackling issues that affect people’s livelihoods to strengthen the economy and reduce social inequality.

The Company operates the business of producing and distributing tap water for PWA by using raw water from natural water sources, where “water” is a natural resource that may be scarce and affect the water use of the community in the future. In order to demonstrate social responsibility and environmental conservation along with sustainable business operations, the Company, therefore, continually organizes social and environmental stewardship activities with the community to create good relationships with the surrounding communities as a good neighbor.

Management

1. The Sustainability Development Committee comprising the Managing Director and Executives are responsible for establishing policies and guidelines for social sustainability development as well as providing advice and recommendations to the Sustainability Development Working Group.
2. The Sustainability Development Working Group comprising of Department Manager and Section Manager from various departments to serve the sustainability policies and measures, as well as presenting sustainability development

performance to the Sustainability Development Committee.

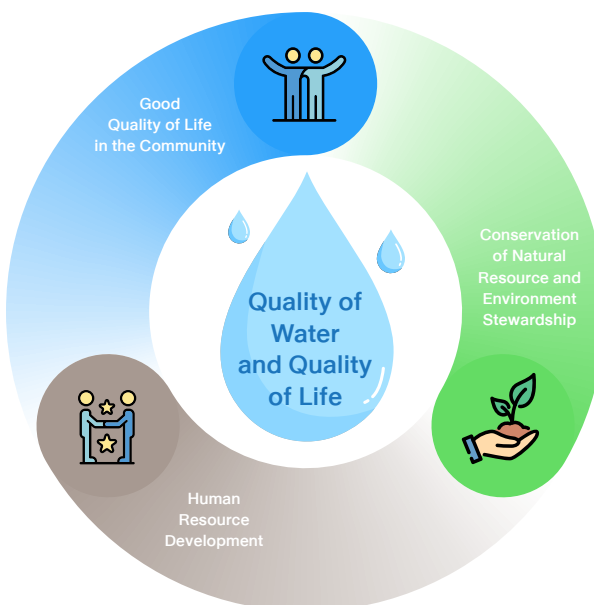
3. The Sustainability Development Section carries out activities to enhance the potential of the communities surrounding the Company’s establishment to have a good quality of life and sustainable self-reliance by working with the Sustainability Development Working Group.

Performance Goals for year 2022

1. Develop communities to be able to solve problems and be self-sufficient in a sustainable way.
2. Improved community’s quality of life.
3. Zero of communities’ complaints from the impacts of the Company’s business operation.

Operating Guidelines

The Company is committed to being an organization driving the country’s economy and infrastructure up to the civilization through the creation of utilities according to international standards, along with social responsibility and environmental stewardship. The Company emphasizes the communities around the water treatment plant by supporting various activities covering education, occupation, sanitation as well as environmental stewardship the people’s quality of life in the community with three operating social aspects are as follows:



Operations in 2022

1. Human Resource Development

Community potential development is community empowerment by connecting between (People, Knowledge, Resources) to create a relationship consisting of “Learning, Management and Development” based on the principle of educating people to develop their knowledge and ideas to have potential and be self-reliant in all aspects. Therefore, community development is considered to develop human potential to be ready in all aspects, able to manage their own problems and needs, and be able to work together with the community and related agencies towards the ultimate goal of community development with happiness, good quality of life, strength, and sustainability.

2. Community Quality of Life in the Community

The Company emphasizes to promoting and developing the lifestyle of the community and society, serve the basic needs for good health and improving the base of well-being. In addition, it also focuses on enhancing the economic and social prosperity of the locality by applying local wisdom to create value of goods and services for the community to have sustainable income and self-reliance.

3. Conservation of Natural Resources and Environmental Stewardship

Conservation of natural resources and the environment means the wisely use of natural resources and the environment in small quantities in order to achieve maximum benefit, with regard to long use periods and least environmental damage including distribute the use of natural resources thoroughly. Nowadays, natural resources and the environment are deteriorating, consequently, the conservation of natural resources and the environment has a meaning as well as improving the quality of the environment as well.

Project Priority to the Company

1. Education Support Project

The Company supports the learning and development

of skills, knowledge, and abilities as well as participate to reducing inequality education in Thai society. Therefore, the Company focuses on supporting education activities to reduce such impacts in order to be part of the Sustainable Development Goals regard solving problems and impacts from quality education: SDG4 of the United Nations, thus established the education support project, such as providing scholarships to students in service areas, support research grants for students from various universities, transfer of knowledge and business experience, create well utilities, landscaping and environmental improvement, school building renovation, including supporting modern teaching equipment for schools in underserved and underfunded areas to be able to rely on themselves, increase their educational capacity and to develop human resource competency, as well as adapting from the rapid social changes in order to cope with the changes, especially preparing the youth for quality growth and the potential to lead the country toward long-term economic prosperity.

The Results toward Business

- Strengthen good relations and cooperation between TTW and the communities.
- Customers satisfaction survey at 95% (Compared to year 2021 increased 0.5%).
- The number of Tap Water User at 604,543 users (Compared to year 2021 increased 4%).
- Zero of communities' complaints to the company.

The Results toward Society / Environment

- The 23 schools in the service area received scholarships covering 3 provinces: Nakhon Pathom, Samut Sakhon and Pathum Thani.
- The 345 students received scholarships amount of 690,000 baht.
- The Provincial Special Education Center received lunch scholarships for 3 places, amount of 30,000 baht.
- The Bang Rakam Subdistrict Administrative Organization in Nakhon Pathom Province renovated a multi-purpose building, amount of 1 unit.



Scholarship for Students in Service Areas Project

2. Support Clean Drinking Water Project

The Company realizes the utilities system for the community as the schools and communities in the service area are still facing the shortage of clean water for consumption. Therefore, it focuses on supporting clean drinking water to reduce such impacts, to be part of the Sustainable Development Goals regard solving problems and impacts from Clean Water and Sanitation: SDG6 of the United Nations. Therefore, the Company has established a project to support clean drinking water, for example, the production of bottled water with the “RO Drinking Water” or “Reverse Osmosis System” which has been certified for the production and product by the Food and Drug Administration (FDA) since 2008 to the present, to support activities in the public interest of stakeholders or communities in the service area. Moreover, the Company has installed a drinking water filtration system for the schools in the service areas where there is a shortage of clean water for consumption, thus reducing the cost of purchasing water and being able to provide services to nearby communities, including supporting tap water to the communities surrounding the water treatment plant that lack of water for consumption during drought situations.

The Results toward Business

- Strengthen good relations and cooperation between TTW and the communities.
- Customers satisfaction survey at 95% (Compared to year 2021 increased 0.5%).
- The number of Tap Water User at 604,543 users (Compared to year 2021 increased 4%).
- Zero of communities' complaints to company.

The Results toward Society / Environment

- The communities received bottled water support amount of 439,020 bottle.
- The communities received bottled water support amount of 43 community.
- The community earns income from the production of bottled water in the amount of 248,000 Baht.
- The community received tap water support amount of 1,134 cubic meter.



Bottled Water project

3. Circular Economy Project

Due to the increasing impact of Solid waste and the shortage of global resources, the Company has realized the adoption of the circular economy as one of its sustainable development strategies including a guide for social operations and communities to be part of the Sustainable Development Goals regarding the Responsible Consumption and Production: SDG12 of the United Nations. The Company believes that the efficient use of resources in accordance with the circular economy principle is the efficient use of natural resources, reducing unnecessary waste and the shortage of resources from reuse, to create value for society in long

term. Therefore, the Company has established a circular economy project, such as establish the sludge mixed with food waste, a research in collaboration between TTW and Kasetsart University, and Laem Phak Bia Environmental Research and Development Project, due to the Royal Decree of King Rama 9 to change the behavior of Solid waste management at source, which is one of the real drivers of the circular economy, that is, Solid waste collecting and managing waste correctly and efficiently in order to bring as much waste back into the recycling process as possible, with a quality waste separation procedures to reduce the amount of contaminated Solid waste, create cooperation in the community according to the “Baworn” approach, including houses, temples, schools, with proper Solid waste management from the beginning linked to Solid waste management within the organization.

The Results toward Business

- Employees have changed their sorting behavior and littering more correctly.
- The amount of concentrated compost from food waste was 138.50 kilograms.
- The amount of food waste of the head office decreased by 605.50 kilograms.

The Results toward Society / Environment

- The 2 schools in the service area participated in the Compost, Conservation of the Land, Environment Conservation Project.



The Compost, Conservation of the Land and Environment Project

- The amount of food waste of the schools decreased by 73.56 kilograms.

4. Coping with Climate Change Project

Global warming has a wide-ranging impact on both climate change and disasters are increasingly affecting ecosystems and people's livelihoods. Therefore, the Company focuses on mitigating such impacts to be part of achieving the Sustainable Development Goals regarding Climate Action: SDG13 of the United Nations, the Company has developed a project to cope with climate change, such as;

4.1 SET's Care the Bear Project aims to reduce GHG emissions, reduce resource consumption and cost of organizing events of Thai Listed Companies. In 2022, the company refrained from organizing events with the many participants. Which has adjusted the activities to reduce the risk from the spread of COVID-19 namely, no scholarship awarding ceremony for students in the service area for year 2022 and refrained printing the 2021 Sustainability Report book for distribution to stakeholders.

4.2 The 1 Million Seedlings to Create Watershed Forests Project, It was measured the growth of trees planted in 2012 at the Thong Pha Phum National Park, Kanchanaburi Province, by random sampling for measuring the height of trees in the current year to compared with the height of the seedlings planted in 2012. The current year's trees had an average height of 292.90 centimeters, 7 times that of the seedlings planted in 2012, which had an average height of 43.10 centimeters.

4.3 GHG Emissions from Business Processes Evaluation Project with the objective of assessing GHG emissions in the operational processes. There is certification from an external agency by using the information gathered for use in planning the GHG emissions from the business operations of Company that are certified and accepted internationally.

The Results toward Business

- Foster good relations and cooperation between companies, government agencies and communities.
- Zero of forest fires enter the project area of one-million seedlings project to create watershed forests.
- Making information about the amount of GHG emissions of the Company in Scope 1 and 2 amounting to 69,429 tCO₂ e and Scope 3 in the amount of 13,626 tCO₂ e, or 0.0003 tCO₂ e per cubic meter as a guideline for reducing GHG emissions of the Company in the future.
- Received Carbon Footprint for Organization (CFO) certification from Thailand Greenhouse Gas Management Organization (Public Organization) or TGO.

The Results toward Society / Environment

- Reduce the amount of GHG emissions by 413.14 kgCO₂ e, equivalent to carbon dioxide absorption by 46 trees per year from 2 activities: reducing the printing of the 2021 Sustainability Report for distribution to stakeholders; and refrain from organizing a scholarship awarding for students in service areas for the year 2022.
- The average height of the current tree is 292.90 centimeters, 7 times compared to the height of the seedlings planted in 2012 with an average height of 43.10 centimeters.



Environmental Conservation Project

5. Water Resource Conservation Project

“Water” is an essential component of human beings and the most necessary of life, it is also the source of living, such as plants and animals, which causes abundance for all living creatures. As the country's leading tap water producer, we are committed to minimizing the impact of water shortage in both quantity and quality as part of achieving the United Nations Sustainable Development Goals (SDGS), Clean water and sanitation : SDG6. Therefore, the Company has implemented water conservation projects, such as Restore the water quality of the Bang Sue Canal to conserve the Tha Chin River project (in progress, 2022-2023).

The Results toward Business

- The number of times affected by water quality problems of the Bang Sue Canal that affected the water quality of the Tha Chin River decreased.
- Reduced cost of chemicals in tap water production per product unit.
- Good image as the country's leading tap water producer by using the Company's knowledge, expertise and experience in wastewater treatment and environmental management to develop the community toward a model and a source of learning for other communities in the future.
- The results of the satisfaction survey of the Moo 10 Community towards the project performance were at least 80% satisfaction level.

The Results toward Society / Environment

- The community makes use of the Bang Sue Canal water source in agriculture.
- The water quality of Bang Sue Canal after installing wastewater treatment equipment had an average oxygen content (DO) of more than 2 mg/l and increasing accordingly.

