



Sustainability Report 2021

Delivering



“Quality of Water and Quality of Life”

for a Sustainable Future

We are doing business with dedication and care to customers. The goal is to produce quality, sufficiency and continuity tap water in order to serve the customers’ needs and tap water’s users with attention to detail and every production process, starting from source to consumers. In addition, TTW 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



“

We focus on improving the business operations responsibly in terms of Economy, Society, and Environment, along with good governance for the delivering “Quality of Water and Quality of Life” for a sustainable future

”



The year 2021 is marked as the year of the pandemic of coronavirus disease 2019 (COVID-19), including the COVID-19 mutation, is also affecting people, economy, and society widely. However, the Company focuses on driving its business toward sustainability to serve the upcoming change to achieve the vision “Thailand’s Leading Company in Water, Energy and Eco-Friendly Businesses” with determination “Delivering Quality of Water and Quality of Life for a Sustainable Future” to create sustainable economic and social values while growing alongside the country’s economy.

The Company has established the direction and concept of corporate sustainability development in accordance with the context and Sustainable Development Goals (SDGs) according to the principles of the United Nations (UN), by adhering to environmental stewardship, social responsibility and governance in accordance with the framework of sustainability (Environmental, Social, and Governance: ESG), taking in to account the benefits of stakeholders both inside and outside the organization equally.

Although the COVID-19 pandemic is a great challenge, climate change is becoming more intense throughout 2021. Therefore, the Company has stipulated the goals to reduce the electricity conservation and the amount of GHG emission per product unit (Scope 2) at least 0.05% per year, in order to support the global average temperature control of not exceeding 1.5 Degrees Celsius under the Paris Agreement, which is in the process of developing a plan to reduce GHG emissions

directly from production processes (Scope 1). In addition, global warming also causes biodiversity loss, affecting saltwater encroaching on freshwater over a longer period of time, the problem of raw water shortage is linked to the allocation of water resources between different watershed areas. The incidents require the Company to review policies and adjust operational strategies, including integrated coordination from relevant sectors to address problems at source, especially government sectors, the agencies responsible for the production of tap water and the people who are water users. Therefore, it requires the comprehension and cooperation of various sectors to solving problems systematically, so that the chosen approach can truly lead to the solution of the problem as well as the business continuity management.

On behalf of TTW Public Company Limited, we would like to thank stakeholders for your trustworthiness and participation in the development and support of the operation. We focus on improving the business operations responsibly in terms of Economy, Society, and Environment, along with good governance for the delivering “Quality of Water and Quality of Life” for a sustainable future.

Ms. Walainut Trivisvavet
Managing Director

About this Report

The Company has published the Sustainability Report for the tenth 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 2016 - 2017 and developed the report according to the GRI-G4. In 2018, the report was made according to the GRI Standard at the Core Option level for the first year, for the 2021 the report was made according to the same standard.

Report Content

The content of this report covers of 16 the main point and other sustainability issues, which consist of 16 no significant differences issues, compared with the previous report are as follows:

- | | |
|--|---|
| 1. Good Corporate Governance | 9. Social and Community Development |
| 2. Risk Management and Business Continuity | 10. Environmentally Friendly Process of Products and Services |
| 3. Crisis Management from the COVID-19 Situation | 11. Water Management |
| 4. Supply Chain Management | 12. Waste and Unused Materials Management |
| 5. Products and Services Responsibility | 13. Climate Change and Water Conservation |
| 6. Innovation and Technology | 14. Biodiversity |
| 7. Employee Stewardship and Development | 15. Environment Cooperation between Organization |
| 8. Occupational Health and Safety | 16. 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, 2021 - December 31, 2021 to report the organization's sustainability performance in three dimensions which are economy, society 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 and Amata City Industrial Estate area in Rayong.

Report Endorsement

This report has been certified by the Company's Sustainability Development Committee.

Contact Information



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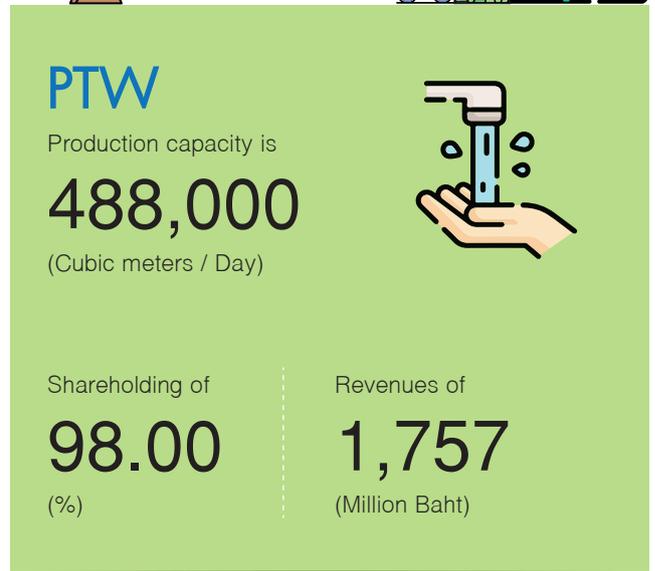
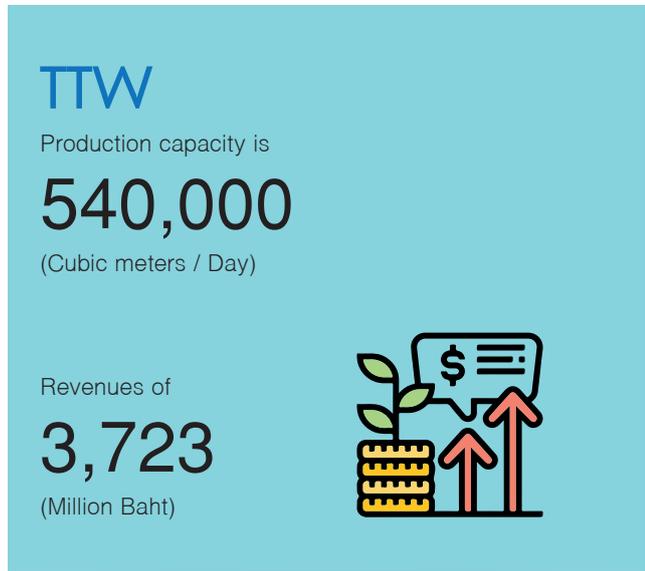
Email Address: SD@ttwplc.com

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 treatment 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.

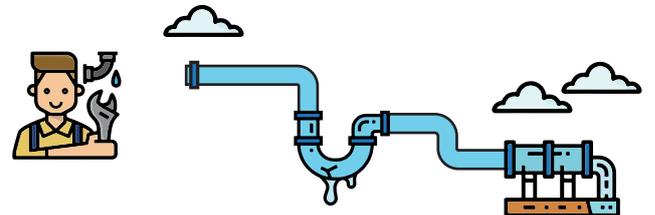
Tap Water Production Business

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



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)



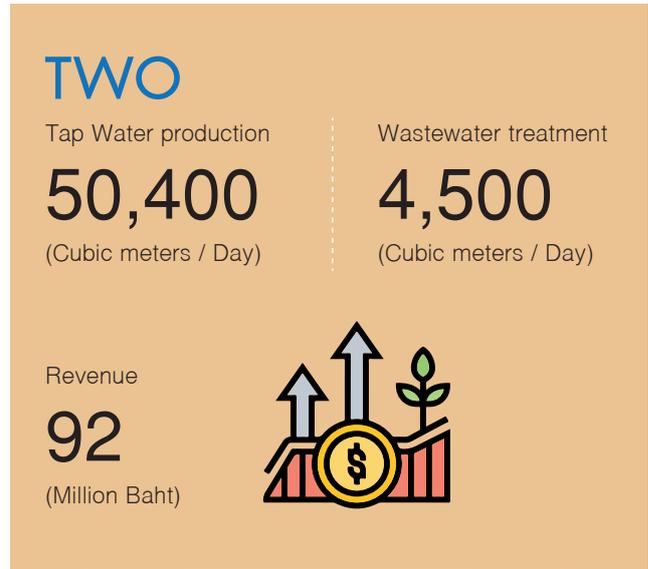
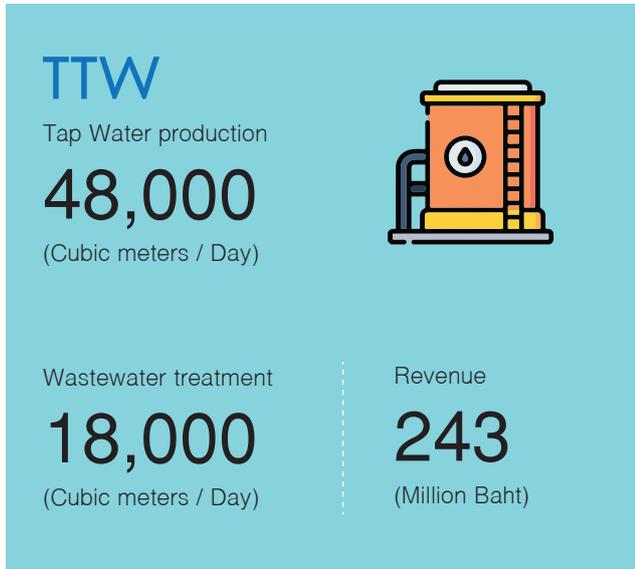
Tap water and Wastewater Management Business in the Industrial Estate

Operated by:

- TTW Public Company Limited (TTW), Bang Pa-in Industrial Estate area in Ayutthaya Province

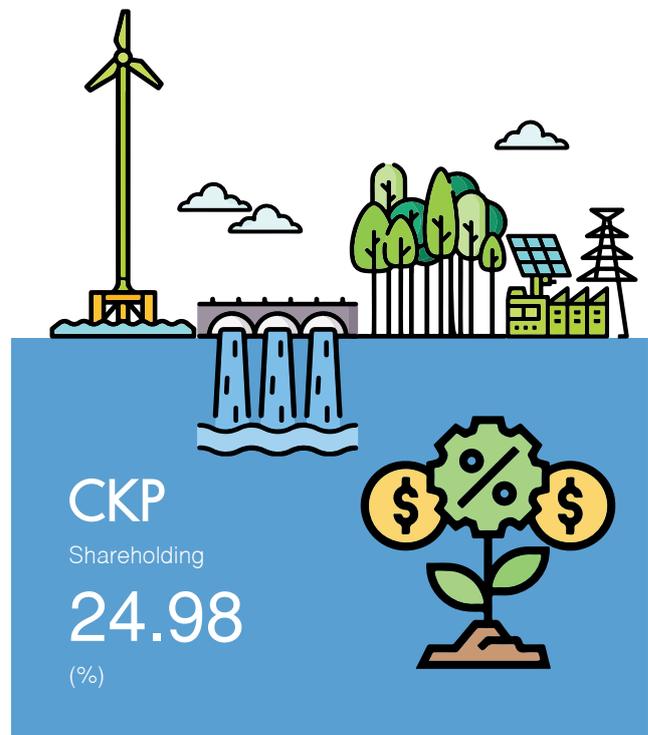


- Thai Water Operations Company Limited (TWO), Amata City Industrial Estate area in Chonburi and Amata City Industrial Estate area in Rayong Province



Other Businesses

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



Background

September 11, 2000

Registered under the name Thai Tap Water Supply Company Limited

In 2006

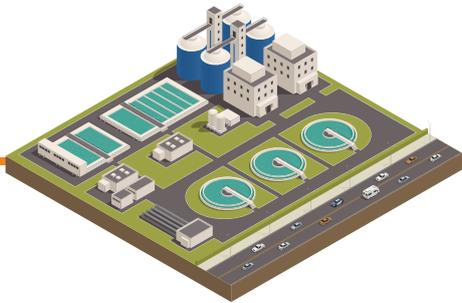
Conversion to Public Company Limited, increase registered capital to 3,990 million Baht

May 22, 2008

SET classified TTW's common stocks to the resource group and in the category of energy and public utility business

March 14, 2014

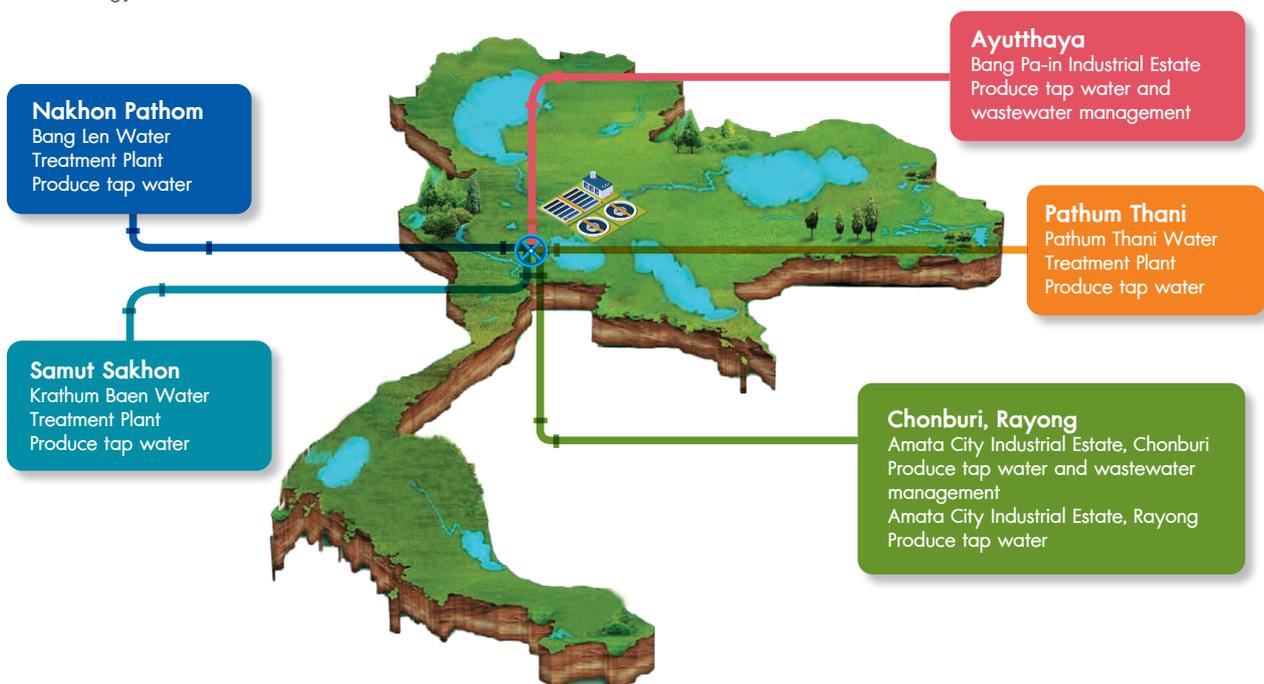
The name changed to TTW Public Company Limited (TTW)



Currently TTW has the maximum tap water capacity for all business areas of 1,126,400 (cubic meters / day).

TTW is the producer and distributor of tap water to the Provincial Waterworks Authority (PWA) in Nakhon Pathom - Samut Sakhon area, acquired the concession to operate the tap water business from the Ministry of Natural Resource and Environment for 25 years, using water from Tha Chin River to produce tap water. The water treatment plant is located in Bang Rakum Sub-District, Banglen District, Nakhon Pathom Province. In this regard, TTW reached a contract with PWA for a period of 30 years, distributing tap water to PWA in Nakhon Chaisri, Samphran, Buddha Monthon District of Nakhon Pathom Province and Krathum Baen, Muang Samut Sakhon District, Samut Sakhon Province from January 5, 2004, the tap water distribution prior to the commencement date of the contract. On July 21, 2004, the tap water was distributed according to the contract and the production capacity was increased to 440,000 m³ / day in 2010. In 2015, TTW constructed the secondary water treatment plant in Khlong Maduea, Krathumbaen, Samut Sakhon Province the construction was completed in June 2017, with a production capacity of 100,000 m³ / day, able to support future production capacity expansion up to 400,000 m³ / day. Currently, TTW has the total production capacity of two plants of 540,000 m³ / day.

In addition, having a contract to produce tap water for PWA in Nakhon Pathom and Samut Sakhon Province, TTW has changed the nature of the business by investing in subsidiaries and associates, as well as the acquisition of rights for tap water and wastewater management in the industrial estates and invest in the company operating to produce and distribute electricity from various types of energy.



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, 2021, 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, 2021, TTW holding 68.5% of register capital (another 31.5% 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, 2021, 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:

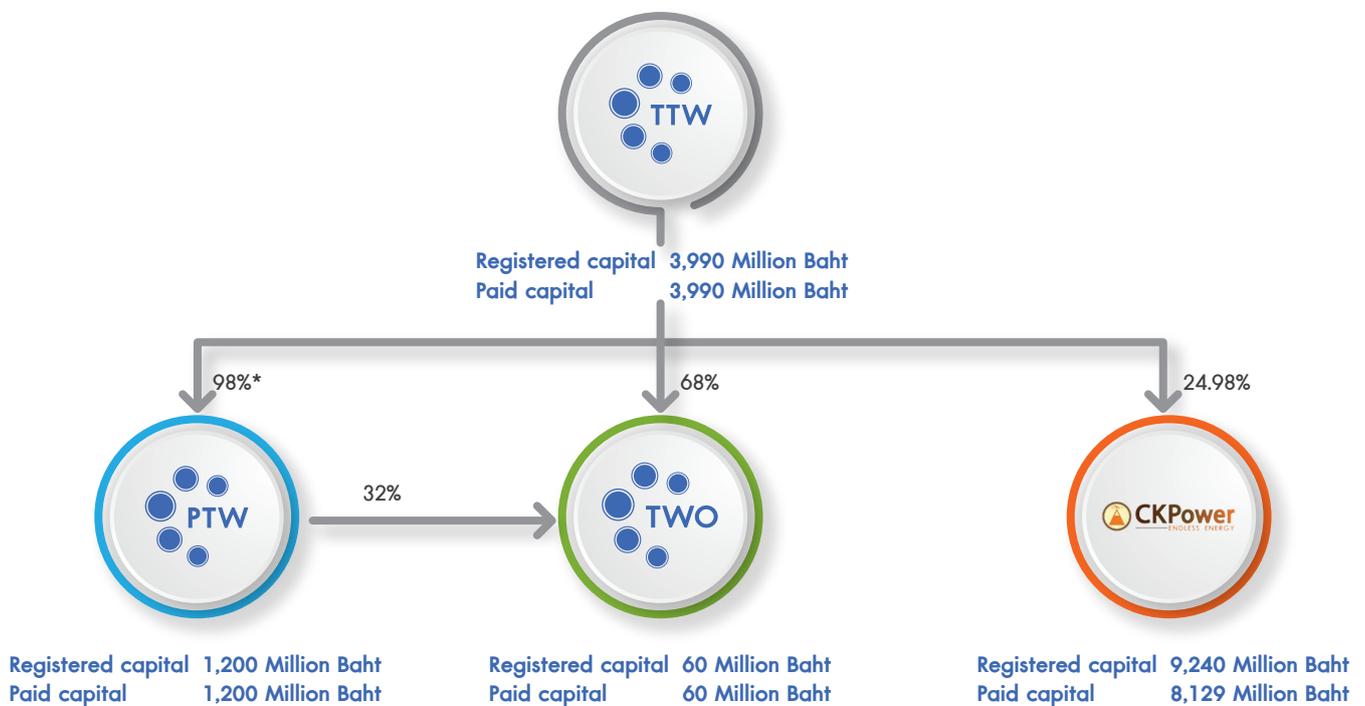
- Nam Ngum 2 Hydroelectric Power Plant as a TTW's core company by investment via South East Asia Energy Limited)
- Bangpa-In Cogeneration Company Limited
- Bangkokchai Company Limited

Investments in power plant of four associated consist of:

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

Shareholding Structure of Company Group

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



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

TTW is listed on the Stock Exchange of Thailand. The Major shareholders are Mitsui Water Holdings (Thailand) Co., Ltd., CH.Karnchang Public Company Limited, Bangkok Expressway and Metro Public Company Limited and both domestic and foreign investors. With shareholding proportion as of December 31, 2021 as follows:

No.	Major Shareholder	Number of Share	Share (%)
1	Mitsui Water Holdings (Thailand) Co., Ltd.	1,036,500,000	25.98
2	CH.Karnchang Public Company Limited	774,077,400	19.40
3	Bangkok Expressway and Metro Public Company Limited	736,900,000	18.47
4	Thai NVDR Company Limited	143,974,317	3.61
5	Bangkok Life Assurance Public Company Limited	122,174,200	3.06

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 by reporting on sustainability performance according to the Global Reporting Initiative (GRI)



Sustainable Development Policy	Sustainable Development Strategy
<p>1. Good Corporate Governance</p> 	<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
<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