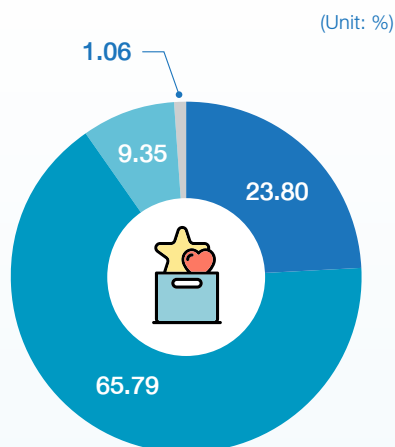


The Restore the Water Quality of the Bang Sue Canal to Conserve the Tha Chin River Project

Social Contributions and Donations

The Company provides budgets and necessities for social and environmental activities to external agencies both in the service area and outside the service area. In 2022, the Company has supported the budget for external agencies in the amount of 50,676,709.45 Baht, divided into the following categories of support:

3.1 Classify by Objectives

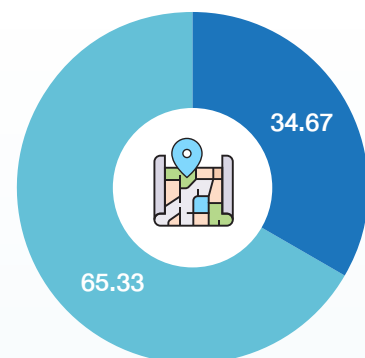


- Support the COVID-19 crisis
- General donation
- Social investment
- Environmental investment

3.2 Classify by Area

(Unit: %)

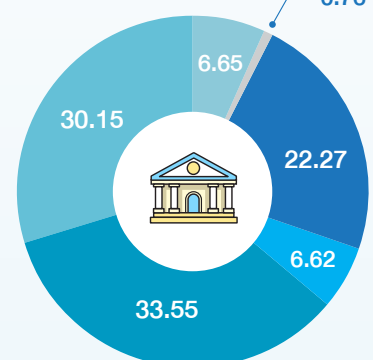
- In the three service area: (Nakhon Pathom, Samut Sakhon, and Pathum Thani)
- Outside service area



3.3 Classify by Department

(Unit: %)

- National agencies / Institutions
- Local authorities
- Hospital
- School
- Temple
- Other agencies



Business and Human Rights



Roles and Responsibilities of Human Rights Committees and Executives

The Company focuses on human rights issues that may affect business operations throughout the value chain involving stakeholders. The Company, therefore, established Human Right and Labor Policies in accordance with the UN Global Compact Universal Declaration of Human Right (UDHR), United Nation Guiding Principles on Business and Human Rights (UNGP) as the guideline and the operating framework of the Company to create confidence in conducting business with respect for human rights by establishing for the Board of Directors, executives and employees have adhered to the practice as disclosed on the website, <https://www.ttwplc.com/storage/about/policy/20220124-ttw-human-right-policy-en.pdf>. The Company established the operation goals for human rights as follow:

1. An organization model respecting human rights by encouraging and promoting in the business value chain.
2. No human rights violations both inside and outside the Company.

Employment and Respect for Human Rights

Employees are valuable to the organization, the Company has established an employment management system to ensure that employees are protected and treated fairly, resulting in a good quality of life and efficiency in their work. Therefore, Human Rights and

Labor Policies have been established and published on the company's website, as a guideline for compliance with the requirements of the Thai labor standard and labor laws, including other regulations related to continuous improvement and development of operation. In addition, the Company has established the Personal Data Protection Policy to explain about the Company's Guidelines to protect personal information and privacy of stakeholders. The Company has taken human rights issues into consideration in employment as follows.

1. Child Labor

The Company is not hiring, neither is involved nor has ever encouraged the use of child labor under the age of 15 years old, nor has it provided or encouraged the use of child labor in hazardous work or in a hazardous environment.

2. Forced Labor

The Company does not employ and encourage forced labor, such as involuntary work by means or justification for punishment or coercion, intimidation, compulsion to work, or providing services resulting in a person's work reluctantly or by putting the person in an inviolable environment.

3. Illegal Foreign Labor

The Company does not employ and does not encourage the use of unlicensed foreign workers or illegal immigration.

4. Pregnancy Labor

The Company does not allow pregnant employees to perform work that is harmful to health or physically as required by law, and provides them with work or in an environment suitable for pregnancy, including no termination of employment, reduction of position or any benefits due to pregnancy.

Human Rights Risk Assessment

1. Human rights risk assessment process

The Company places great importance on respecting human rights as a fundamental virtue of working and coexisting by promoting and supporting TTW Group to apply the principles of respecting human rights to their operations and treat stakeholders with transparency and efficiency, with a human rights risk assessment process as follows:



2. The result of human rights risk assessment

The result of human rights risk assessment in the Company's business operations revealed that, in 2022 there were no issues of human rights violations against stakeholders. However, the Company has established guidelines for prevention and measures to reduce human rights risks for stakeholders as follows:

2.1 Employee Rights

Risk Issues	Impact	Risk Reduction Measures
Occupational Health and Safety	<ul style="list-style-type: none">• Rights to good quality of life• Rights to work	<p>Safety</p> <ul style="list-style-type: none">• Provide work safety training course on hazardous chemicals, personal protective equipment as well as building environmental awareness, worker in confined space, review of the work on cranes etc.• Practice, review and safe chlorine handling as well as using of an Emergency Kit-B.• Manage emergency plan in the event of severe chlorine leakage.• Provide a chlorine vapors and leakage protection equipment. <p>Occupational health</p> <ul style="list-style-type: none">• Provide employees annual health check-up at all levels.• Provide a special health check-up for workers in high-risk areas and employees aged 35 years and over.• Group insurance against COVID-19 infection is available for employees of all levels.• Campaign for employees to vaccinate from government agencies.• Weekly tested COVID-19 before entering the workplace.

Risk Issues	Impact	Risk Reduction Measures
Right Protection and Personal Data Protection	<ul style="list-style-type: none"> • Rights to equality • Rights to be protected by law • Privacy Rights 	<p>Protection of employee rights</p> <ul style="list-style-type: none"> • There is a Human Rights and Labor Policy. • There is a process for accepting employee complains. • Treat employees with equality and fairness. <p>Personal Data Protection</p> <ul style="list-style-type: none"> • Protect employees personal data and not distributing it to third parties. • Disclosed the Personal Data Protection Policy on the Company's website. • Training employees on Personal Data Protection Act and defining the operating guideline.

2.2 Customer Rights

Risk Issues	Impact	Risk Reduction Measures
Quality of Product and Service	<ul style="list-style-type: none"> • Rights to good quality of life 	<p>Communication and Safety</p> <ul style="list-style-type: none"> • Communicate and public information about products and services continually. • Operate in accordance with the Product and Service Quality Policy.
Right Protection and Personal Data Protection	<ul style="list-style-type: none"> • Rights to equality • Rights to be protected by law • Privacy Rights 	<p>Protection of customer rights</p> <ul style="list-style-type: none"> • There is a process for accepting customers complains. • Warranty for the damages from the Company's operations to customers according to the agreement. <p>Personal Data Protection</p> <ul style="list-style-type: none"> • Disclosed the Personal Data Protection Policy on the Company's website. • Protect customers personal data and not distributing it to third parties.

2.3 Business Partner Rights

Risk Issues	Impact	Risk Reduction Measures
Fair Business Practices	<ul style="list-style-type: none"> • Comply with trade terms • Comply with the agreement fairly 	<ul style="list-style-type: none"> • There is Supplier Code of Conduct (SCOC) to assess the partner's sustainable business development in the section of Labor and Human Rights Practice, Occupational Health and Safety, and Environment disclosed on the Company's website. • There is a screening process for business partners and business alliance as required by law.

Risk Issues	Impact	Risk Reduction Measures
Right Protection and Personal Data Protection	<ul style="list-style-type: none"> • Rights to equality • Rights to be protected by law • Privacy Rights 	<p>Protection of business partner rights</p> <ul style="list-style-type: none"> • There is a process for accepting business partner complains. • Treat partners with equality and fairness. <p>Personal Data Protection</p> <ul style="list-style-type: none"> • Disclosed the Personal Data Protection Policy on the Company's website. • Protect partners personal data and not distributing it to third parties.

2.4 Community Rights

Risk Issues	Impact	Risk Reduction Measures
Quality of life, Safety and Environment	<ul style="list-style-type: none"> • Rights to be protected by law • Freedom of expression • Rights to good quality of life 	<p>Quality of life and safety</p> <ul style="list-style-type: none"> • Announce in advance before servicing water pipes. • Survey of needs and provide complaint channel. • Establish remedial measures if affected by the Company's operations. <p>Environment</p> <ul style="list-style-type: none"> • Operate according to ISO 14001: 2015 standard. • Manage waste (sludge) strictly according to the requirements of the Department of Industrial Works. • Cooperate to protect natural water resources.

2.5 Contractor Rights

Risk Issues	Impact	Risk Reduction Measures
Quality of Life and Safety	<ul style="list-style-type: none"> • Rights to be protected by law • Rights to good quality of life 	<ul style="list-style-type: none"> • Comply with the laws on safety, occupational health and working environment. • There are Quality, Environment, Occupational Health and Safety Policy of the Company. • Training and following the rules of safety at work. • Procure basic personal protective equipment appropriate to work risk.

3. Disabilities Employment or other Disadvantaged Groups

The company is aware of the disability's employment or other disadvantaged groups by complying with the Empowerment of Persons with Disabilities Act and contributing money to the Fund for Empowerment of Persons with Disabilities under Section 34. In November 2022, the Company cooperated with workers in Nakhon Pathom Province in subcontracting work for caregivers of the disabled to encourage people with disabilities to support projects of the Ministry of Social Development and Human Security that grant employers or business owners the right to subcontract work for people with disabilities or their caregivers under section 35 of the Promotion and Development of the Life of Persons with Disabilities Act B.E.2550 (2007).

Managing Human Rights Complaints and Remedies

If there is a human rights complaint, the Company is ready to listen and present in the executive meeting and provide equal treatment to those affected.

Cooperation with human rights business partners

The Company has extended its responsibility for human rights operations to its suppliers by using the Supplier Code of Conduct (SCOC) in the category of Labor and Human Rights Practices, Safety, Occupational Health and Environment, and disclosed on the website [https://](https://www.ttwplc.com/storage/about/policy/20220124-ttw-supplier-coc-en.pdf)

www.ttwplc.com/storage/about/policy/20220124-ttw-supplier-coc-en.pdf.

Human Rights Communication and Training

Human rights are fundamental human rights and freedoms that must be enjoyed with equality, equality and non-discrimination. Nowadays, human rights are a global concern, which is one of the key principles affecting business operations. Therefore, the Company aims to continuously promote communication and training on human rights to both current and new employees. In 2022, the Company encourages employees to attend training courses related to human rights as follows:

1. Human Rights throughout the Value Chain Course by the Stock Exchange of Thailand
2. How to Report on human Rights SDC Course by Thaipat Institute

In 2022, the Company and subsidiaries did not have any disputes, lawsuits or complaints between the Company and employees, stakeholders related to human rights violations and unlawful issues and the Company's Code of Conduct, which the business sector attaches importance, including establishing guidelines for operating in accordance with the principles of human rights protection covering international principles and national laws.



Environmental Sustainability Management

The environment is the responsibility of all sectors to protect toward next generations for the sustainable business growth. For this reason, the Company has determined to develop the TTW Group's environmental management system with efficiency as specified in "Environmental Quality, Occupational Health and Safety Policy" and disclosed on the website <https://www.ttwplc.com/storage/about/policy/20220124-ttw-supplier-coc-en.pdf>. applied as a guideline



for environmental management, including: ISO 14001:2015, Global Reporting Initiative (GRI).

Environmental Objectives

1. Waste sorting according to the specified containers not less than 98%	Once a Week
2. No sludge spills out to neighboring communities	Every 6 Months
3. No environmental complaints from outside communities	Once a Year
4. No lubricants or dangerous chemicals spills out	1 Time / Month
5. Results of working environment measurement comply with the law	1 Time / 6 Months
6. Safety Data Sheet (SDS) complete list of all chemicals used	1 Time / 6 Months
7. Control the rate of energy consumption <ul style="list-style-type: none"> 7.1 Tap water production and distribution system <ul style="list-style-type: none"> • Bang Len Water Treatment Plant (BLN) < 0.64 kWh/m³ • Bang Pa-In Project (BIE) < 0.20 kWh/m³ 7.2 Wastewater treatment system <ul style="list-style-type: none"> • Bang Pa-In Project (BIE) < 0.26 kWh/m³ 	1 Time / Month
8. Emergency Drills at least (per plan)	1 Time / Year

Environmentally Friendly Process of and Services

Tap Water Production without Loss of Water

The Company realizes the importance of products and services quality, along with taking into account the environmental impacts may arise from the Company's business operations, both directly and indirectly, by environmental management with ISO 14001 : 2015 systems combined with the tap water production with Zero Discharge model. In addition, the residual sludge from the tap water production process was dewatered and returned to the new production process, this means throughout the process, no wastewater is released into natural water sources. As a result, 6,663,459 cubic meters of water recycled in new production processes in 2022.

Wastewater Treatment

In addition to operating business of production and distribution tap water to the Provincial Waterworks Authority (PWA) in service areas; Nakhon Pathom, Samut Sakhon and Pathum Thani Province, the Company also operates a tap water and wastewater management business in Bang Pa-in Industrial Estate area in Ayutthaya, Amata City Industrial Estate area

in Chonburi Province and Amata City Industrial Estate area in Rayong Province. The amount of treated wastewater since 2016-2022 are as follows:

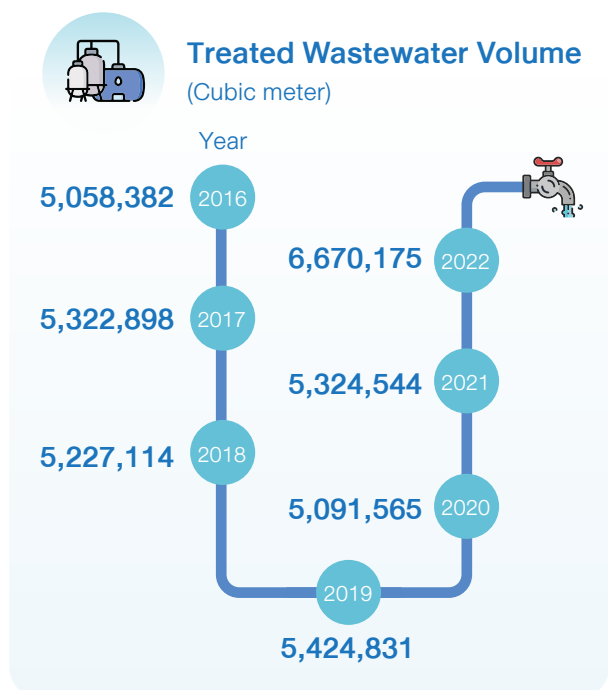
Application of Membrane Technology in Tap Water Production Processes

The Company realizes the importance of risk management from continual declining quality of raw water and may affect the Company's business operations, therefore, membrane technology was used in production process at the Krathum Baen Water Treatment Plant, Samut Sakhon Province. Membrane technology has higher filtering properties than conventional filtration and effectively removes contaminants that are pathogens such as viruses and bacteria. As a result, the quality of tap water has a better quality and can reduce the cost of using chemicals in the tap water production process.

Air Pollution Control

The Company emphasizes to air pollution control no less than other operations due to currently, air pollution affecting the people's quality of life in the community and the environment greatly, in addition to the problem of particulate matter size 2.5 microns (PM 2.5) that is now intensifying in Thailand. The Company realizes to the supervision and control of the air quality emitted to the environment and focuses on the environmental management system in accordance with the international standard ISO 14001 : 2015 without affecting the employees, contractors working in the Company's area, including the community surrounding the Company's water treatment plant and the Company's operations area in order to sustainable business operation and balance of economy, society and environment. The Company defines the air pollution control are as follows:

1. Establish an environmental quality inspection plan, for example, dust emissions from the exhaust chimneys of standby generators.
2. Establish measures and procedures for vehicle inspection from contractors or third parties entering and exiting the Company's operating area such as check the exhaust fumes and various availability conditions.



The Company is aware of the role and responsibility of air quality control even though its business processes have a slight impact on air pollution. However, the Company has established various measures to assess the air quality effectively by controlling the quality of air vented to the outside according to the law and with the least impact on the environment, society and community. In 2022, the Company has an audit of air pollution caused by the use of generators which has been certified by an external agency, Health & Envitech Co., Ltd., showing the results of air pollution monitoring as follows:

Air Pollution Detail	Standard Criteria
Total Suspended Particulate (TSP)	no more than 240 mg/m ³
Sulfur Dioxide (SO ₂)	no more than 950 ppm
Nitrogen Dioxide (NO ₂)	no more than 200 ppm
Carbon Monoxide (CO)	no more than 690 ppm

Standby Generator (71GEN01)

Bang Len Water Treatment Plant



Passed the benchmark

Standby Generator (71GEN02)

Bang Len Water Treatment Plant



Passed the benchmark

Standby Generator (93GEN01)

Mahachai Water Distribution Station



Passed the benchmark

Standby Generator (91GEN01)

Phutthamonthon Water Distribution Station



Passed the benchmark

Standby Generator (91GEN02)

Phutthamonthon Water Distribution Station



Passed the benchmark

Water Management

Water recycling

The Company realizes the risk of water resources that may affect the business operation in the future due to water resources are the main raw materials for producing tap water. The Company is committed to participate in the conservation of water resources and driving operations towards the Sustainable Development Goals (SDGs) No. 6 “Water availability and sanitation management for sustainability” by promoting the use of water resources wisely to reduce water shortages that may arise in the future.

The Company has 3 Water Treatment Plants, namely Bang Len Water Treatment Plant; Nakhon Pathom Province, Krathum Baen Water Treatment Plant; Samut Sakhon Province, and Pathum Thani Water Treatment Plant; Pathum Thani Province, using two surface water sources for the production of tap water, namely Tha Chin River and Chao Phraya River. In 2022, the Bang Len and Krathum Baen Water Treatment Plant use 149.19 million cubic meters of raw water from the Tha Chin River, the Pathum Thani Water Treatment Plant use 136.05 million cubic meters of raw water from the Chao Phraya River. The consumption of water from both water sources are as follows:

Using Water from Natural Sources	Unit	2019	2020	2021	2022	Results compared to 2021
Tha Chin River	Million cubic meters	166.02	179.75	158.34	149.19	Decreased 5.78%
Chao Phraya River	Million cubic meters	161.48	161.00	146.95	136.05	Decreased 7.42%
Total	Million cubic meters	327.50	340.75	305.29	285.24	Decreased 6.57%

In order to the most using water resources serve the corporate goals, therefore, the company has designed tap water producing system with the most efficiency water recycling in the production process by adhering Water Discharge Minimization. The sludge collection system was designed to separate the water from the sludge returning to the tap water system again, thus water from the sludge removal system or the water back wash the sand filter tank will not be wasted. The procedures are as follows:

1. Sludge balancing tank, which serves to receive sludge generated by the clarifier, the sludge collected in the pond is pumped to the sludge thickener tank.
2. The wash water tank, which serves to receive water and sludge from the back wash of the filter system, in this section; clear water separated from the sludge is pumped back into the tap water system in order to maximize the reuse of water, known as "Recovery Water". The sludge will be pumped through a pump into the sludge thickener tank.
3. Sludge dewatering system is the final system for removing water from sludge to make the sludge as dry as possible, this include recovery water is back to production again.



Goal : Water Recycling

The recycled water proportion
Not less than 2%
of the total amount of water
entering the production
process

In 2022, the Bang Len and Krathum Baen Water Treatment Plant recycle water of 2.72 million cubic meters or equivalent to 1.83% compared with the total amount of water entering the production process. The Pathum Thani Water Treatment Plant recycles water of 3.94 million cubic meters or equivalent to 2.90% compared with the total amount of water entering the production process. The recycled water proportion of Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant are as follows:

Recycled Water Proportion	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	Percent	1.07	2.05	2.30	1.83	Decreased 20.43%
Pathum Thani Water Treatment Plant	Percent	2.95	2.29	3.06	2.90	Decreased 5.23%
Average	Percent	2.01	2.17	2.68	2.36	Decreased 11.94%

Water Leakage in the Production Process

The Company realizes the risks and impacts of water leakage in the production process, which is a key issue for sustainable business operations and environmental stewardship in all activities of the Company in order to reduce the impact on society and the environment along the value chain. The Company has a systematic measure to monitor the rate of water leakage in the production process by showing as follows:

Details	Unit	2019	2020	2021	2022
1. Water leakage in the production process	Cubic meters	6,543,016	7,370,081	8,144,476	6,663,459
2. Water drained into the natural water source	Cubic meters	0	0	0	0
3. Recycled water	Cubic meters	6,543,016	7,370,081	8,144,476	6,663,459

Waste and Unused Materials Management

Sewage or Waste Material

The Company has handled sewage or waste materials in accordance with environmental management standards such as ISO 14001:2015 by preparing an operating manual regard handling sewage or waste materials with the objective of being a guideline for sewage and waste materials management in accordance with the law to prevent potential negative effects on the environment. Sewage or waste material means all sewage or waste produced by a factory operation, including waste from raw materials, waste generated in the production process, waste products of deterioration, and effluent with hazardous composition or nature.

Performance Goal

Zero of sediment leakage into neighboring communities



Zero of environmental complaints from outside communities

0

Zero of leak of lubricants or dangerous chemicals

0

Operating Procedures

1. Explore all waste within the Company.
2. Prepare waste containers according to the quantity, type and storage method, by considering the Safety Data Sheet (SDS) means a chemical safety data sheet which shows information about a chemical or chemical on its hazard and toxic nature, instruction, storage, transportation, disposal and other handling to ensure proper and safe handling of chemicals.
3. Provide containers with labels indicating the type of waste.







4. Provide training for involved employees in all departments to acknowledge the types of waste items, identification of containers, sorting and storage locations.
5. Supervise the storage and classification of waste materials and garbage in their own areas of responsibility.
6. Employees each department are responsible for moving containers, waste materials and various types of waste to be stored or disposed of in designated areas.
7. Disposal of waste and sewage or unused materials.

7.1 Disposal of waste.



7.2 Disposal of sewage or waste materials according to the notification of the Department of Industrial Works.

Type of waste	Disposal methods
 <p>Chemical containers can be returned to the seller</p>	<p>Notify the engineering procurement division, proceed to contact the seller for return.</p>
 <p>Sludge</p>	<ol style="list-style-type: none"> 1. Request permission from the Department of Industrial Works, landfill or notify to extend the period of storage, or landfill in the designated areas. 2. Sludge transported outside the plant area must inform the Department of Industrial Works for transport information every time.
 <p>Non-hazardous waste materials</p>	<ol style="list-style-type: none"> 1. Request to extend the retention period for sewage or waste materials. 2. Store in a designated place. 3. The amount of waste material is sufficient for disposal. The Company must contact the certified company by the Department of Industrial Works. 4. Request permission to transport sewage or waste materials outside the plant. 5. Waste materials transported outside the plant area must inform the Department of Industrial Works for transport information every time. 6. Submit the annual report to the Department of Industrial Works according to the notification about details of sewage or waste materials by March 1 of the following year.
 <p>Hazardous waste materials (Hazardous waste)</p>	<ol style="list-style-type: none"> 1. Request to extend the retention period for sewage or waste materials. 2. Store in a designated place. 3. The amount of waste material is sufficient for disposal. The Company must contact the certified company by the Department of Industrial Works. 4. Request permission to transport sewage or waste materials outside the plant. 5. Waste materials transported outside the plant area must inform the Department of Industrial Works for transport information every time. 6. Submit the annual report to the Department of Industrial Works according to the notification about details of sewage or waste materials by March 1 of the following year.

Hazardous waste management measures

The Company has created an environmental management system (ISO 14001:2015) on "Handling of Waste or Unused Materials" according to the manual, which states that "Hazardous waste" means waste or unused materials that have components or contaminated with hazardous substances or possessing hazardous properties, waste hazardous to living creatures and environment, such as fluorescent tube, thinner cans, batteries, oil-stained rags, chemical adsorbent, lubricating oil, foam boxes, and containers of various hazardous substances. The hazardous waste

management procedures are specified as follows:

1. Unused materials after 90 days of storage must be requested to extend the storage period of waste or unused materials to the Department of Industrial Works.
2. Store at designated location.
3. When the amount of hazardous waste is sufficient for disposal, contact an agency licensed by the Department of Industrial Works for proper disposal.
4. Ask for permission for unused waste to leave the factory.