3. Social Value Creation

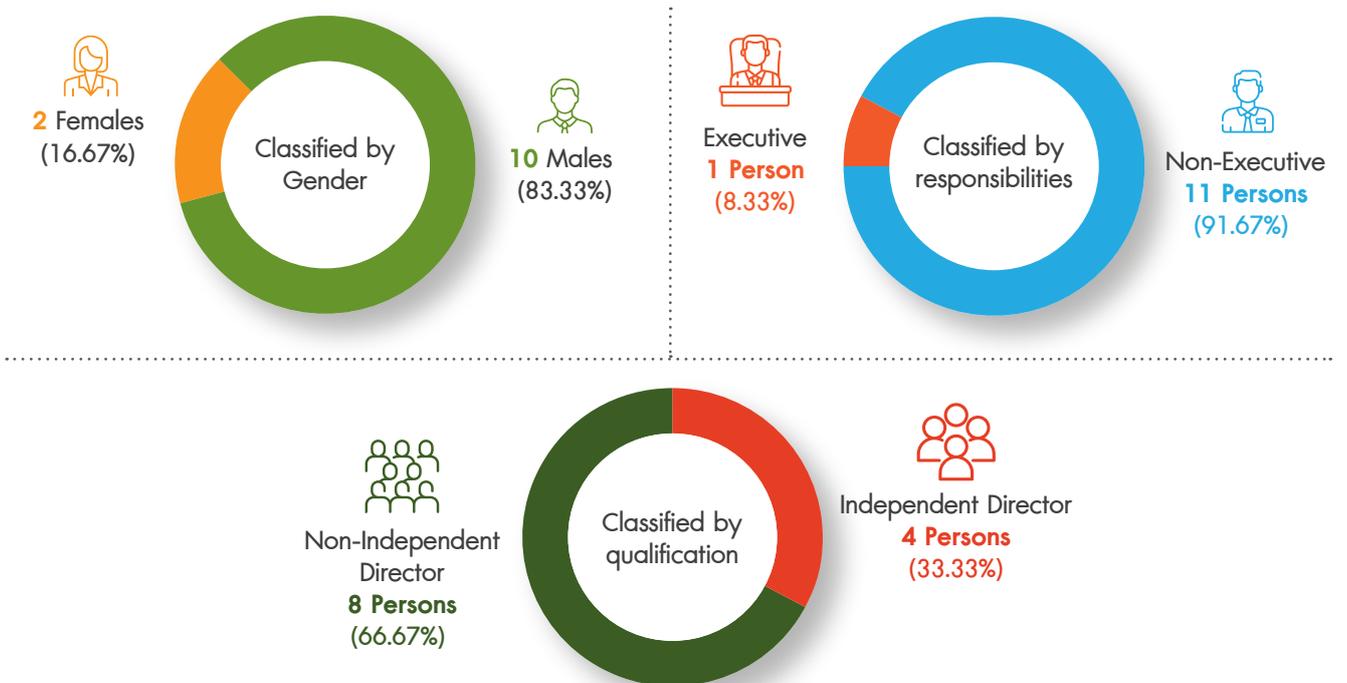
1. Manage human resources with efficiency and fairness in accordance with the standards, requirements of laws, and international labor charters.
2. Encourage personnel to develop necessary knowledge and skills according to the employee potential development plan and promote creativity in working through 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

4. Sustainable Environmental Management

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

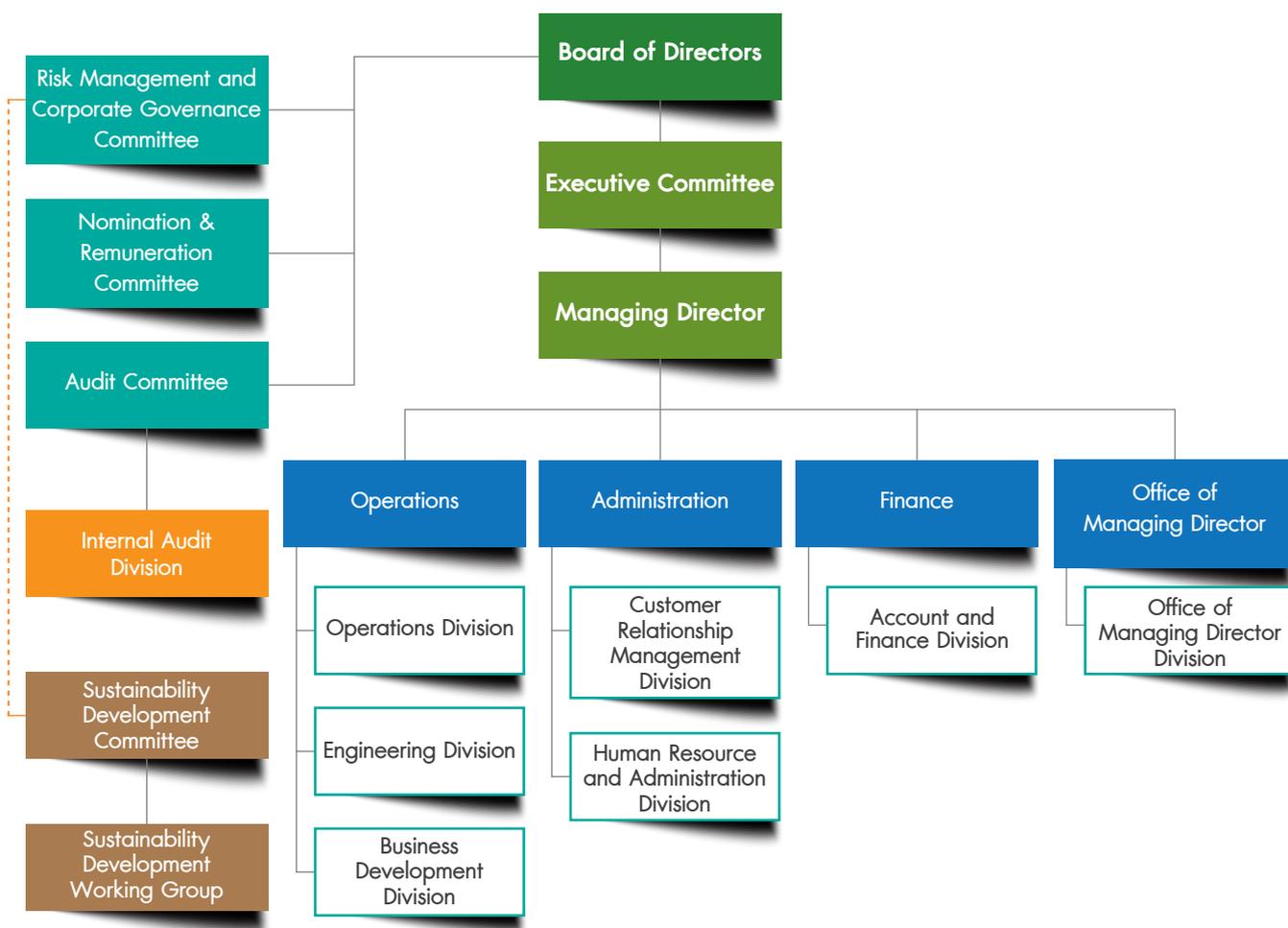
The Board of Directors is a one tier system, comprising four sub-committees, responsible for overseeing business operations in accordance with the law, objectives and articles of association, including the resolutions of the shareholders' meeting, under the guidelines of the Board of Directors regularly updated to be in line with business conditions and corporate governance, with a Board of Directors of twelve members.



Sub-committees	Categorized by characteristic	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, management policies and business operations Perform other tasks as assigned by the Board of Directors
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 and the adequacy of internal audit controls Consider the connected transactions or transactions that may have conflicts of interest
Nomination and Remuneration Committee (Total 4 persons)	<ul style="list-style-type: none"> Non-Executive Director of 4 persons 	<ul style="list-style-type: none"> Recruiting persons for the position of the Board of Directors and Managing Director

Sub-committees	Categorized by characteristic	Duties and Responsibilities
	<ul style="list-style-type: none"> Independent Director of 2 persons 4 Males 	<ul style="list-style-type: none"> Propose opinions on compensation management and other benefits for the Board of Directors, Sub-Committees and Managing Director
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 the results of risk management Review the Corporate Governance Policy and Business Ethics Manual Follow up on policy compliance through complaints channels Supervise the sustainability development work of the organization.

Remark: The duties and responsibilities of the committees are disclosed in the 2021 Annual Report (Form 56-1 One report)



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 Division Managers and Department Manager 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

The Company emphasizes on sustainability management issues with a process of assessment and prioritization based on the Global Reporting Initiative framework (GRI), GRI Standard. Therefore, the Company collects and assesses sustainability issues through sustainability issues analysis, including using operational guidelines according to the Company's strategy and risk factors that may affect the Company's business operations in assessing the importance of sustainability issues.

Assessment Process

1. Issue Analysis

Analyze issues throughout the Company's value chain covering operations from raw material sourcing, production, delivery, using of products and services for analysis of sustainability issues in related industries.

2. Identifying Issues

Define the important issues of the Company's business operations and stakeholders, it takes into account the current situation, covers new issues that may increase and downgrade the priorities of unrelated issues.

3. Priority Assessment

Arrange the priorities by responsible agency surveyed the expectations from stakeholders covering economic, social and environmental dimensions may be affected by the Company's business operations.

4. Assessment Certification

4.1 The Company reviewed 27 sustainability issues, by selecting 16 sustainability issues focused by the stakeholders and the Company respectively, eliminating some of the least importance or similar issues.

4.2 The results of the selection of 16 sustainability issues (4.1) were presented to the Sustainability Committee to certify the results of the assessment and to be included in the Corporate Sustainability Issues in the 2021 Sustainability Report.



Economic

- 1 Business Sustainability
- 2 Good Corporate Governance
- 3 Risk Management and Business Continuity
- 4 Products and Services Responsibility
- 5 Stakeholders Compensation and Benefits
- 6 Building Image and Confidence
- 7 Crisis Management from the COVID-19 Situation
- 8 Indirect Impact of Doing Business
- 9 Value Chain Management
- 10 Business Partners for Sustainable Development
- 11 Serve Customers Demand and Satisfaction
- 12 Innovation and Technology

Social

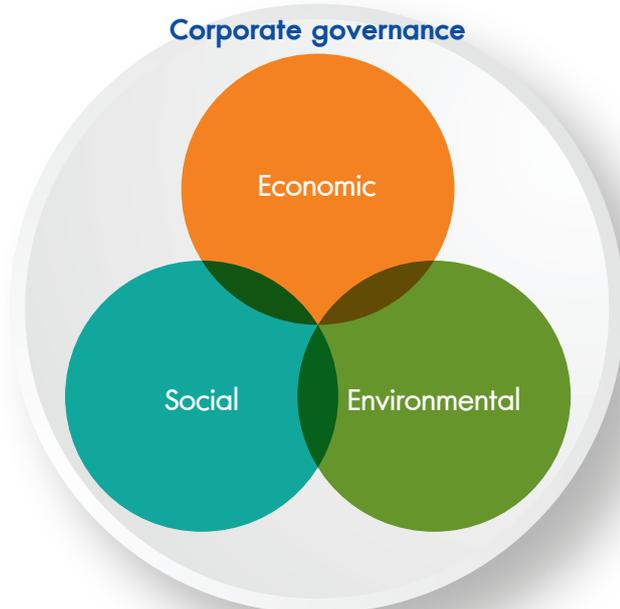
- 1 Equitable Treatment of Stakeholders
- 2 Occupational Health and Safety
- 3 Contribution and Donation to Society
- 4 Social and Community Development
- 5 Business Partner Social Impact Assessment
- 6 Equality and Human Rights
- 7 Employee Stewardship and Development

Environmental

- 1 Compliance with Environmental Laws
- 2 Environmentally Friendly Process of Products and Services
- 3 Water Management
- 4 Waste and Unused Materials Management
- 5 Environmental Cooperation
- 6 Climate Change and Energy Conservation
- 7 Business Partner Environmental Impact Assessment
- 8 Biodiversity

Sustainability Issues Review and Improvement for the year 2021

The Company reviewed 27 sustainability issues in 2021, by selecting 16 sustainability issues focused by the stakeholders and the Company respectively to improve and develop operational processes to achieve the specified goals, which are aligned with 14 United Nations Sustainable Development Goals (SDGs).



Economic

Operate the business to achieve the vision and mission based on the satisfaction and interests of the stakeholders. (Selected to 6 sustainability issues)

Social

Operate business with integrity, take care of community and society, both in the service area and outside the service area. (Selected to 3 sustainability issues)

Environmental

Adhere to environmental stewardship both within the process, worthwhile use of resources, natural resources conservation, and maintain a sustainable ecological balance. (Selected to 7 sustainability issues)

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. In 2021, the stakeholders and the Company focus on 16 sustainability issues, the aforementioned issues will be analyzed for organizational risks and opportunities linked to the Sustainable Development Goals (SDGs), which are aligned with 14 of the 17 UN Sustainable Development Goals. The sixth goal is the Company's main mission of doing business to achieve the goal of clean water and sanitation (Clean Water and Sanitation), while the remaining goals are secondary missions that support the Company's operations to achieve the goals of organization.



Dimension	Sustainability Issues	Details	Risk	Opportunity	SDGs
Economic	Good Corporate Governance	<ul style="list-style-type: none"> Policy, Operations under the principles of good governance, Board duties and responsibilities, transparency, report, and Anti-corruption 	<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"> 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 	

Dimension	Sustainability Issues	Details	Risk	Opportunity	SDGs
Economic	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"> 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 without impact to stakeholders. In this situation, the Company provides financial support and COVID-19 anti-epidemic equipment to hospitals and other departments, including the financial support and COVID-19 protective equipment to hospitals and stakeholders, resulting in the credibility of the Company 	  
	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"> 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"> 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 	  

Dimension	Sustainability Issues	Details	Risk	Opportunity	SDGs
Economic	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"> 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 	
	Employee Stewardship and Development	<ul style="list-style-type: none"> Personnel and labor relations Management, employee development and empowerment, policy and process of respect for the human rights of employees 	<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 	
Social	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"> 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 	
	Social and Community Development	<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"> 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 	

Dimension	Sustainability Issues	Details	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"> 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, water management with the communities and related agencies to solve water quality problems and sustainable water shortages 	<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 Collaborate with communities and government agencies, organize projects to restore water quality in the Bang Sue Canal and canal branches to conserve the Tha Chin River 	
	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"> 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 and monitoring 	<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 Assess GHG emissions from business processes to certify corporate carbon footprint standards and determine measures to reduce GHG emissions from business processes 	

Dimension	Sustainability Issues	Details	Risk	Opportunity	SDGs
Environmental	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"> 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"> 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 	
	Compliance with Environmental Laws	<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"> The strictness of environmental laws is increasing may affect the Company's operating costs 	<ul style="list-style-type: none"> Raising awareness, taking care of the system and comply with environmental laws, it becomes an organizational culture that everyone acts with common sense 	

Goals and Performance

The Company establishes goals and operation methods for each of 16 sustainability issues, including the results obtained from operations in 2021 are as follows:

Goals	Methods	Results
1. Good Corporate Governance		
<ul style="list-style-type: none"> Establish guidelines for working under the principles of good governance to become a culture Zero of violation of the Company's code of conduct 	<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 Establish a personal data protection policy 	<ul style="list-style-type: none"> Zero of violation of the Company's code of conduct

Goals	Methods	Results
2. Risk Management and Business Continuity		
<ul style="list-style-type: none"> • Manage corporate risks to be within acceptable criteria 	<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"> • Able to manage risk measures to an acceptable level and does not affect TTW’s business operations
3. Crisis Management from the COVID-19 Situation		
<ul style="list-style-type: none"> • Zero of stop distribute tap water to customers from COVID-19 situation • Zero of stakeholder affected by the Company’s business operations 	<ul style="list-style-type: none"> • Announce the BCP plan base on “Measures to prevent COVID-19” using in the operation • Provide facilities for production processes and provide employees and stakeholders with the necessary resources to prevent the epidemic of COVID-19 • Provide corona virus insurance to employees • Communicate and publicize to build confidence in business operations • Weekly tested COVID-19 before entering the workplace • Coordinate with government agencies to vaccinate employees with COVID-19 thoroughly and keep up with changing situations • Establish Factory Accommodation Isolation. 	<ul style="list-style-type: none"> • Zero of stop distribute tap water to customers from COVID-19 situation • Zero of stakeholder affected by the Company’s business operations
4. Supply Chain Management		
<ul style="list-style-type: none"> • Performance appraisal ratio of major business partner at 100% • Zero of business partner operating impact on business operation • The timely receipt ratio as agreed with the buyer and seller or specified in the purchase order at 90% • Zero of complaint from business partner 	<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 • Visit the establishments of key partners or partners with sustainability risks 	<ul style="list-style-type: none"> • Performance appraisal ratio of major business partner at 100% • Zero of business partner operating impact on business operation • The timely receipt ratio as agreed with the buyer and seller or specified in the purchase order at 94% • Zero of complaint from business partner

Goals	Methods	Results
5. Products and Services Responsibility		
<ul style="list-style-type: none"> The distribution of tap water to the customers is not less than 316.57 million cubic meters Survey of customer satisfaction result is not less than 90% Zero of complaint from customers 	<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"> The distribution of tap water to the customers is 291.30 million cubic meters Survey of customer satisfaction at 94.50%. The complaint from customers 1 time (PTW about Cleanliness)
6. Innovation and Technology		
<ul style="list-style-type: none"> Number of issues for process improvement working through Kaizen activities (Kaizen) no less than 363 activities Increased productivity from 2020 Cost of electricity decreased from 2015 	<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 (Kaizen or Exchange Program) 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 	<ul style="list-style-type: none"> Number of issues for process improvement working through Kaizen activities (Kaizen) of 368 activities. The amount of tap water to customers decreased from 2020 of 27.67 million cubic meters TTW's electricity cost in 2020 decreased from 2015 (before the production process to be improved to Hybrid) at 17.32% or 2.54 baht/cubic meters
7. Employee Stewardship and Development		
<ul style="list-style-type: none"> Survey of employees' satisfaction result is not less than 80% The number of employees who resigned decrease from 2020 The number of training hours has increased from 2020 	<ul style="list-style-type: none"> Regularly review the employee performance appraisal 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"> Survey of employee satisfaction at 72% The number of employees who resigned decreased from 2020 of 4 persons or 57% The number of training hours has increased from 2020 of 96 hours or 3.02%
8. Occupational Health and Safety		
<ul style="list-style-type: none"> Percentage of employees receives an annual check-up at 100% Zero of occupational illnesses Zero of operational accident 	<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. 	<ul style="list-style-type: none"> Percentage of employees receives an annual check-up at 100% Zero of occupational illnesses The operational accident 1 time

Goals	Methods	Results
	<ul style="list-style-type: none"> 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 	

9. Social and Community Development

<ul style="list-style-type: none"> The number of communities' benefits from the Company's corporate social responsibility operations not less than 30 communities The number of projects or activities on corporate social responsibility not less than 10 projects Zero of complaint from the community 	<ul style="list-style-type: none"> Supporting scholarships for students in schools with a shortage in service areas Renovation of the school building, installing water filtration systems and improving the landscape of the school in the service area Transferring knowledge on water conservation to schools and communities Produce and support our stakeholders with bottled water for use in socially beneficial activities Financial support to stakeholders using in activities beneficial to society Supporting activities on Buddhism and preserve good Thai traditions Solving social problems in times of crisis 	<ul style="list-style-type: none"> The number of communities that benefit from the Company's corporate social responsibility operations of 113 communities The number of projects or activities on corporate social responsibility of 7 projects. Zero of complaint from the community
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10. Environmentally Friendly Process of Products and Services

<ul style="list-style-type: none"> Chlorine usage cost per product unit decrease from 2020 The amount of electricity consumption per product unit reduces not less than 0.05% The amount of GHG emission per product unit reduced not less than 0.05% 	<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"> Chlorine cost per product unit compared to 2020, TTW increased by 29% and PTW remained invariable (as chlorine use is also a factor of water quality) GHG emissions per product unit compared to 2020, TTW decreased by 6.36% and PTW decreased by 7.64%
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11. Water Management

<ul style="list-style-type: none"> The ratio of water recovery is not less than 2% of the total amount of water entering the production process 	<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 	<ul style="list-style-type: none"> The ratio of water recovery, TTW at 2.30% and PTW at 3.06% of the total amount of water entering the production process
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Goals	Methods	Results
	<ul style="list-style-type: none"> • 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, Regional Environmental Office 5, Metropolitan Waterworks Authority, Provincial Waterworks Authority, Private agency and the We Love Tha Chin River Club, Nakhon Pathom Province • Established a project to restore the water quality of Bang Sue Canal and its tributaries to conserve the Tha Chin River with government agencies and communities 	

12. Waste and Unused Materials Management

<ul style="list-style-type: none"> • The number of products from waste in the production process to be used for social benefits at least 1 type • The number of communities' benefit from waste products at least 1 community 	<ul style="list-style-type: none"> • Waste is sorted into 3 types: general waste, recycle waste and toxic waste • Establish a project of compost from sludge with 1: 2 ratio of fresh waste, in order to take care of plants in Thairath Wittaya 4 School and Wat Sukwattanaram School, Nakhon Pathom Province • The products obtained from sludge research are used to enhance the livelihoods of the community, by using "clay tiles" to decorate the school buildings of Wat Sukwattanaram School, Nakhon Pathom Province • Establish a composting project from an automatic food waste disposal machine in the head office. 	<ul style="list-style-type: none"> • The number of products from waste in the production process to be used for social benefits is 2 types • The number of communities' benefit from waste products were 2 communities
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13. Climate Change and Energy Conservation