5. When waste or unused material is taken out of the factory area, information on the transportation of hazardous waste must be reported to the Department of Industrial Works every time.
6. Submit annual reports to industrial factories by March 1 of the following year.

Infectious waste means waste resulting from human diagnostic treatment or the use of laboratory animals. It is any substance or object that is not used or cannot be used that contains or is contaminated with pathogenic substances, such as waste of COVID-19 test. The process of infectious waste management is specified as follows:

1. In case no infection is found

- 1.1 Dispose of such waste in closed infectious waste bins, clearly labeled according to international standards, with a red plastic bag stacked inside. If there is no red bag, there must be a message "Infectious waste" on the packaging bag.
- 1.2 When the garbage is full, tie the bag tightly and completely.
- 1.3 Collected in a temporary storage (Garbage storage), clearly labeled for disposal by an authorized outside contractor.

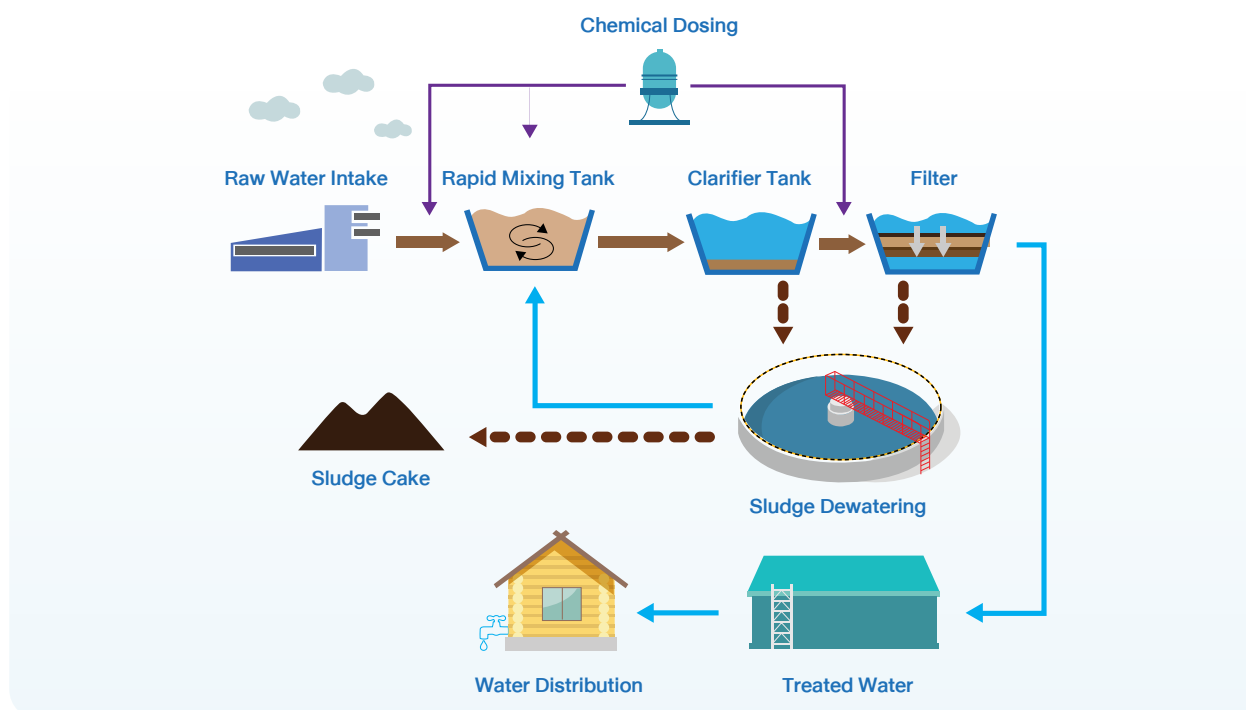
2. In case an infected person or a high-risk person is found

- 2.1 Follow item 1 in case no infection is found and uses alcohol to disinfect.
- 2.2 Tie the bag tightly.
- 2.3 Stacked with another red bag and tied the bag tightly. If there is no red bag, there must be a message "Infectious waste" on the packaging bag.
- 2.4 Collected in a temporary storage (Garbage storage), clearly labeled for disposal by an authorized outside contractor.

Performance

1. Sludge

The Company regards to the waste management from water production process, the objective is waste management for maximum efficiency and reduce the cost of outsourcing. The waste management methods are appropriate or develop in to products. Sludge is classified as non-hazardous wastes from tap water production processes and the amount of non-hazardous wastes in this report is the result of operations from the Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant.



The Company is committed to conducting business without any negative impact on the environment by engaging with communities and related agencies in environmental stewardship as well as adding value to waste from water production processes, it can be seen that the wastes generated from tap water process contains only the sludge obtained from the clarifier and backwash process of the sand filter tank. In 2022, the Bang Len and Krathum Baen Water Treatment Plant have 18,765 tons of sludge generated from the tap water production process; the Pathum Thani Water Treatment Plant has 20,016 tons of sludge generated from the tap water production process, which are shown in the table as follows:

Quantity	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	Tons	13,683	18,677	21,986	18,765	Decreased 14.65%
Pathum Thani Water Treatment Plant	Tons	11,838	9,909	9,280	20,016	Increased 115.69%
Total	Tons	25,521	28,586	31,266	38,781	Increased 24.04%

2. Solid Waste

The Company has sorted solid waste according to the environmental management standard ISO 14001:2015. The summary of waste separation and disposal or use in 2022 in 3 locations, consisting of Bang Len Krathum Baen and Pathum Thani Water Treatment Plant are as follows:

Type of Solid Waste	Amount (Kg)	Percent (%)
General waste	6,688	36.56%
Recycle waste	7,022	38.39%
Hazardous waste	4,583	25.05%
Total	18,293	100%

Disposal methods	Amount (Kg)	Percent (%)
Disposal agencies	420	4.15%
Local authorities	9,691	95.85%
Total	10,111	100%

Remark: The amount of solid waste waiting to be disposed of according to the period amounted of 8,182 kilograms

“Composting from the Automatic Food Waste Disposal Machine Project”

Most of the full-time employees at the Company’s head office bring their own food, resulting in approximately 2-3 kilograms of food waste each day, all of which is thrown in municipal government bins. This increases the burden on the authorities to dispose of food waste, causing waste in the use of waste and messing with municipal government waste sorting.

The Sustainability Development Section therefore had the idea of composting project from the automatic food waste disposal machine, resulting the reduction in the amount of food waste in municipal bins, and increased employee participation in waste separation. The resulting compost is concentrated with nutrients suitable for the maintenance of flowering plants and ornamental plants within the Company's head office.



Using the food waste to compost

A Performance Comparison Before – After

Details	2021	2022	Results compared to 2021
The amount of food waste used for composting	2.90 Kg / Day	1.66 Kg / Day	Decreased 42.76%
The amount of concentrated compost	0.70 Kg / Day	0.38 Kg / Day	Decreased 45.71%

Remark: The amount of food waste and compost decreased continually came from the eating behavior of employees had changed due to the decreased in the spread of COVID-19.

3. Wastewater

The Company recognizes the conservation of water resources because water is essential to our livelihood and is used in the production of tap water. In order to prevent the activities of the Company's business processes from polluting or affecting the quality of water resources, the Company strictly complies with the requirements of relevant laws, categorizing the Company's wastewater into two types include; wastewater from water use within the office and from other activities within the water treatment plant by establishing a wastewater quality inspection plan before draining to the outside once a year.

Bang Len Water Treatment Plant

Details	2019	2020	2021	2022
The results of the wastewater quality analysis	Qualified	Qualified	Qualified	Qualified

Pathum Thani Water Treatment Plant

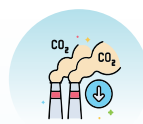
Details	2019	2020	2021	2022
The results of the wastewater quality analysis	Qualified	Qualified	Qualified	Qualified

In 2022, the results of the analysis of Banglen and Pathum Thani water treatment plants were qualified the standards according to the notification of the Ministry of Industry regarding the determination of the standard for controlling the wastewater from the plants, by virtue of Article 14 of the Ministerial Regulation, No. 2 B.E.2535 (1992) issued under the Factory Act, B.E.2535 (1992) published in the Government Gazette, Volume 134, Special Part 153 Ngor, on June 7, 2017.

Climate Change and Energy Conservation

Greenhouse Gas Emissions

In 2022, the Company has conducted "The Greenhouse Gas Emission Assessment from the Business Process Project" covering 3 scopes, namely GHG emissions from direct business processes (Scope 1), GHG emissions from indirect business processes from energy use (Scope 2), and GHG emissions from other indirect business processes (Scope 3). The Company hires a consultant whose name is registered with Thailand Greenhouse Gas Management Organization (Public Organization) or TGO is Green Style Co., Ltd. to assess and prepare a report on the amount of GHG emissions of the Company, with a data collection period from October 1, 2021 to September 30, 2022, period 12 month, which has been verified by the Greenhouse Gas Management Certification Unit, University of Phayao and has been certified for the Carbon Footprint for Organization (CFO) by the TGO. The current year's CFO value is 69,429 tCO₂e/year since it is operating for the first year, and the amount of carbon dioxide emissions equivalent per unit of product (Carbon intensity) in Scope 1 and 2, the base year is 0.0003 tCO₂e/m³, and the current year is 0.0003 tCO₂e/m³.



Goal : Greenhouse Gas Emissions (Scope 2)

GHG emission proportion of the Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant

Decrease not less than 0.03%
For the period 2022-2025

In the past, the Company has only assessed GHG emissions from electricity consumption (Scope 2) as it has the highest proportion of GHG emissions (99.40%) compared to other GHG emission sources. In 2022, the Company has applied the consultant's GHG emission assessment model to calculate GHG emissions in Scope 2, retrospectively from 2019 onwards, with a 12-month data collection cycle starting from January - December of every year to be used to compare the amount of GHG emissions in Scope 2 of the Company, covering all 3 water treatment plants, namely; Banglen Water Treatment Plant, Nakhon Pathom Province, Kratumban Water Treatment Plant, Samut Sakhon Province, and Pathum Thani Water Treatment Plan, Pathum Thani Province. In 2022, Banglen Water Treatment Plant and Kratumban Water Treatment Plant had GHG emissions in Scope 2 of 41,772 tCO₂e, with a decreased of 18.27% from 2021 and Pathum Thani Water Treatment Plan had GHG emissions in Scope 2 of 29,396 tCO₂e. The ratio decreased from 2021 by 4.26%, which shows the amount of GHG emissions in Scope 2 as in the following table:



GHG Emission in 2022
at (Scope 1 and 2)
At **69,429** tCO₂e

The Amount of GHG Emission in Scope 2	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	tCO ₂ e	50,596	56,296	51,108	41,772	Decreased 18.27%
Pathum Thani Water Treatment Plant	tCO ₂ e	35,722	35,135	30,705	29,396	Decreased 4.26%
Total	tCO₂e	86,318	91,431	81,813	71,168	Decreased 13.01%

GHG Emission Rate per Product Unit in Scope 2	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	Kg.CO ₂ e / m ³	0.305	0.339	0.333	0.294	Decreased 11.71%
Pathum Thani Water Treatment Plant	Kg.CO ₂ e / m ³	0.240	0.229	0.222	0.220	Decreased 0.90%
Average	Kg.CO₂e / m³	0.274	0.287	0.281	0.258	Decreased 8.19%

Energy Conservation

Energy is essential cost in the business and manufacturing processes of various industries; energy use creates the climate change impact of global GHG emissions by focusing on the Sustainable Development Goals regarding Affordable and clean energy: SDG7 and Climate Action: SDG13 to reduce the impact of energy use and GHG emissions.

Energy Conservation Policy

The Company realizes the importance of energy conservation which is essential for activities or operations. Therefore, the Company has formulated energy conservation guidelines for employees within the organization to participate in energy conservation operations and act in the same direction towards sustainable development; reduce the Company expenses energy-saving according to government policies.