<p>13.1 2021 Goals</p> <ul style="list-style-type: none"> • The electricity consumption rate per product unit decreased not less than 0.05% • GHG emission rate per product unit decreased not less than 0.05% <p>13.2 2022-2025 Goals</p> <ul style="list-style-type: none"> • The electricity consumption rate per product unit decreased not less than 1% • GHG emission rate per product unit decreased not less than 0.03% 	<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 • Establish project for assess GHG emissions from business processes by hiring consultants and auditors from outside agencies 	<ul style="list-style-type: none"> • The electricity consumption rate per product unit, TTW decreased by 1.77% and PTW decreased by 3.05% • GHG emission rate per product unit, TTW decreased by 6.36% and PTW decreased by 7.64%
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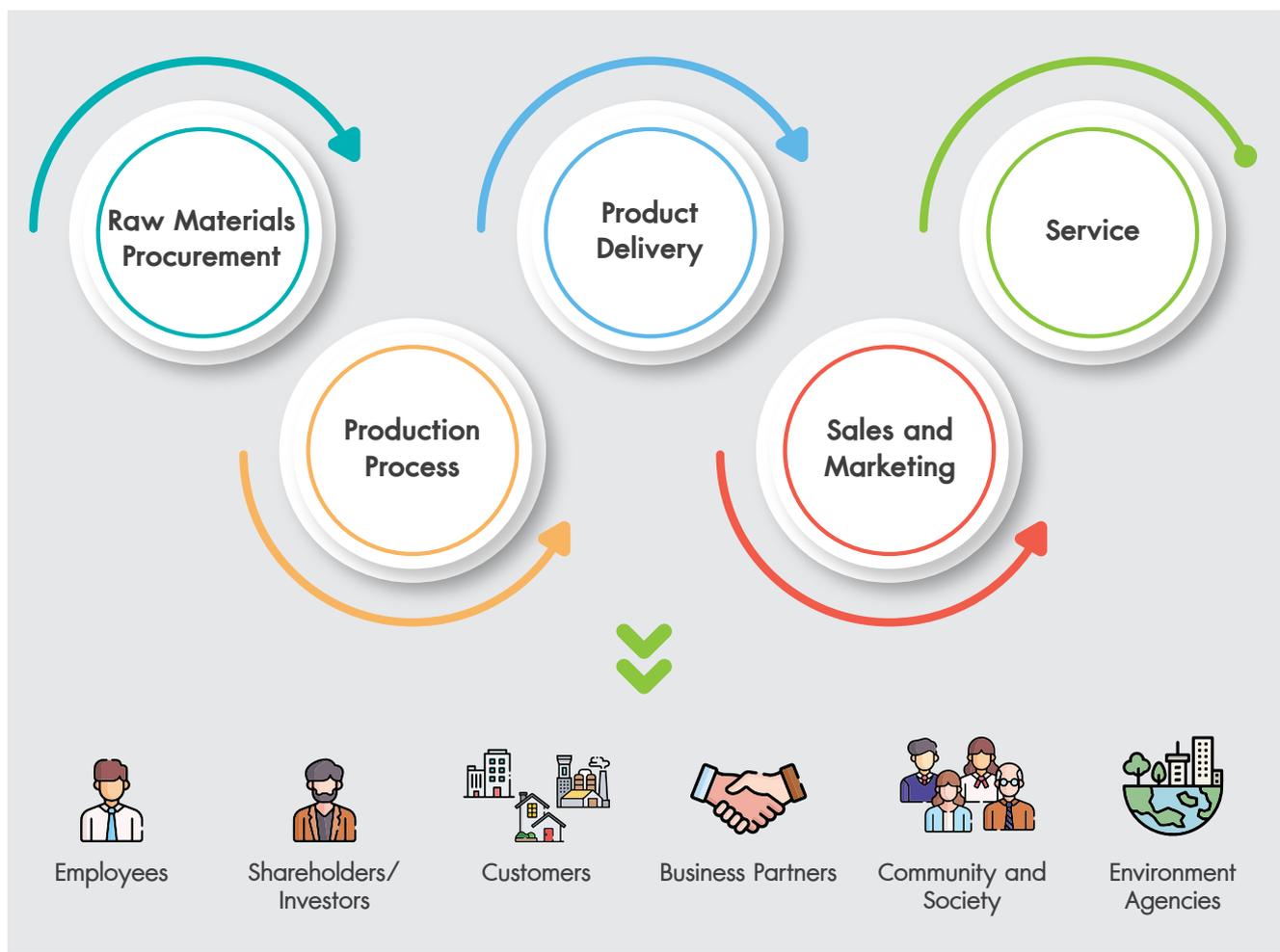
Goals	Methods	Results
14. Biodiversity		
<ul style="list-style-type: none"> The number of projects or activities in caring for conservation areas or natural resources not less than 1 project Zero of complaint from stakeholders about the impact of the Company's business operations on conservation areas or natural resources 	<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. Follow up the one-million seedlings project to create watershed forests by supporting donations for officers and forest guards for the Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation (DNP) 	<ul style="list-style-type: none"> The number of projects or activities in caring for conservation areas or natural resources was 2 projects Zero of complaint from stakeholders about the impact of the Company's business operations on conservation areas or natural resources
15. Environment Cooperation between Organization		
<ul style="list-style-type: none"> The number of projects or activities related to environmental stewardship with external agencies not less than 1 project The number of external agencies cooperates in projects or activities related to environmental stewardship with the Company not less than 2 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 Tha Chin River Club, Nakhon Pathom Province. And the Regional Environmental Office 5 Established a project to restore the water quality of Bang Sue Canal and its tributaries to conserve the Tha Chin River with government agencies and communities Follow up the one-million seedlings project to create watershed forests by supporting donations for officers and forest guards for the Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation (DNP) 	<ul style="list-style-type: none"> The number of projects or activities related to environmental stewardship with external agencies was 4 projects The number of external agencies cooperates in projects or activities related to environmental stewardship with the Company was 7 agencies
16. Compliance with Environmental Laws		
<ul style="list-style-type: none"> The number of internal audits ISO 14001:2015 environmental system management not less than 1 time Received ISO 14001:2015 environmental certification from external agencies Zero of violation of environmental laws 	<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 Prepare 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 number of internal audits ISO 14001:2015 environmental system management was 1 time during March 29-31, 2021 Received ISO 14001:2015 environmental certification from SGS (Thailand) Company Limited Zero of violation of environmental laws

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, 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, 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. We recognize that "water" is essential to our livelihood and business operations, thus promoting integrated solutions to water problems by creating engagement between companies, communities and government agencies.

The Company, collaborate with the Center of Excellence on Hazardous Substance Management (HSM) has organized the project "Composting from Fresh Waste and Sludge" where the results contain nutrients suitable for planting fruit and flowering plants. Currently, the Company has implemented a compost project at its head office and is in the process of implementing with schools in the Bang Len Water Treatment Plant area in Nakhon Pathom Province, which creates mutual values between the business sector and society at the same time, it also promotes the cost-effective and efficient use of natural resources and energy along with the sustainable conservation of natural resources and energy, as well as participating in reducing global warming from GHG emission from business processes.

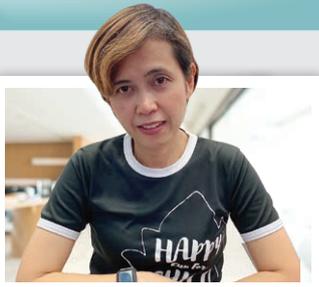
Stakeholders' Feedback to the Company



Mr. Kriengkrai Prathumsin
Production Staff

Bang Len Water Treatment Plant
TTW Public Company Limited

I started working with TTW in 2005, I have seen continuous improvement, especially the development of the work system and personnel to be efficient and proficient in their work, resulting in career stability, and I am very pleased to work with TTW. "We will move forward together".



Ms. Sansanee Tanotkaew
Financial Officer

Account and Financial Division
TTW Public Company Limited

TTW takes care of employees in terms of health and wellness. We have a gym to encourage employees to be healthy and also provide annual health check-ups by arranging different type according to gender, age and risk of disease. Furthermore, the Company has issued health insurance for employees in addition to social security payments and additional medical expenses.



Mr. Phuthong Duanglert
PWA Managers of Regional Offices

Provincial Waterworks Authority
Samut Sakhon Branch

TTW's tap water system is clean and safe, meets World Health Organization (WHO) standards, has sedimentation, filtration and chlorination processes to kill germs, bacteria and viruses, and has strict measures to prevent the spread of COVID-19, thus ensure that TTW's tap water is safe from the COVID-19 virus.



Mr. Danai Lulitanon
Deputy Chief Executive Officer

Siam Chemicals Public
Company Limited

TTW and its business partners are always exchanging knowledge and improving their work. Due to the COVID-19 crisis, knowing that our supply chain is important and continuity, we have applied TTW's advice as a way to reduce risks in our production processes. As a result, the production is continuous and the products can be delivered as scheduled.



Mr. Peerapol Hiranyasat
Managing Director

P71 COMPANY LIMITED

TTW's ESG vendor assessment shows the importance of ESG today. We receive advice on improving ESG work from TTW and use it to improve our operations to promote sustainable operations.



Ms. Salinee Wongthong
Parent

Maharaj Foundation Youth Home
Pathum Thani

On behalf of Maharaj Foundation Youth Home, we would like to thank TTW for providing us with necessary supplies as currently the operating expenses of the foundation are quite high because we have to take care of many people, causing some necessities to be scarce.



Chutikarn Singtokaew
Primary 4 Student

Wat Sukwattanaram School
Nakhon Pathom

My name is Chutikarn Singtokaew, a primary 4 student at Wat Sukwattanaram School. I am very pleased with the scholarship received from TTW. Part of the scholarship will be used to buy necessary items during the COVID-19 epidemic. Due to my family is having a hard time, which my father earns 300 Baht per day. I would like to thank TTW for giving me a scholarship that can help my family very well.

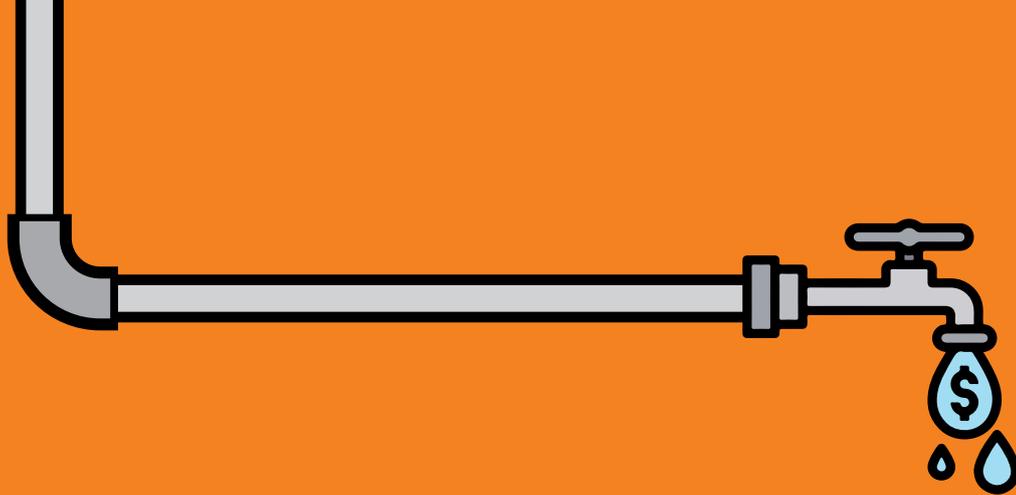


Dr. Thammawit honor, M.D.,
Director

Kratumbean Hospital
Samut Sakhon

Krathum Baen Hospital is grateful for TTW's generosity which shows the encouragement that is continually delivered to the hospital through support "Medical equipment and essentials" In the past, the staff were tired from the burden of caring for patients. The support from TTW has made us more motivated and able to take care of people more thoroughly.

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



Leader of Private Sector in Operating Tap Water Business



Good Corporate Governance

Corporate Governance

Business management with good corporate governance is an important factor reflecting the management system that is effective, fair, transparent, accountable, socially and environmentally responsible, which will create mutual confidence to shareholders, investors, stakeholders, and all related parties.

The Board of Directors has assigned the Risk Management and Corporate Governance Committee to review, promote, supervise and monitor the Company's corporate governance operations. The corporate governance policy is reviewed and updated in accordance with international standards, laws, rules, regulations, and requirements of relevant agencies in order to comply with the Corporate Governance Code for listed companies 2017 (CG Code 2017) of the Securities and Exchange Commission (SEC), the criteria of the Corporate Governance Report of Listed Companies (CGR) of the Thai Institute of Directors (IOD) and the Principles of Good Corporate Governance according to the ASEAN CG Scorecard and related good practices of the Stock Exchange of Thailand (SET), etc., in order to grow and achieve the vision and mission stably and sustainably.