1. The Company has developed an appropriate energy management system by requiring energy conservation to be a part of its operations in accordance with applicable laws and other requirements.
2. The Company continually improves the efficiency of the organization's energy resource utilization and is well suited to its business, technology used and good practice.
3. The Company establishes energy conservation plans and goals each year with appropriate energy reduction and communicates them to all employees to understand and act correctly.
4. The Company regards energy conservation as the responsibility of the owners, executives and employees at all levels who cooperate in complying with the established standards, monitor and report to the Energy Management Working Group.
5. The Company will provide the necessary support, including: human resources, budget, working hour, training and participation in providing ideas to improve energy work.
6. The Executives and Energy Management Working Groups has annually reviewed and update energy policies, goals, and plans.



The Company has measures to control electricity usage to reduce the amount of GHG emission from the electricity consumption rate as follows:

- Management, operation of the production system, and pumping and delivering tap water at an appropriate energy consumption rate.
- Improvement of machinery efficiency of Pathum Thani Water Treatment Plant.
- Pathum Thani Water Treatment Plan improve the level of the valve cover and air valve along the water supply pipeline, including the improvement of the water intake hole into the tap water tank of the Rangsit Water Treatment Plan (R-2) to increase the efficiency of tap water.

The aforementioned measures are continually monitored to ensure that the energy consumption and GHG emission rates of Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant, can be effectively controlled.

In 2022, the Company's electricity consumption in the tap water production process of Bang Len and Krathum Baen Water Treatment Plant amounted to 81,843,743 kWh or 0.577 kWh/m³ Pathum Thani Water Treatment Plant amounted to 58,179,668 kWh or 0.436 kWh/m³ showing the information as follows:



Goal : Electricity Consumption

The electricity consumption at the Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant

Decrease not less than 1%

For the period 2022-2025

The Amount of Electricity Consumption	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	GWh	101.21	112.62	102.24	81.84	Decreased 19.95%
Pathum Thani Water Treatment Plant	GWh	71.46	70.28	61.42	58.18	Decreased 5.28%
Total	GWh	172.67	182.90	163.66	140.02	Decreased 14.44%

The Electricity Consumption Rate per Product Unit	Unit	2019	2020	2021	2022	Results compared to 2021
Bang Len and Krathum Baen Water Treatment Plant	kWh/m ³	0.611	0.679	0.667	0.577	Decreased 13.49%
Pathum Thani Water Treatment Plant	kWh/m ³	0.480	0.459	0.445	0.436	Decreased 2.02%
Average	kWh/m³	0.546	0.569	0.556	0.507	Decreased 8.81 %

In 2022, the Bang Len, Krathum Baen and Pathum Thani Water Treatment Plants have decreased water demand in the area, together with effective control over the production, distribution of tap water. The energy consumption is therefore significantly reduced.

Solar Rooftop System

In 2018, The Company has installed a Solar Rooftop system on a clear water tank at the Bang Len Water Treatment Plant, Nakhon Pathom Province with the objective to reduce the amount of electricity consumption and GHG emission from business operations. The Company has the potential in the area where a solar rooftop system can be installed on a clear water tank with a total installed capacity of 3,471 MWdc which is capable of generating electricity of 4,236,395 kWh / year, which is approximately 17,893,565 Baht / year this includes decreasing in the GHG emission of 2,398 tCO₂e / year. The investment is about 187 million Baht, which takes about 10.5 years to pay back. In the feasibility study report on the Solar Rooftop installation project, the hypothesis of installing a Solar Rooftop on a clear water tank of Banglen Water Treatment Plant was

used as a prototype by studying information on solar power generation, technology, cost and, expenses to assess the feasibility of the project together with financial analysis.



In 2022, the amount of electricity generated from the Solar Rooftop system is
4,387,643 kWh

The performance in 2022 is able to generate electricity from the Solar Rooftop system totaling 4,387,643 kWh and reduced GHG emission of 2,158 tCO₂e.

System Solar Rooftop	Unit	2019	2020	2021	2022	Results compared to 2021
The amount of electricity from the Solar Rooftop system	kWh	5,329,481	4,367,503	4,235,331	4,387,643	Increased 3.60%
Reduce Greenhouse Gas Emission	tCO ₂ e	2,664	2,183	2,117	2,158	Increased 1.94%

Biodiversity

Biodiversity is the existence of various organisms on the planet, whether it is the existence of plants, animals, bacteria, fungi or humans, all inhabiting their specific habitats in regions around the world, live within a healthy ecosystem, the diverse climates and environments from accumulation, improvement, transformation, and evolution to survival over the course of many years have resulted in the persistence of differences in each species of organisms. These have become essential elements and fundamentals of the nature and ecosystems of the world.

Tap Water Production Process

In the past, the Company's business operations did not have a significant negative impact on the natural organisms. The Company using raw water from two natural water sources for tap water production, namely the Tha Chin River and the Chao Phraya River which is full of aquatic animals and others, it is inevitable that pumping raw water into the tap water process does not affect these organisms. The company has installed a fine grating of 1 x 1 cm in width in the raw water pumping area to prevent aquatic animals are pumped in to the production process. In addition, the tap water production with Zero Discharge model by the residual sludge from the tap water production process was dewatered and returned to the new production process, this means throughout the process, no wastewater is released into natural water sources.

Watershed Stewardship

In 2018, the Company has delivered 1,000,000 planted trees in an area of 5,000 Rais in the degraded forest area of Thong Pha Phum National Park, Pilok, Thong

Pha Phum, Kanchanaburi Province to the Department of National Parks, Wildlife and Plant Conservation (DNP) for 7 consecutive years. Although the reforestation has been completed and it has been handed over to the relevant authorities, the Company continues to monitor the growth of the trees, forest fire surveillance, and continuously went to the area to measure the height of the trees planted with DNP officials, the objective for achieving the 1 Million Seeding to Create Watershed Forests Project "Afforestation Get Forest" in order to preserve the watershed forest of the Mae Klong River that has branched out into the Tha Chin River which the Company uses in the tap production process. In 2020-2021, the Company suspended visiting the area due to the COVID-19 situation; there has been coordination with the authorities regularly.

In 2022, the Company cooperated with Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation conducted fieldwork monitoring the growth of the trees planted in 2012 under the 1 Million Seedlings to Create Preserve Forest Project that by randomly measuring the height of trees planted in 2012, which had an average height of 292.90 centimeters., comparing the height of the current year's trees with the height of the seedlings planted in 2012, it was found that the height was 7 times.



Environment Cooperation between Organizations

Engage with External Agencies

The Company cannot operate for business sustainability in the long term. If there is no cooperation from the community and relevant agencies in the area. In the past, the Company has participated for the planning and preparation of energy conservation projects and conserve natural resources and environment in cooperation with external agencies as follows:

1. The Company collaborates with We Love Tha Chin River Club, Nakhon Pathom Province by attending a monthly meeting to acknowledge the problem and jointly solve the problem of the Tha Chin River, promote awareness of water saving and conservation of water resources in the community continuously for more than 10 years. In 2022, the Company has participated in the “Beautiful trees, Clean water, Bright life” project, the National Youth Day activities, and the National Canal Conservation Day for the year 2022, including attending the meeting at the end of 2022 with We Love Tha Chin River Club, Nakhon Pathom Province.
2. The Company collaborates with the Faculty of Environment, Kasetsart University and Laem Phak Bia Environmental Research and Development Project. By using sludge research results, ie compost, to make compost from sludge mixed with organic waste for Thairath Wittaya 4 School and Wat Sukwattanaram School, Nakhon Pathom Province.
3. The Company together with Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation monitored the growth of trees planted in 2012 under 1 Million Seeding to Create Watershed Forests Project at Thong Pha Phum National Park, Thong Pha Phum, Kanchanaburi Province.
4. The Company cooperated with Raikhing Municipality, the Environment and Pollution Control Office 5, the Phasi Charoen Water Transmission and Maintenance Project, the Regional Irrigation Office 11 organized

a project “Restore the Water Quality of the Bang Sue Canal to Conserve the Tha Chin River”. In 2022, there was a Memorandum of Understanding (MOU) signing ceremony between 4 agencies, with a training course on the topic “Restoring Quality of Bang Sue Canal” such as waste sorting, composting and the installation of grease traps for surveyed community representatives and entrepreneurs along the Bang Sue Canal, including collecting water samples at Bang Sue Canal for analysis of water quality on a monthly basis until it is officially delivery to Raikhing Municipality. For the 2023 plan, grease traps will be installed for community representatives and entrepreneurs in 24 households, along with installing equipment to improve water quality and landscape improvement of Bang Sue Canal, as well as conduct a community satisfaction survey after completion; then hand over this project to Raikhing Municipality for further stewardship.

5. The Company has established “The Greenhouse Gas Emission Assessment from the Business Process Project” by hiring a consultant from Green Style Co., Ltd. to preparing a report on the amount of GHG emissions of the Company, including being verified by the Greenhouse Gas Management Certification Unit, University of Phayao. The Company has been certified for Carbon Footprint for Organization (CFO) from Thailand Greenhouse Gas Management Organization (Public Organization) or TGO.



Employee Engagement

The Company supports and promotes employees' participation in environmental stewardship activities with the aim of raising employees to realize the importance of environmental management within the organization such as the big cleaning day activities, waste sorting, and composting from sludge mixed with fresh waste within the head office with cooperation from employees at all levels regularly participate in activities.

Environmental Compliance

The Company realizes the importance of conducting business with environmentally friendly and adheres fully comply with the conditions and requirements set forth in the law.

Performance Goal

The Company aware of environmental management along with business operations by establishing an environmental management system (ISO 14001:2015) with the goal of internal auditing at least once a year in order to raise awareness and audit environmental management system for employees.

Operation

The Company followed up within the ISO 14001:2015

system from December 14, 2021 - January 18, 2022 by considering and appointing a competent person to act as an internal auditor from the environmental management department. In 2022, there is one internal audit of the ISO 14001:2015 system, the results meet the target, effectively preventing non-compliance with environmental laws.

Performance

The Company was certified for environmental management system (ISO 14001:2015) by SGS (Thailand) Co., Ltd. on 17 May, 2022. The performance in 2022, was examined on March 27-30, 2022. There were no serious issues or processes that did not comply with environmental laws.



Environmental Law Violations

Detail	Unit	2019	2020	2021	2022
Violation	Case/Subject	0	0	0	0
Fine	Baht	0	0	0	0

2022 Performance Summary

Economic Performance

Economic success

Detail	2018	2019	2020	2021	2022	Unit
Net gross income	5,948,536,254	6,165,591,032	6,203,116,678	5,822,385,785	5,704,859,938	Baht
EBITDA	4,910,525,378	5,269,752,426	5,098,231,739	5,249,403,981	5,137,054,010	Baht
Net profit	2,860,903,791	3,147,333,971	2,971,811,031	3,119,974,681	2,978,774,010	Baht
Earnings per share	0.71	0.78	0.74	0.78	0.74	Baht
Return on assets	12.26	3.59	12.92	13.76	13.54	%
Return on Equity	23.14	23.98	22.16	22.37	20.58	%

Value Distribution to Shareholders

Detail	2018	2019	2020	2021	2022	Unit
Dividends to shareholders (only in the first half of 2022)	2,394,000,000	2,394,000,000	2,394,000,000	2,394,000,000	1,197,000,000	Baht
Dividend per share (only in the first half of 2022)	0.60	0.60	0.60	0.60	0.30	Baht / Share

TTW's Investment Value and Subsidiaries

Unit : Million Baht

Detail	2018	2019	2020	2021	2022
Utilities investment and other support	20.89	140.07	431.49	157.44	158.89

TTW's Other Economic Value

Unit : Baht

Detail	2018	2019	2020	2021	2022
Financial cost	371,677,534	304,542,661	274,534,160	249,486,104	168,726,157
Tax payment to the Government	616,091,619	696,977,417	685,387,474	650,959,542	656,537,396

Tap Water Distribution of TTW and PTW

Unit : Million m³

Detail	2018	2019	2020	2021	2022
Nakhon Pathom - Samut Sakhon area	158.30	166.10	165.85	153.27	141.88
Pathum Thani - Rangsit area	145.90	148.90	153.12	138.03	133.54
Total	304.20	315.00	318.97	291.30	275.42

Tap Water User of TTW and PTW

Unit : User

Detail	2018	2019	2020	2021	2022
Nakhon Pathom - Samut Sakhon area	183,853	193,903	203,225	211,504	220,235
Pathum Thani - Rangsit area	335,324	345,683	356,351	369,273	384,308
Total	519,177	539,586	559,576	580,777	604,543

Customer Satisfaction Survey of TTW and PTW

Unit : Percent

Detail	2018	2019	2020	2021	2022
Nakhon Pathom - Samut Sakhon area	95	98	97	95	94
Pathum Thani - Rangsit area	96	99	96	94	96
Average	95.50	98.50	96.50	94.50	95

Social Performance

Value of Investment in Personnel of TTW and Subsidiaries

Unit : Million Baht

Detail	2018	2019	2020	2021	2022
Employee Compensation (salary and bonus)	113.93	122.85	124.44	122.44	133.33
Executive Compensation (salary and bonus)	26.10	26.57	25.50	29.52	32.30
Total	140.03	149.42	149.94	151.96	165.53

Value of Investment in Community and Society of TTW and Subsidiaries

Unit : Baht

Detail	2018	2019	2020	2021	2022
Community donation and development	6,468,125.60	15,371,569.54	25,178,964.52	31,345,673.51	50,676,709.45

Employee Information

All Employee

Unit : Person

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	267	268	270	270	265
	Female	54	56	58	58	58
	Total	321	324	328	328	323
Classify by age						
Not over 30 years	Male	65	69	63	62	48
	Female	10	10	10	10	6
	Total	75	79	73	72	54
30 - 39 years	Male	100	99	97	98	75
	Female	22	23	26	26	24
	Total	122	122	123	124	99
40 - 49 years	Male	77	75	85	86	101
	Female	16	16	13	13	15
	Total	93	91	98	99	116
Above 50 years	Male	25	26	25	24	41
	Female	6	6	9	9	13
	Total	31	32	34	33	54
Classify by position						
Chief Executive (Division Director and above)	Male	4	4	4	5	6
	Female	2	2	2	2	3
	Total	6	6	6	7	9
Executive, Middle Level (Department Manager)	Male	7	7	7	6	4
	Female	5	5	5	5	5
	Total	12	12	12	11	9
Executive, Primary Level (Section Manager)	Male	13	12	10	9	9
	Female	11	11	11	11	10
	Total	24	23	21	20	19
Employee	Male	243	245	249	250	246
	Female	36	38	40	40	40
	Total	279	283	289	290	286

Detail	Gender	2018	2019	2020	2021	2022
Classify by business area						
Nakhon Pathom	Male	106	103	104	105	101
	Female	42	43	44	44	44
	Total	148	146	148	149	145
Samut Sakhon	Male	33	35	35	35	29
	Female	2	2	2	2	2
	Total	35	37	37	37	31
Pathum Thani	Male	53	52	51	51	54
	Female	5	5	6	6	6
	Total	58	57	57	57	60
Chonburi	Male	38	41	41	40	36
	Female	1	2	2	2	2
	Total	39	43	43	42	38
Rayong	Male	16	15	16	16	22
	Female	0	0	0	0	0
	Total	16	15	16	16	22
Ayutthaya	Male	21	22	23	23	23
	Female	4	4	4	4	4
	Total	25	26	27	27	27

New Employee

Unit : Person

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	25	18	9	5	10
	Female	4	2	3	3	1
	Total	29	20	12	8	11
Classify by age						
Not over 30 years	Male	13	8	6	3	8
	Female	4	1	2	3	1
	Total	17	9	8	6	9

Detail	Gender	2018	2019	2020	2021	2022
30 - 39 years	Male	9	10	3	1	2
	Female	0	1	1	0	0
	Total	9	11	4	1	2
40 - 49 years	Male	3	0	0	0	0
	Female	0	0	0	0	0
	Total	3	0	0	0	0
Above 50 years	Male	0	0	0	1	0
	Female	0	0	0	0	0
	Total	0	0	0	1	0
Classify by position						
Chief Executive (Division Director and above)	Male	0	0	0	1	0
	Female	0	0	0	0	0
	Total	0	0	0	1	0
Executive, Middle Level (Department Manager)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Total	0	0	0	0	0
Executive, Primary Level (Section Manager)	Male	1	1	1	0	0
	Female	0	0	0	0	0
	Total	1	1	1	0	0
Employee	Male	24	17	8	4	10
	Female	4	2	3	3	1
	Total	28	19	11	7	11
Classify by business area						
Nakhon Pathom	Male	8	5	2	4	4
	Female	0	0	3	3	1
	Total	8	5	5	7	5
Samut Sakhon	Male	6	2	1	0	1
	Female	0	0	0	0	0
	Total	6	2	1	0	1

Detail	Gender	2018	2019	2020	2021	2022
Pathum Thani	Male	4	1	1	0	1
	Female	0	1	0	0	0
	Total	4	2	1	0	1
Chonburi	Male	7	4	0	1	1
	Female	0	1	0	0	0
	Total	7	5	0	1	1
Rayong	Male	2	5	4	0	1
	Female	0	0	0	0	0
	Total	2	5	4	0	1
Ayutthaya	Male	2	1	1	0	2
	Female	0	0	0	0	0
	Total	2	1	1	0	2

Internally Recruited Employees to Hold Vacancies

Unit : Person

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	12	2	3	3	0
	Female	3	1	0	0	0
	Total	15	3	3	3	0
Classify by age						
Not over 30 years	Male	3	0	0	1	0
	Female	1	0	0	0	0
	Total	4	0	0	1	0
30 - 39 years	Male	4	0	3	0	0
	Female	1	1	0	0	0
	Total	5	1	3	0	0
40 - 49 years	Male	4	2	0	1	0
	Female	1	0	0	0	0
	Total	5	2	0	1	0

Detail	Gender	2018	2019	2020	2021	2022
Above 50 years	Male	1	0	0	1	0
	Female	0	0	0	0	0
	Total	1	0	0	1	0
Classify by position						
Chief Executive (Division Director and above)	Male	1	0	0	1	0
	Female	0	0	0	0	0
	Total	1	0	0	1	0
Executive, Middle Level (Department Manager)	Male	2	1	0	0	0
	Female	1	0	0	0	0
	Total	3	1	0	0	0
Executive, Primary Level (Section Manager)	Male	0	1	2	1	0
	Female	1	1	0	0	0
	Total	1	2	2	1	0
Employee	Male	9	0	1	1	0
	Female	1	0	0	0	0
	Total	10	0	1	1	0
Classify by business area						
Nakhon Pathom	Male	2	0	1	2	0
	Female	2	1	0	0	0
	Total	4	1	1	2	0
Samut Sakhon	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Total	0	0	0	0	0
Pathum Thani	Male	0	2	0	0	0
	Female	0	0	0	0	0
	Total	0	2	0	0	0
Chonburi	Male	10	0	1	1	0
	Female	0	0	0	0	0
	Total	10	0	1	1	0

Detail	Gender	2018	2019	2020	2021	2022
Rayong	Male	0	0	1	0	0
	Female	0	0	0	0	0
	Total	0	0	1	0	0
Ayutthaya	Male	0	0	0	0	0
	Female	1	0	0	0	0
	Total	1	0	0	0	0

Employee Resignation

Unit : Person

Detail	Gender	2017	2018	2019	2020	2021	2022
Classify by gender							
	Male	26	23	10	5	1	14
	Female	1	7	-	2	2	3
	Total	27	30	10	7	3	17
Classify by age							
Not over 30 years	Male	5	5	2	2	1	5
	Female	0	2	0	1	2	1
	Total	5	7	2	3	3	6
30 - 39 years	Male	12	12	4	3	0	5
	Female	0	4	0	1	0	1
	Total	12	16	4	4	0	6
40 - 49 years	Male	4	5	4	0	0	1
	Female	1	1	0	0	0	0
	Total	5	6	4	0	0	1
Above 50 years	Male	5	1	0	0	0	3
	Female	0	0	0	0	0	1
	Total	5	1	0	0	0	4
Classify by position							
Chief Executive (Division Director and above)	Male	0	1	0	0	0	0
	Female	0	0	0	0	0	0
	Total	0	1	0	0	0	0

Detail	Gender	2017	2018	2019	2020	2021	2022
Executive, Middle Level (Department Manager)	Male	5	1	0	0	0	0
	Female	0	0	0	0	0	0
	Total	5	1	0	0	0	0
Executive, Primary Level (Section Manager)	Male	2	2	4	1	0	0
	Female	1	2	0	0	0	0
	Total	3	4	4	1	0	0
Employee	Male	19	19	6	4	1	14
	Female	0	5	0	2	2	3
	Total	19	24	6	6	3	17
Classify by business area							
Nakhon Pathom	Male	17	10	7	4	1	2
	Female	0	6	0	0	2	2
	Total	17	16	7	4	3	4
Samut Sakhon	Male	0	0	1	0	0	3
	Female	0	0	0	0	0	0
	Total	0	0	1	0	0	3
Pathum Thani	Male	3	3	0	0	0	3
	Female	1	0	0	0	0	1
	Total	4	3	0	0	0	4
Chonburi	Male	3	3	1	1	0	3
	Female	0	6	0	0	0	0
	Total	3	9	1	1	0	3
Rayong	Male	2	0	1	2	0	2
	Female	0	0	0	0	0	0
	Total	2	0	1	2	0	2
Ayutthaya	Male	1	1	0	0	0	1
	Female	0	1	0	0	0	0
	Total	1	2	0	0	0	1

Detail	Gender	2017	2018	2019	2020	2021	2022
Employees Resigned Voluntarily							
Classify by gender	Male	26	23	10	5	1	14
	Female	1	7	0	2	2	3
	Total	27	30	10	7	3	17
Employee ratio total resignation (percent)	-	100	100	100	100	100	100

Employee Maternity Leave

Unit : Person

Detail	2018	2019	2020	2021	2022
Maternity Leave					
NaKhon Pathom	3	2	2	1	0
Samut Sakhon	0	0	1	0	0
Pathum Thani	0	0	1	0	0
Chon Buri	0	0	0	0	0
Rayong	0	0	0	0	0
Ayutthaya	0	1	0	0	0
Total	3	3	4	1	0

Unit : Percent

Detail	2018	2019	2020	2021	2022
Employee back to work after Maternity Leave					
NaKhon Pathom	100	100	100	100	-
Samut Sakhon	-	-	100	-	-
Pathum Thani	-	-	100	-	-
Chon Buri	-	-	-	-	-
Rayong	-	-	-	-	-
Ayutthaya	-	100	-	-	-
Total	100	100	100	100	-

Personnel development

Training hour

Unit : Hour

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	3,712	3,768	2,636	2,544	4,788
	Female	1,007	730	541	729	1,329
	Total	4,719	4,498	3,177	3,273	6,117
Classify by position						
Executive (Section Manager and above)	Male	925	495	309	157	331.50
	Female	432	252	193	221	370.50
	Total	1,357	747	502	378	702
Employee	Male	2,378	2,456	1,985	2,387	4,456.50
	Female	984	1,295	690	508	958.50
	Total	3,362	3,751	2,675	2,895	5,415
Classify by course						
Professional Course	Male	1,645	1,590	1,084.50	456	1,667
	Female	808	433	270.50	381	801
	Total	2,453	2,023	1,355	837	2,468
Vocational Course (Optional)	Male	410	386.50	102	75	157
	Female	52	26.50	33	39	135
	Total	462	413	135	114	292
Safety Course	Male	1,657	1,791.50	1,449.50	2,013	2,964
	Female	147	270.50	237.50	309	393
	Total	1,804	2,062	1,687	2,322	3,357
Average training hour (Hour/Person)	-	15	14	10	10	19

Trainee

Unit : Person

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	198	220	174	226	225
	Female	49	43	45	48	54
	Total	247	263	219	274	279

Detail	Gender	2018	2019	2020	2021	2022
Classify by position						
Executive (Section Manager and above)	Male	23	14	15	17	18
	Female	12	10	12	19	16
	Total	35	24	27	36	34
Employee	Male	187	195	154	201	209
	Female	25	44	38	37	36
	Total	212	239	192	238	245
Classify by course						
Professional Course	Male	98	92	48	50	61
	Female	30	25	21	22	20
	Total	128	117	69	72	81
Vocational Course (Optional)	Male	12	7	8	11	14
	Female	5	2	4	11	4
	Total	17	9	12	22	18
Safety Course	Male	88	121	118	165	163
	Female	14	16	20	15	17
	Total	102	137	138	180	180