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, covering five important matters in accordance with the Stock Exchange of Thailand which are; shareholders' rights, equitable treatment of shareholders, stakeholder roles, disclosure of information and transparency, and board responsibility to enable the Board of Directors, executives and employees apply the following principles in their operations;

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.

The Board of Directors is aware of compliance with the CG Code by the Office of the SEC and thus has adapted said principles to be in line with the Company's operations. The corporate governance policy is reviewed annually and the criteria are adjusted based on the foundational principles of good corporate governance and in accordance with the changing environment.

The Board of Directors

The Board of Directors consists of 12 members, 4 of which are independent directors and 2 females. The Board Diversity has skills that are in line with the Company's business strategy.

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

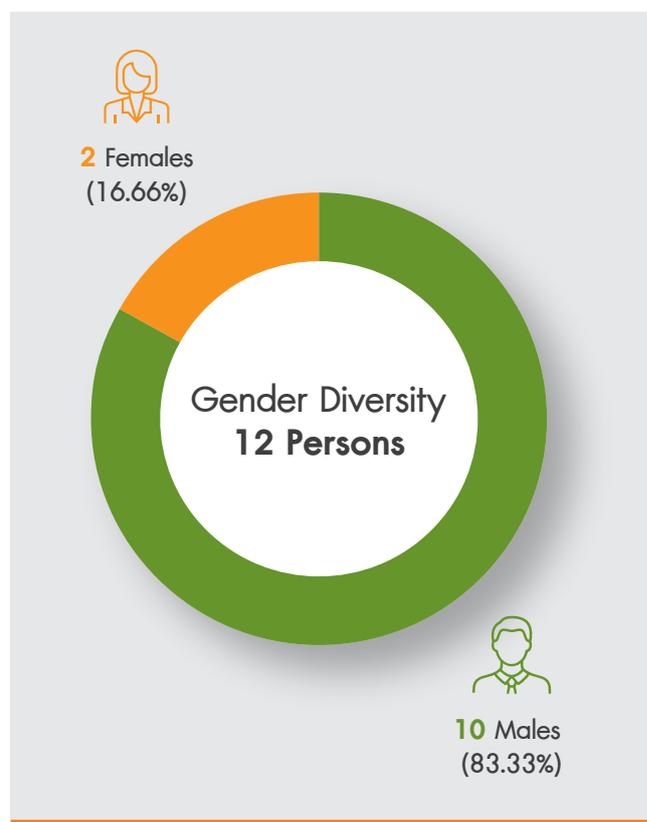
due to reasons other than retiring by rotation, then propose at the shareholders' meeting in the event that the director completes his / her term by considering the following factors:

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 as follows:

- Gender Diversity



- Education and Expertise Diversity

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. Dr. Sombat Kitjalaksana	✓	✓	-	✓	✓	✓
7. Mr. Suvich Pungchareon	✓	-	✓	✓	✓	✓
8. Mrs. Payao Marittanaporn	✓	✓	-	✓	✓	✓
9. Mr. Yuttana Yimgarund	✓	-	✓	✓	✓	✓
10. Mr. Kaoru Umehara	✓	-	✓	✓	✓	✓
11. Mr. Hideo Matsumoto	✓	✓	-	✓	✓	✓
12. Ms. Walainut Trivisvavet	✓	✓	✓	✓	✓	✓
Total	12	8	5	12	12	12

The Board of Directors's Compensation Policy

The Board of Directors considers remuneration on a fair and reasonable basis compared with similar industries, this includes the experience, scope of duties and responsibilities of each director as well as duties and responsibilities from being a member of the sub-committees, then propose to the shareholders' meeting for approval. The remuneration of the Board of Directors and executives are required to disclose in the Annual Report and the Company's financial statements.



Compensation Principles's the Board of Directors

The Company defines the composition of compensation in two parts are as follows:

Part 1 Annual Fee

1.1 Retainer fee

It is the remuneration paid to directors on a monthly basis whether or not there are meetings by considering the operating results and the ability to operate according to goals.

1.2 Attendance Fee

It is the remuneration paid to each director attending the meeting which is paid only to directors who attend the meeting.

Part 2 Incentive Fee / Bonus

It is a special remuneration paid to directors once a year by linking with the value created for shareholders such as the company's profits or dividends paid to shareholders.

Corporate Governance Structure

The Company establishes guidelines for good corporate governance, with the Board of Directors defining roles in controlling and supervising the management's operations, including planning strategies, policies and operating organization's direction, providing effective corporate governance, create a good image for stakeholders, including transparent and fair confidence in the management system. The Board of Directors has approved the establishment of four sub-committees to study, screen and alleviate the duties of the Board of Directors as follows:

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

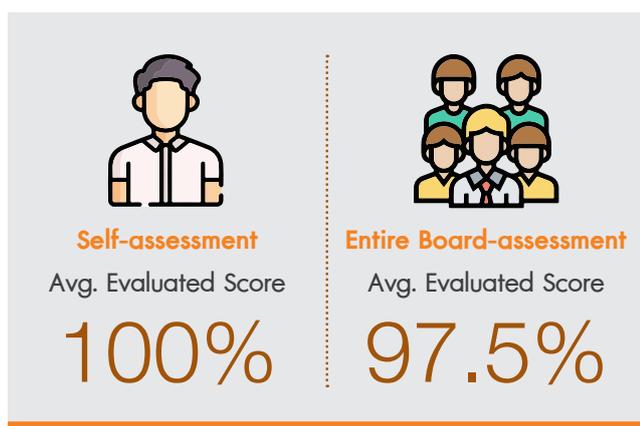
In addition, it clearly defines the scope of powers and duties of the sub-committees and requires all committees to report their duties directly to the Board of Directors. The details of the sub-committees can be found in the Annual Report 2021 (Form 56-1 One report), item 7.3. Subcommittees.

Risk Management and Corporate Governance Committee consist of 5 members are as follows:

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

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. There are two types of assessments are as follows:



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 Annual Report 2021 (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 and the Company's risk management system related to the vision, goals, strategies, finance, production and operations, 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. Continuous Awareness and Comprehension

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.

Conflict of Interest

1. All executives and employees should avoid the conflict between personal interests and the Company interest in dealing with business partners and others.
2. Executives and employees shall not disclose the Company confidential information to others during the course of the Company's employment or leaving without the proper authorization of the Company.
3. Executives or employees acting as directors or advisors in other organizations, whether acting on behalf of the company or not, must not be conflict with the interests and direct performance of their duties, as well as must be approved by the Company in accordance with the company's regulations.
4. In the event that executives or employees and family members become shareholders in any business that may have conflict of interest with the Company, the Company must be notified in written form.
5. In the event that conflict of interest arising without the intention of executives or employees and related persons, if the person becomes aware that he or she is in the situation, immediately notify the hierarchical supervisor of the incident for further corrective action.

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 2021, the Company has not encountered any corruption incidents.

Protection of Personal Information

The Company recognizes the importance and duties under the Personal Data Protection Act C.E. 2019, attaches great importance to respecting the privacy rights and protecting the personal information of employees and stakeholders.

1. To educate employees about personal data protection.
2. To raise awareness and communicate to employees.
3. To establish the orders, policies, and procedures for employees' personal data protection and publish on the Company's website: <https://www.ttwplc.com/storage/about/policy/ttw-pdpa-policy-en.pdf>

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>

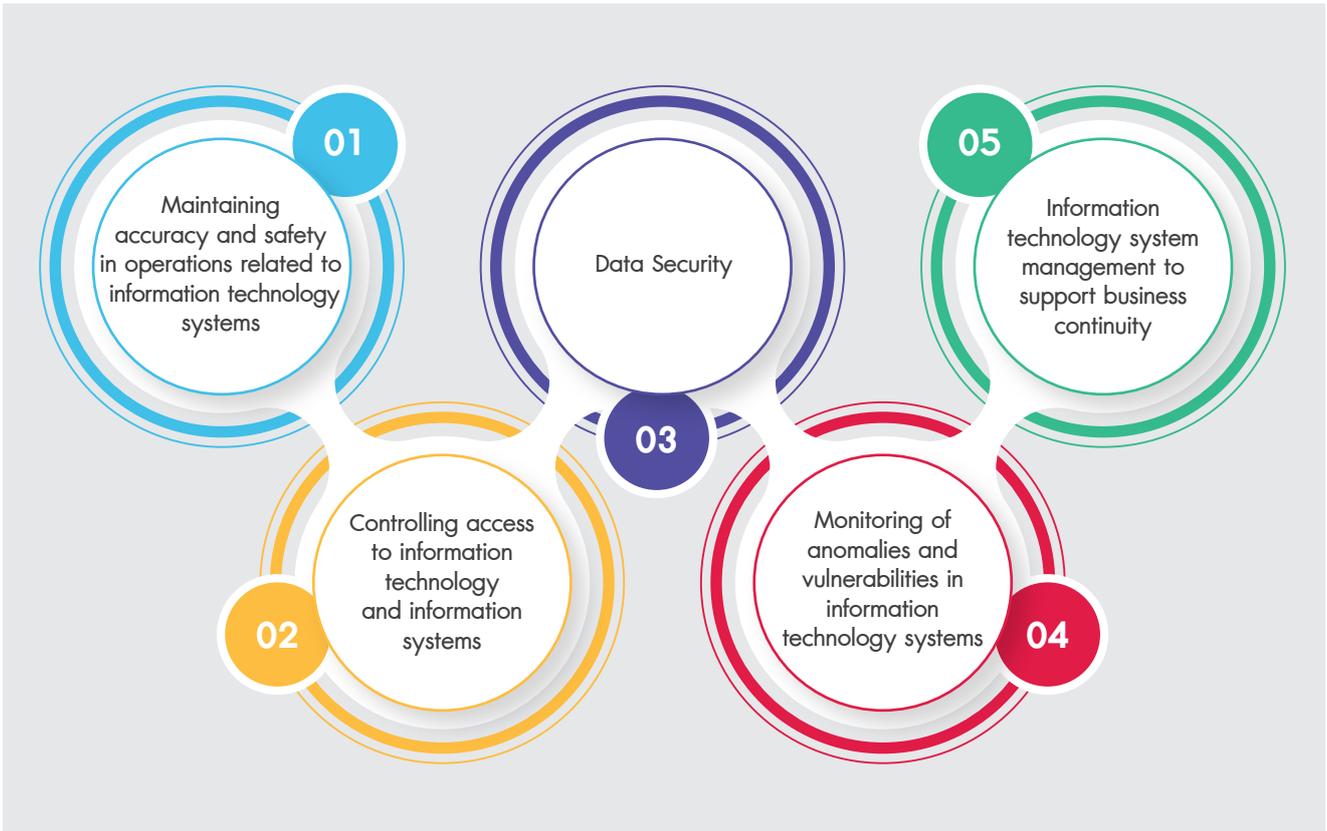
Communication of Good Corporate Governance Principles

To create awareness and understanding of the Company's business operations under the principles of good corporate governance, therefore the Company has continuously communicated and provided training course about policies, practices, and anti-corruption, by publishing the articles through the communication system within the organization such as email, publicity board, and through various activities. In addition, employees at all levels will receive a lecture on anti-corruption practices in the orientation of new employees.

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 external 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.

Performance Goals for year 2021 _____

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.

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 one per month
- Network recovery time within 48 hours

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 Courses

1. Training courses for administrators responsible for information technology systems

- 1.1 Adaptive Network-base Infrastructure Attacking
- 1.2 On the Job Training, HCI Sangfor System
- 1.3 Database SQL

2. Training courses for executives and employees

- 2.1 In-house computer systems such as basic operations, e-mail systems, and procurement and accounting programs for new employees.
- 2.2 Personal Data Protection Act: PDPA for executives and employees.

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.

2021 Information Risk Management and Information Technology System Performance (IT Security)

Goals	Key Performance Indicator (KPI)	2021	Result
The Service Efficiency	The number of repairs can be made not less than 90% of the monthly repair notice	100%	Achieved the Goal
The Preventive Maintenance: PM	<ul style="list-style-type: none"> PM to Amata City Industrial Estate, Chonburi and Rayong two months per time PM to other business areas once a month. 	1 Time / 2 Months	Achieved the Goal
		1 Time / Month	Achieved the Goal
The Down Time Reduction	The number of down time and recovery time by defining the indicators as follows: <ul style="list-style-type: none"> The number of down time is less than or equal to one per month Network recovery time within 48 hours 	Less than or equal to 1 Time / Month Within 12 Hours / Time	Achieved the Goal
			Achieved the Goal

Receiving Complaint & Clues

The Company provides the communication channels for employees or stakeholders of all sectors to communicate in expressing their opinions, including whistleblowing or unfair due to unlawful acts or the Company's ethics as well as complaints in the matter that may cause damage to the Company by submit the information in written form to the Audit Committee or the Board of Directors through the following channels:



Post:

To 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: (+622) 019-9490-3, (+622) 019-9484-9
Cont. 1103, 1106

In this regard, questions, complaints and suggestions will be forwarded to the relevant departments to act in order to revise, improve and summarize the results for further reporting to the Audit Committee and the Board of Directors.

In 2021, the Board of Directors has not received any complaints related to non-compliance with rules and business ethics of the Board of Directors and employees. The details of corporate governance report are disclosed in the Annual Report 2021 (Form 56-1 One Report) "Corporate Governance Structure"

Performance of Compliance with the Code of Conduct Report to the Board of Directors or Sub-Committees

Non-Compliance with the Code of Conduct

Directors, executives, and employees who encounter or are pressured/compelled to act against the code of conduct must report to their supervisors, chief executives, the Internal Audit Department, or the Audit Committee, as the case may be. In addition, complaints can be reported through the complaints channel on the Company's website: <https://www.ttwplc.com/storage/cg/cg/files/20210825-whistle-blowing-policy-en.pdf> where the complaints will be sent directly to the Company Secretary and the Audit Committee, or sent email at cg@ttwplc.com

The Company has a policy to protect whistleblowers and related persons with appropriate and fair protection. The Company will keep the information related to the complaint confidential and not disclose it except in cases where it is necessary in accordance with the requirements of the law.



2021 Corporate Governance Performance

Result	Goal
✓	Adhere to the Principles of Good Corporate Governance for listed companies in 2017 (CG Code).
✓	Adhere to the guidelines for compliance with the Good Corporate Governance Manual and the Company's Code of Business Conduct that has been prepared in writing and published to the directors management and employees adhere to the guidelines.
Excellence	TTW was ranked CG Score for the year 2021 from the Corporate Governance Report of Thai Listed Company (CGR) by the Thai Institute of Directors Association's assessment.
Scoring 100 points	Get a full score of 100 points for the 2021 Annual General Meeting (AGM) Quality Assessment, Thai Investors Association (TIA)

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.

Risk Management

Operating Policy

1. To ensure the achievement of business objectives and stakeholder expectations, the Company balances the level of risk and reward from business opportunities while keeping the risks at an acceptable level.
2. Executives and employees shall be aware of the Company's risk, especially the risks of their own responsibility.
3. Executives and employees should promote a risk-management culture within the Company for sustainability as part of their day-to-day operations.
4. All events that may adversely affect the achievement of the Company's objectives must be treated as follows:
 - 4.1 Identify and assess the level of risk in terms of likelihood and impact in a timely manner.
 - 4.2 Risks are managed to an acceptable level through various control activities in order to prevent potential losses considering the costs and benefits of implementing those controls.
 - 4.3 Continuously monitor the Company's risk management to ensure that are properly managed.

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 established a risk management structure in accordance with the Annual Report 2021 (Form 56-1 One Report) Page 110, with the Risk Management and Corporate Governance Committee comprising five members. The Risk Management Officer, chaired by the Managing Director, is responsible for defining the structure and considering, approving policies, strategies, risk management frameworks and risk management plans, including reviewing and monitoring risks throughout the organization. The Company has established a risk management process in five steps as follows:



In 2021, the Company has reviewed the corporate risk register and adjusts risk arising from both the internal and external environment in order to be current due to the events are constantly changing. During the year 2021 Thailand and the global were affected by the epidemic of the COVID-19. Therefore, the Company has the COVID-19 prevention measures as required by law for the operational person in order to mitigation the impact of production process. The additional prevention measures enable the Company operates its business according to the specified goals, which employees must strictly comply with to mitigate the risks that may affect the tap water production and distribution process. The Company has a policy to implement the recommendations of the World Health Organization (WHO) on the disinfection of tap water by managing corporate risks in accordance with the risk management framework and strategies to reduce the level of risk to an acceptable level. The economic risks are divided into three areas namely; strategic, operational, and financial, by establishing a risk register consisting of a list of risks and measures to control management risks, as well as monitoring the performance according to the planned work continually. The details are as follows.

Economic Risk

Risk Issues	Risk Mitigation Measures
Strategic Risk	
<ul style="list-style-type: none"> The distribution of tap water is not in accordance with the Company's plan 	<ul style="list-style-type: none"> Support the installation of pipe lines to strengthen the pressure and/or expand the area to increase the amount of PWA's tap water distribution in the service area under the contract Monitor the movements of other tap water distributors, both public and private, that may affect the Company's current and future tap water volumes Monitor the water leakage management in the Company's service area Monitor and analyze irregularities in the Company's tap water distribution Maintenance of machinery, core equipment and electrical systems as well as fixing and preventing solutions
Operational Risk	
<ul style="list-style-type: none"> Change of raw water quality 	<ul style="list-style-type: none"> Establish an appropriate surveillance and monitoring plan both randomly collecting water samples for analysis and changing data from relevant agencies, such as the Authority Metropolitan Waterworks, Regional Environmental Office 5, and the Royal Irrigation Department, etc.
Financial Risk	
<ul style="list-style-type: none"> Expanding new businesses in water, energy and environment 	<ul style="list-style-type: none"> Tracking information, news and business movements related to the Company both domestic and abroad, as well as the laws changed by the government sector Study and develop investment projects in utilities business according to government policies and investment plans and seek alliances

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
Personnel 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

Risk Issues	Risk Mitigation Measures
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 Establish campaign to promote the conservation of the Tha Chin River and its branch canal to conserve the Tha Chin River 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
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 	<ul style="list-style-type: none"> Monitoring news and coordinate with the relevant departments closely such as Department of Water Resources, Regional Irrigation Office 5, MWA, PWA, Local environmental departments Monitor the water levels in the Tha Chin and Chao Phraya Rivers Follow the flood/drought response action plan
Risk from Changes in Relevant Laws	
<ul style="list-style-type: none"> The Water Resources Act, which has collected raw water costs by the Department of Water Resources resulting to increasing in production tap water cost 	<ul style="list-style-type: none"> Monitor the secondary legislation of the Water Resources Act on the issues related to or affecting the Company's business operations Develop the Company's future cost management plan
Emerging Infectious Diseases Risks	
<ul style="list-style-type: none"> The epidemic situation of COVID-19, emerging and continually mutating pathogens, affects human life behavior, including the consumption of products and services. 	<ul style="list-style-type: none"> Announced the BCP plan "Measures to prevent COVID-19 infection" to be used in the operation Strictly adhere to the epidemic prevention measures of COVID-19 Allocate the necessary budget and resources to prevent the spread of COVID-19 to employees and stakeholders Provide employees a preventive vaccinations COVID-19 to build immunity, reduce the spread and severity of symptoms Preliminary screening COVID-19 for employees with Antigen Test Kit (ATK) before entering the workplace weekly. Continuously communicate and publicize information about the prevention of the spread of COVID-19 to all stakeholders Strictly comply with orders or instructions of government agencies Follow the recommendations of the WHO on disinfection of tap water Establish the Factory Accommodation Isolation for COVID-19 infected by the order of the Samut Sakhon Governor

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.

In 2021, the Company provides risk training courses for executives and employees to create knowledge and comprehension of corporate risk management with the following programs:

1. Courses: Introduction to risk management policy for new employees
2. Courses: Risk management from the COVID-19 outbreak

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.

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 2021, the Risk Management Officer held four meetings to report the risk management performance to the Risk Management and Corporate Governance Committee and to further submitted to the Board of Directors.

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:



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 2021, 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
	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 waste material

	Main Activity	Risk Issues	Risk Mitigation Measures
	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 waste 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 second 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, and the Factory Accommodation Isolation. 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.



COVID-19 Epidemic Management

The Company prioritizes the executives meeting first to establish the COVID-19 prevention measures in accordance with the government policy and inform the employees to prevent the spread of COVID-19 among personnel that may affect the Company’s business operations.

1. Respond to the incident immediately

- Request employees to cooperate not to travel to high-risk areas during long holidays
- Screening people entering and leaving the operating site
- Prepare a budget
- Provide COVID-19 protective equipment for employees
- Spray disinfection the workplace continuously



2. Management plan in the event of a crisis

- Improve the BCP plan and announce the implementation of the COVID-19 prevention measure
- Communicate internally and externally to prepare communications to stakeholders
- Improved computer and online systems to support online meetings and WFH
- Adjust the production plans, such as increasing the rate of chlorination in tap water and chemical reserves to avoid affecting the production
- Adjust manpower plans, such as dividing employees into two sets and dividing the working area into two zones to reduce the risk of the spread of COVID-19 and prevent impact on business operations

- Establish the Pathum Thani Water Treatment Plant, Samkok, Pathum Thani Province for the quarantine of production department employees who are not risk (Seal) according to the condition in BCP (In case production department employees are at high risk for more than 50% of the total number of employees in the production department.)



3. Mitigation and Stakeholder Stewardship

3.1 Employees

The Company is concerned about the well-being of employees, the Company, therefore, allocates the necessary resources to prevent the spread of COVID-19, such as: protective equipment, separate workplace, spray disinfection, screening COVID-19 before entering the workplace, campaign for government vaccination, and COVID-19 insurance for all employees, etc. In addition, the Company has the additional measure as follows:

- Establish the Factory Accommodation Isolation for the workplace infection located Kratumban Water Treatment Plant, Kratumban, Samut Sakhon Province, with accommodating 4 beds, equivalent to 10% of the number of employees in the Samut Sakhon area according to the announcement of the Ministry of Industry and the Samut Sakhon Governor's policy.