Training Course

Unit : Course

Detail	2018	2019	2020	2021	2022
Classify by course					
Professional Course	97	81	51	55	43
Vocational Course (Optional)	1	10	9	8	6
Safety Course	12	20	11	7	17
Total	110	111	71	70	66
Classify by training organization					
In-house Training	34	35	25	15	32
External Training	76	76	46	55	34
Total	110	111	71	70	66

Training Expense

Unit : Baht

Detail	Gender	2018	2019	2020	2021	2022
Classify by gender						
	Male	813,992	478,050	155,965	224,800	744,811
	Female	218,498	119,513	38,991	56,200	186,203
	Total	1,032,490	597,563	194,956	281,000	931,014
Classify by position						
Executive (Section Manager and above)	Male	516,760	208,855	95,996	2,500	189,667
	Female	129,191	139,238	24,000	13,500	103,109
	Total	645,951	348,093	119,996	16,000	292,776
Employee	Male	401,885	224,523	67,464	238,550	596,550
	Female	44,546	24,947	7,496	26,450	41,688
	Total	446,431	249,470	74,960	265,000	638,238
Average training expense (Baht/Person)	-	3,216	1,844	594	857	2,882

Employee Satisfaction Survey

Unit : Percent

Detail	2019	2020	2021	2022
Employee satisfaction survey results	75	78	72	92

Achievements in Kaizen

Unit : Subject

Detail	2018	2019	2020	2021	2022
Employee creativity by Kaizen activities	236	357	363	368	534

Environmental Performance

Environmental Stewardship Value

Unit : Baht

Detail	2018	2019	2020	2021	2022
Environmental Stewardship	1,741,155.00	12,753,618.20	2,203,870.00	80,240	549,077.45

Water Consumption

Water Consumption from Natural Sources

Unit : Million m³

Detail	2019	2020	2021	2022
Tha Chin River	166.02	179.75	158.34	149.19
Chao Phraya River	161.48	161.00	146.95	136.05
Total	327.50	340.75	305.29	285.24

Water Recycling

Unit : Million m³

Detail	2019	2020	2021	2022
Bang Len and Krathum Baen Water Treatment Plant	1.78	3.68	3.64	2.72
Pathum Thani Water Treatment Plant	4.76	3.69	4.50	3.94
Total	6.54	7.37	8.14	6.66

Electricity Consumption

Unit : GWh/Hour

Detail	2019	2020	2021	2022
Bang Len and Krathum Baen Water Treatment Plant	101.21	112.62	102.24	81.84
Pathum Thani Water Treatment Plant	71.46	70.28	61.42	58.18
Total	172.67	182.90	163.66	140.02

Remark: Data collection cycle for 12 months from January to December in 2022 (Assessor: TTW)

Electricity Consumption Rate per Product Unit

Unit : kWh / m³

Detail	2019	2020	2021	2022
Bang Len and Krathum Baen Water Treatment Plant	0.611	0.679	0.667	0.577
Pathum Thani Water Treatment Plant	0.480	0.459	0.445	0.436
Average	0.546	0.569	0.556	0.507

Remark: Data collection cycle for 12 months from January to December in 2022 (Assessor: TTW)

Greenhouse Gas Emission

Unit : tCO₂e

The Amount of Greenhouse Gas Emissions (Scope 2)	2019	2020	2021	2022
Bang Len and Krathum Baen Water Treatment Plant	50,596	56,296	51,108	41,772
Pathum Thani Water Treatment Plant	35,722	35,135	30,705	29,396
Total	86,318	91,431	81,813	71,168

Remark: Data collection cycle for 12 months from January to December in 2022 (Assessor : TTW)

Unit : kgCO₂e/m³

Greenhouse Gas Emission Rate per Product Unit (Scope 2)	2019	2020	2021	2022
Bang Len and Krathum Baen Water Treatment Plant	0.305	0.339	0.333	0.294
Pathum Thani Water Treatment Plant	0.240	0.229	0.222	0.220
Average	0.274	0.287	0.281	0.258

Remark: Data collection cycle for 12 months from January to December in 2022 (Assessor : TTW)

Unit : tCO₂e

The Amount of Greenhouse Gas Emissions (Scope 1+2)	2019	2020	2021	2022
Bang Len, Krathum Baen and Pathum Thaini Water Treatment Plant, including Water Distribution Station, Booster Station and Company's Head Office.	-	-	-	69,429

Remark: Data collection cycle for 12 months from October in 2021 to September in 2022 (Assessor : Green Style Co., Ltd.)

Unit : tCO₂e

The Amount of Greenhouse Gas Emissions (Scope 1+2+3)	2019	2020	2021	2022
Bang Len, Krathum Baen and Pathum Thaini Water Treatment Plant, including Water Distribution Station, Booster Station and Company's Head Office.	-	-	-	83,055

Remark: Data collection cycle for 12 months from October in 2021 to September in 2022 (Assessor : Green Style Co., Ltd.)

Unit : tCO₂e/m³

Greenhouse Gas Emission Rate per Product Unit (Scope 1+2)	2019	2020	2021	2022
Bang Len, Krathum Baen and Pathum Thaini Water Treatment Plant, including Water Distribution Station, Booster Station and Company's Head Office.	-	-	-	0.0003

Remark: Data collection cycle for 12 months from October in 2021 to September in 2022 (Assessor : Green Style Co., Ltd.)

Unit : tCO₂e/m³

Greenhouse Gas Emission Rate per Product Unit (Scope 1+2+3)	2019	2020	2021	2022
Bang Len, Krathum Baen and Pathum Thaini Water Treatment Plant, including Water Distribution Station, Booster Station and Company's Head Office.	-	-	-	0.0003

Remark: Data collection cycle for 12 months from October in 2021 to September in 2022 (Assessor : Green Style Co., Ltd.)

Awards of Pride in 2022



TTW has been selected as Thailand Sustainability Investment for the year 2022 for the 7th consecutive year by the Stock Exchange of Thailand (SET).

TTW has been ranked as one of 170 listed companies listed on the “Thailand Sustainability Investment” (THSI) Year 2022 from the sustainability assessment in the dimensions of the environment, society and economy, including corporate governance or ESG: (Environmental Social and Governance), reinforcing management on sustainability.



Corporate Governance Report of Thai Listed Companies 2022 as “Excellent”

TTW was assessed on Corporate Governance of Thai Listed Companies as “Excellent” by the Thai Institute of Directors Association, that evaluated Thai Listed Companies according to the principles of Good Corporate Governance or (CGR) for the year 2022, this year TTW was assessed as “excellent”.



TTW has received the ASEAN Asset Class PLCs award, reinforcing its commitment to improving corporate governance.

TTW is one of 76 Thai listed companies awarded the ASEAN Asset Class PLCs from the ASEAN CG Scorecard 2021 project organized by the Securities and Exchange Commission (SEC) and the Thai Institute of Directors (IOD) has cooperated with Capital Market Organizations in 6 ASEAN countries to elevate the quality of business governance of listed companies in ASEAN serve the international standards.



TTW has received an “AA-” rating for Corporate Credit and Bonds in 2022 with the outlook for “stable” rating from TRIS Rating Co., Ltd.



TTW has received an award of honor **“Sustainability Disclosure Award”** for the year 2022 for the 4th consecutive year from the Thaipat Institute in assessing the company’s sustainability development report that provides complete and reliable information on sustainability according to the Global Reporting Initiative (GRI) reporting framework.



TTW has received the Green Industry certification level 3; Green System 2021-2024 Systematic environmental management has been monitored, evaluated and reviewed for continuous development from the Ministry of Industry.



TTW has received an award of honor **“Bronze Medal”** for the 1st year of the Zero Accident Campaign from the Institute for the Purpose of Promoting Occupation Safety, Health and Environment.



TTW has been announced the results of the carbon footprint of the organization for the year 2022 from Thailand Greenhouse Gas Management Organization (Public Organization) or TGO for the assessment of GHG emissions in the tap water process, with a scope of work covering 3 companies, consisting of TTW Public Company Limited, Pathum Thani Water Company Limited, and Thai Water Operations Company Limited. It covers GHG emissions in three Scopes: Scope 1 (direct GHG emissions), Scope 2 (indirect GHG emissions from energy consumption), and Scope 3 (other indirect GHG emissions) to demonstrate the commitment to environmental preservation and responsibility for GHG emissions from the business operations of the organization, it also serves as a guideline for establishing goals and determining GHG emissions methods in the future.

GRI Content Index (GRI Standard 2021)

Statement of use	TTW Public Company Limited has reported in accordance with the GRI Standards for the period from 1 January 2022 to 31 December 2022.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	-

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
General disclosures						
GRI 2: General Disclosures 2021	2-1 Organizational details	SR 9-13 AR 8-9	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.			
	2-2 Entities included in the organization's sustainability reporting	SR 8				
	2-3 Reporting period, frequency and contact point	SR 8				
	2-4 Restatements of information	SR 8				
	2-5 External assurance	SR 8				
	2-6 Activities, value chain and other business relationships	SR 36-40 AR VIII-IX, 8-10				
	2-7 Employees	SR 124-134 AR 113				
	2-8 Workers who are not employees	-	a, b, c	Confidentiality constraints	This information is for internal use.	
	2-9 Governance structure and composition	SR 16-18 AR 97				
	2-10 Nomination and selection of the highest governance body	SR 43-44 AR 123-125				
	2-11 Chair of the highest governance body	SR 18 AR 102-103				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	2-12 Role of the highest governance body in overseeing the management of impacts	SR 17-18 AR 102-103				
	2-13 Delegation of responsibility for managing impacts	SR 18 AR 107				
	2-14 Role of the highest governance body in sustainability reporting	SR 18, 94				
	2-15 Conflicts of interest	SR 42 AR 89-90, 133-134				
	2-16 Communication of critical concerns	SR 42-43 AR 95-96, 139-141				
	2-17 Collective knowledge of the highest governance body	SR 43-44 AR 98, 103, 125-126				
	2-18 Evaluation of the performance of the highest governance body	SR 45 AR 127-129				
	2-19 Remuneration policies	AR 111, 115, 130-131				
	2-20 Process to determine remuneration	SR 79				
	2-21 Annual total ompensation ratio	AR 112, 116, 123				
	2-22 Statement on sustainable development strategy	SR 14-15				
	2-23 Policy commitments	SR 4, 14-15, 42-43, 50-51, 53, 61-62, 70, 78-79, 86, 94-95, 100, 105 AR XII, 1				
	2-24 Embedding policy commitments	SR 14-15				
	2-25 Processes to remediate negative impacts	SR 31, 48-49, 73, 103 AR 46-49				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	2-26 Mechanisms for seeking advice and raising concerns	SR 49, 83, 152 AR 90, 94, 140-141				
	2-27 Compliance with laws and regulations	SR 47, 121 AR 76-77				
	2-28 Membership associations	SR 8, 42, 82, 100 AR 50, IV				
	2-29 Approach to stakeholder engagement	SR 36-39 AR 36, 53-55, 84-88				
	2-30 Collective bargaining agreements	SR 78-79, 85 AR 84-88				
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	SR 19-21	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.			
	3-2 List of material topics	SR 20-21				
Economic performance						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 14-15 AR 62-63				
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	SR 9-10, 122 AR XI, 72-73				
	201-2 Financial implications and other risks and opportunities due to climate change	SR 33, 55-56 AR 35-36, 46-49				
	201-3 Defined benefit plan obligations and other retirement plans	SR 55-56 AR 47, 167-168, 175-176				
	201-4 Financial assistance received from government	AR 203				
Market presence						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 11, 78 AR 85				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	-	a, b, c, d	Information unavailable/incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
	202-2 Proportion of senior management hired from the local community	-	a, b, c, d	Information unavailable/incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
Indirect economic impacts						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 22-25				
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	SR 122				
	203-2 Significant indirect economic impacts	SR 26-35				
Procurement practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 61 AR 55, 86				
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	-	a, b, c	Information unavailable/incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
Anti-corruption						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 47-48 AR 139				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	SR 48-49 AR 139				
	205-2 Communication and training about anti-corruption policies and procedures	SR 48-49 AR 139				
	205-3 Confirmed incidents of corruption and actions taken	SR 48 AR 140-141				
Anti-competitive behavior						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 46-47 AR 87				
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	SR 47 AR 87				
Tax						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 45 AR 176				
GRI 207: Tax 2019	207-1 Approach to tax	SR 122 AR 176				
	207-2 Tax governance, control, and risk management	AR 65, 176				
	207-3 Stakeholder engagement and management of concerns related to tax	AR 176				
	207-4 Country-by-country reporting	AR 201-202				
Materials						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 105 AR 33-35, 52-53				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 301: Materials 2016	301-1 Materials used by weight or volume	SR 108				
	301-2 Recycled input materials used	SR 109, 113-114				
	301-3 Reclaimed products and their packaging materials	SR 109				
Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 116-117 AR 52, 55, 58				
GRI 302: Energy 2016	302-1 Energy consumption within the organization	SR 117-118				
	302-2 Energy consumption outside of the organization	-	a, b, c	Confidentiality constraints	Energy data are very confidentiality of suppliers, transporters, customers and related stakeholders in value chain.	
	302-3 Energy intensity	SR 118				
	302-4 Reduction of energy consumption	SR 117-118				
	302-5 Reductions in energy requirements of products and services	SR 117				
Water and effluents						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 108, 114				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	SR 107-108				
	303-2 Management of water discharge-related impacts	SR 114-115				
	303-3 Water withdrawal	SR 107-108				
	303-4 Water discharge	SR 109, 114-115				
	303-5 Water consumption	SR 108				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Biodiversity						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 119				
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR 119, 120				
	304-2 Significant impacts of activities, products and services on biodiversity	SR 119				
	304-3 Habitats protected or restored	SR 119, 120				
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	SR 119				
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 106, 115				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	SR 115-116, 136				
	305-2 Energy indirect (Scope 2) GHG emissions	SR 115-116, 136				
	305-3 Other indirect (Scope 3) GHG emissions	SR 115-116, 136				
	305-4 GHG emissions intensity	SR 116, 136				
	305-5 Reduction of GHG emissions	SR 117, 118-119				
	305-6 Emissions of ozone-depleting substances (ODS)	SR 106-107				
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SR 106-107, 115				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Waste						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 109				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	SR 112-113				
	306-2 Management of significant waste-related impacts	SR 111-112				
	306-3 Waste generated	SR 110-112				
	306-4 Waste diverted from disposal	SR 113				
	306-5 Waste directed to disposal	SR 111, 113				
Supplier environmental assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 61-62				
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	SR 64-65				
	308-2 Negative environmental impacts in the supply chain and actions taken	SR 64				
Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 78, 100-101 AR 4-5, 88-89				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	SR 78-79, 125-127, 129-131				
	401-2 Benefits provided to full-time employees that are not provided to temporary or part-time employees	SR 81				
	401-3 Parental leave	SR 81				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Labor/management relations						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 78-79				
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	-	a, b	Information unavailable/ incomplete	Improving the data collection process.The complete disclosure of information will report on the next reporting period.	
Occupational health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 86 AR 60-61, 117-119				
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SR 86 AR 118-119				
	403-2 Hazard identification, risk assessment, and incident investigation	SR 88 AR 118				
	403-3 Occupational health services	SR 88				
	403-4 Worker participation, consultation, and communication on occupational health and safety	SR 88-89 AR 119				
	403-5 Worker training on occupational health and safety	SR 89, 132-133 AR 117-119				
	403-6 Promotion of worker health	SR 79-81, 89 AR 52, 85, 116				
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR 88, 101-103				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	403-8 Workers covered by an occupational health and safety management system	SR 86				
	403-9 Work-related injuries	SR 90-91 AR 119				
	403-10 Work-related ill health	SR 90-91				
Training and education						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 83 AR 4-5, 60-61, 113-115				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	SR 85 AR 115				
	404-2 Programs for upgrading employee skills and transition assistance programs	SR 83-84 AR 115				
	404-3 Percentage of employees receiving regular performance and career development reviews	SR 84-85				
Diversity and equal opportunity						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 14, 42-43 AR 78				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	SR 16-17, 42-43, 78-79 AR 85, 97-98				
	405-2 Ratio of basic salary and remuneration of women to men	-	a, b	Information unavailable/incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Non-discrimination						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 14-15, 42, 100 AR 79-80, 88-89				
GRI 406: Non- discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	SR 101-104				
Freedom of association and collective bargaining						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 82				
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	SR 38, 64-68, 82-83, 102				
Child labor						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 100 AR 88				
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	SR 63				
Forced or compulsory labor						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 100 AR 88				
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	SR 63				
Security practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 86 AR 60-61, 117-119				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	-	a, b	Information unavailable/ incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
Rights of indigenous peoples						
GRI 3: Material Topics 2021	3-3 Management of material topics	-				
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	-	a, b	Not applicable	In the business areas have not the indigenous peoples.	
Local communities						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 94-95 AR 50				
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	SR 95-99 AR 52, 60-61				
	413-2 Operations with significant actual and potential negative impacts on local communities	SR 95-98				
Supplier social assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 61-62 AR 86-89				
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	SR 65				
	414-2 Negative social impacts in the supply chain and actions taken	SR 63-64				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Public policy						
GRI 3: Material Topics 2021	3-3 Management of material topics	-		Information unavailable/ incomplete	Improving the data collection process.The complete disclosure of information will report on the next reporting period.	
GRI 415: Public Policy 2016	415-1 Political contributions	-	a, b	Information unavailable/ incomplete	Improving the data collection process.The complete disclosure of information will report on the next reporting period.	
Customer health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 70				
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety im pacts of product and service categories	SR 70, 73				
	416-2 Incidents of non-compliance c oncerning the health and safety impacts of products and services	SR 73				
Marketing and labeling						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 70 AR 23-24				
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	SR 70-71				
	417-2 Incidents of non-compliance concerning product and service information and labeling	SR 73				
	417-3 Incidents of non-compliance concerning marketing communications	SR 73				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Customer privacy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 74 AR 85-86				
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR 50				

Remark : AR - Annual Report 2022 (Form 56-1 One Report 2022)
SR - Sustainability Report 2022



Feedback from Reader

Feedback Form for Sustainability Report 2022 TTW Public Company Limited (TTW)

1. Please specify your relationship with TTW?

- | | | | |
|-----------------------------------|----------------------------------|---|--|
| <input type="radio"/> Employee | <input type="radio"/> Community | <input type="radio"/> Customer | <input type="radio"/> Government |
| <input type="radio"/> Supplier | <input type="radio"/> Contractor | <input type="radio"/> Financial institution | <input type="radio"/> Business partner |
| <input type="radio"/> Shareholder | <input type="radio"/> Investor | <input type="radio"/> NGOs | <input type="radio"/> Other (Please specify) |

2. How did you receive this report?

- | | |
|---|-------------------------------------|
| <input type="radio"/> Annual General Meeting | <input type="radio"/> TTW's Website |
| <input type="radio"/> TTW's Employee | <input type="radio"/> Seminar |
| <input type="radio"/> Other (Please Specify.....) | |

3. What is your reason for reading this report?

- | | |
|---|--|
| <input type="radio"/> To support investment decision | <input type="radio"/> To understand TTW's business |
| <input type="radio"/> For research and education purposes | |
| <input type="radio"/> Other (Please Specify.....) | |

4. Please indicate the topic(s) that you are interested in.

Economy

- | | |
|---|---|
| <input type="radio"/> Good Performance | <input type="radio"/> Crisis Management from the COVID-19 Situation |
| <input type="radio"/> Good Corporate Governance | <input type="radio"/> Supply Chain Management |
| <input type="radio"/> Risk Management and Business Continuity | <input type="radio"/> Products and Services Responsibility |
| <input type="radio"/> Innovation and Technology | |

Environment

- | | |
|---|--|
| <input type="radio"/> Environmentally Friendly Process of Products and Services | <input type="radio"/> Climate Change and Energy Conservation |
| <input type="radio"/> Biodiversity | <input type="radio"/> Water Management |
| <input type="radio"/> Environment Cooperation between Organization | <input type="radio"/> Waste and Unused Materials Management |
| | <input type="radio"/> Environmental Compliance |

Employee & Society

- | | |
|--|--|
| <input type="radio"/> Employee Stewardship and Development | <input type="radio"/> Social and Community Stewardship |
| <input type="radio"/> Occupational Health and Safety | <input type="radio"/> Social Contributions and Donations |

Human Rights

- | | |
|--|---|
| <input type="radio"/> Roles and Responsibilities of Human Rights Committees and Executives | <input type="radio"/> Employment and Respect for Human Rights |
| <input type="radio"/> Human Rights Risk Assessment | <input type="radio"/> Human Rights Communication and Training |
| <input type="radio"/> Cooperation with Human Rights Business Partners | <input type="radio"/> Managing Human Rights Complaints and Remedies |





5. In your opinion, does the report cover all material topics?

☐ Yes

☐ No

If no, please specify topic(s) that should be included.

.....

.....

.....

6. Please rate your satisfaction towards our Sustainability Report 2022

- | | | | | |
|--------------------------|----------------------------|------------------------------|---------------------------|------------------------------------|
| 6.1 Completeness | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |
| 6.2 Materiality | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |
| 6.3 Attractive content | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |
| 6.4 Ease to understand | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |
| 6.5 Report design | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |
| 6.6 Overall satisfaction | <input type="radio"/> High | <input type="radio"/> Medium | <input type="radio"/> Low | <input type="radio"/> Dissatisfied |

7. Please provide other comments or suggestions for further improvement.

.....

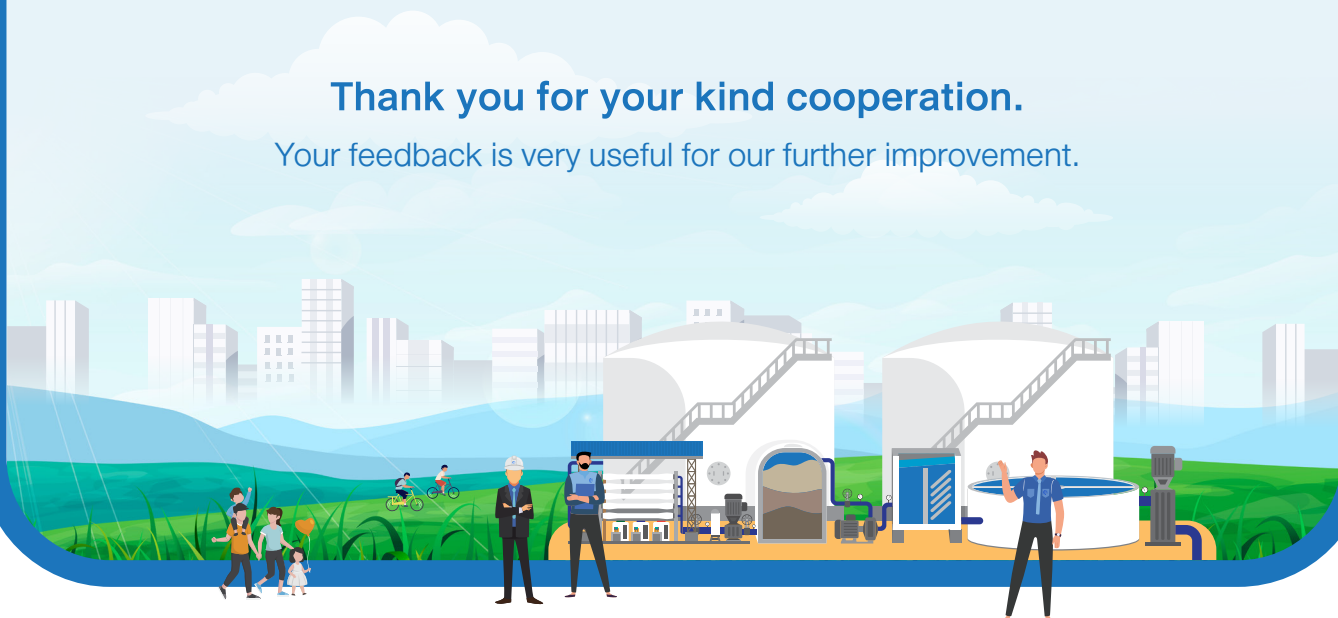
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.....

Thank you for your kind cooperation.

Your feedback is very useful for our further improvement.



Another way to express your opinions,
please scan the QR Code to answer online surveys.



TTW Public Company Limited

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