3.2 Customers (PWA)

The Company realizes the importance of customers operation (PWA), maintains "Quality of Water" and concerns for tap water users, thus mitigating the impact of the COVID-19 epidemic to PWA is a priority for the Company by maintaining production efficiency, quality of products and services in accordance with the terms of the contract, including allocation budget, necessities, COVID-19 protective equipment as well as supporting tap water to the field hospital and bottled water for the use of COVID-19 prevention to the PWA continuously.

- Follow the recommendations of the WHO on disinfection of tap water
- Increasing the chlorine addition rate in tap water to maintain the remaining free chlorine content of more than 0.8 mg/l.
- Adjust the pressure to be suitable for the area using the tap water
- The Company has waived the payment of tap water to PWA during the COVID-19 crisis, from the original schedule specified in the contract to be postponed for a period of two months from the date specified in the invoice without interest, no minimum tap water according to the contract



3.3 Government Agencies, Hospitals, and Communities

The Company concerns and mitigates the impact of the COVID-19 situation to its stakeholders by supporting the budget, protective equipment, necessities, food box, survival bag, and bottled water, which support to the external agencies, national, organizational, local level such as the Ministry of Health, Chaipattana Foundation, Royal Thai Police, Ramathibodi Hospital, Siriraj Hospital, Phuttha Sothon Hospital, local authorities, hospital, community nursing home, children's home, field hospitals and schools to alleviate the suffering from the COVID-19 situation.

National Agency

- Fundraising donation for the prevention of COVID-19
- COVID-19 insurance policy for medical personnel a nationwide
- Contribution to the Kariyat herb project for the people
- Rapid Antigen Test (ATK)
- Personal Protective Equipment (PPE)
- Bottled water

Hospital

- Fundraising donation for the prevention of COVID-19
- Face mask
- N95 mask
- Personal Protective Equipment (PPE)
- Alcohol
- Puritan Bennett Ventilator
- Oxygen Concentrator
- Oxygen Meter Finger
- Contribution to the construction of a negative pressure patient room
- Contribution to the construction of 30 beds in patient building
- Contribution to the construction of "the 84th Anniversary Nawamindrabophit Building"
- Contribution to purchase of medical equipment
- Bottled water

Customer (PWA) / Community

- Fundraising donation for the prevention of COVID-19
- Tap water for the filed hospitals
- Drive Thru Project
- Face mask
- N95 mask
- Alcohol
- Food box
- Survival bag
- Pansuk Cabinet
- Necessities
- Bottled water



4. Business Revitalization Plan

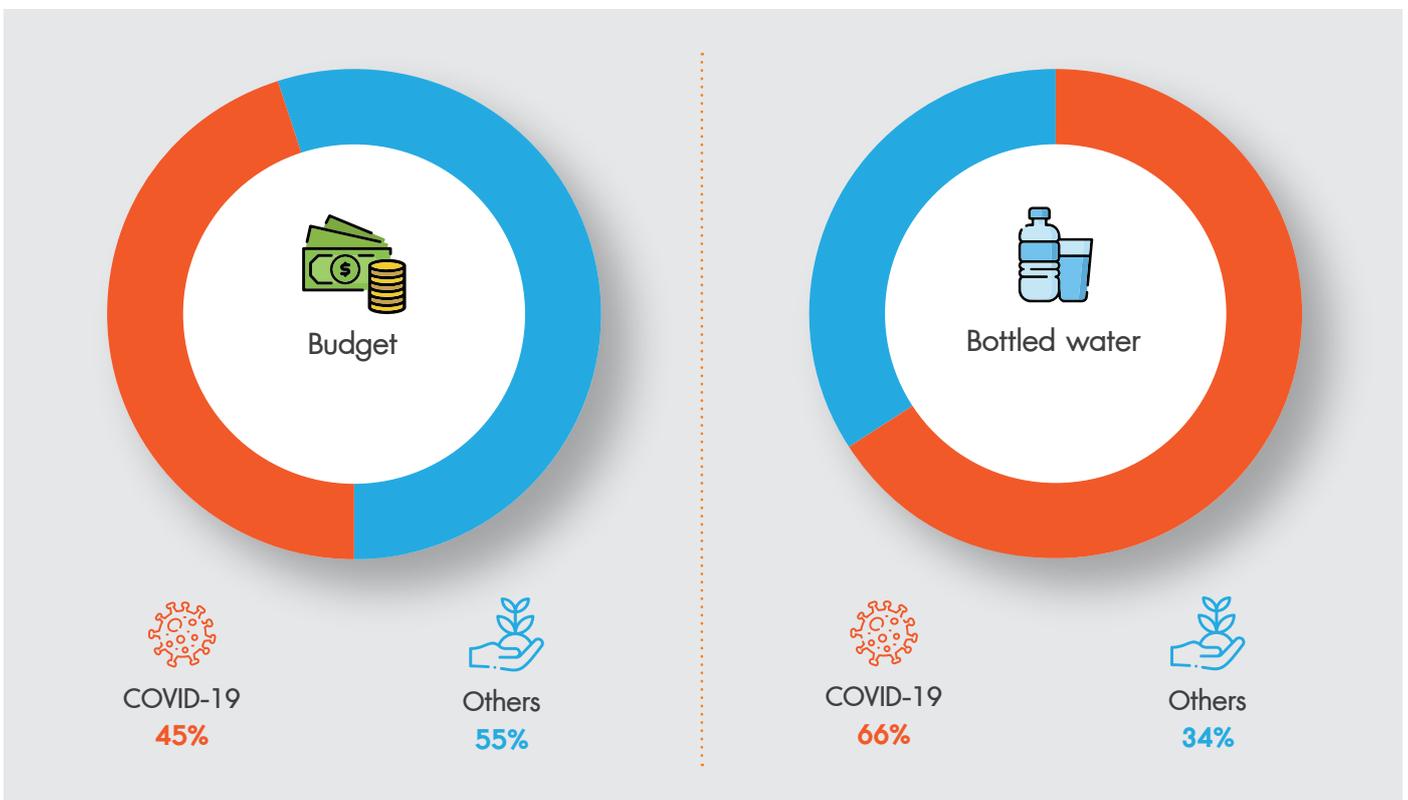
The Company analyzes external situations that may affect the Company's future operation and also attaches importance to the standard of tap water production to ensure quality, sufficient and continuity in order to supply tap water to customers (PWA) according to the contract; and support customers' businesses to reduce the impact of the COVID-19 situation.

- Monitor the amount of tap water distribution to be sufficient and continuous
- Maintaining tap water quality standards to have enough chlorine remaining to prevent the spread of COVID-19
- Waive the payment of tap water from the original schedule specified in the contract to be postponed for a period of two months from the date specified in the invoice without interest, no minimum tap water according to the contract

The Company has assessed the business potential of the COVID-19 epidemic by analyzing the needs of each type of tap water user, reviewing goals and action plans in line with tap water need currently to maintain the concept of leader of private sector in operating tap water business. In addition, the Company looks for new business development opportunities as it has the potential to grow its energy and environmental business in the future.

External Agency Support

In 2021, the Company continuously supported its stakeholders the prevention of COVID-19 activities to external agencies by supporting the "budget" and "bottled water" for social responsibility and environmental stewardship with 45% of the total budget, and 66% of bottled water distributed to the external agencies.



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 society, and environment.

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.

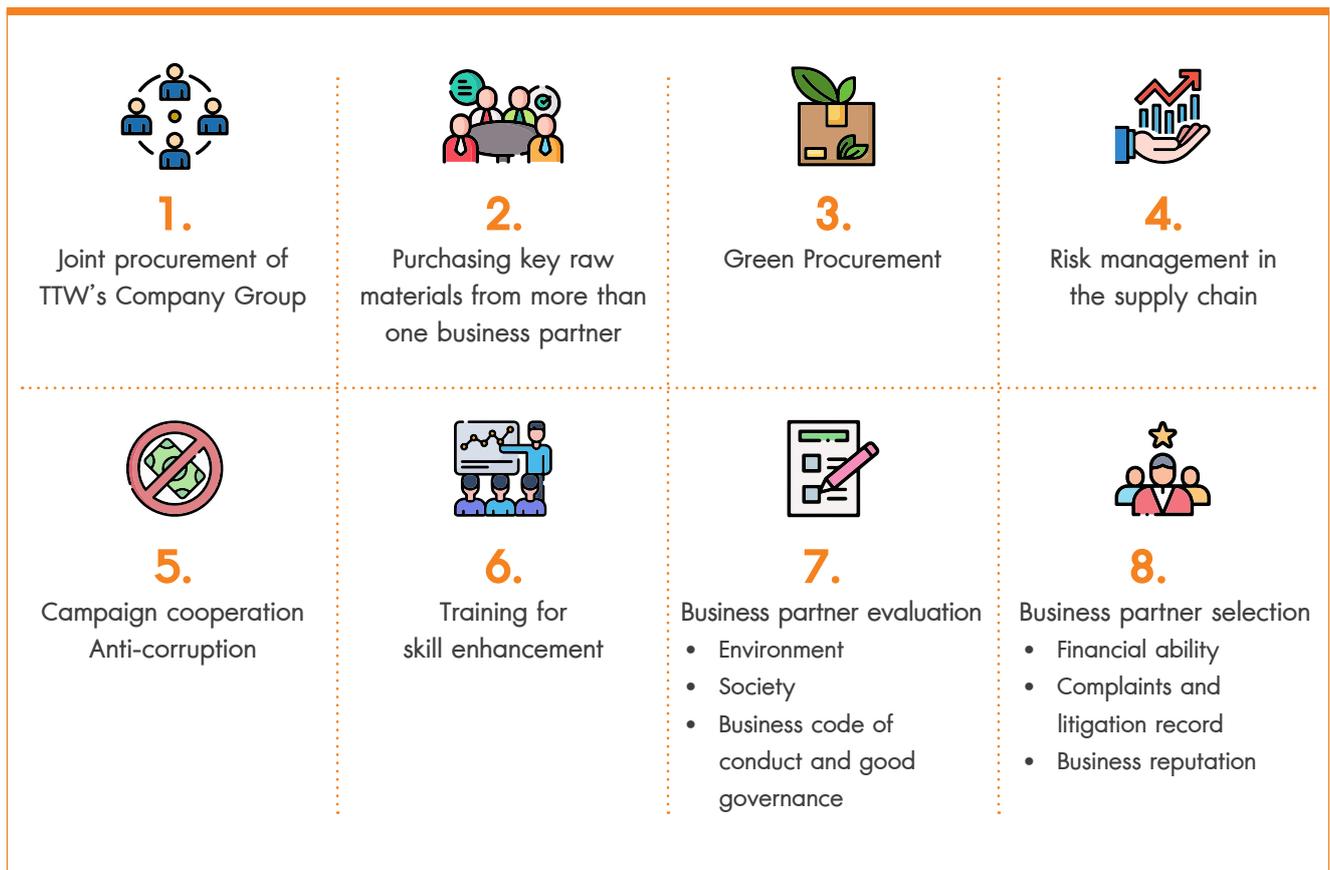


Supplier Code of Conduct

The Company has established the Supplier Code of Conduct (SCOC) adheres to environmental, social and governance principles (ESG) which disclose on the Company's 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:



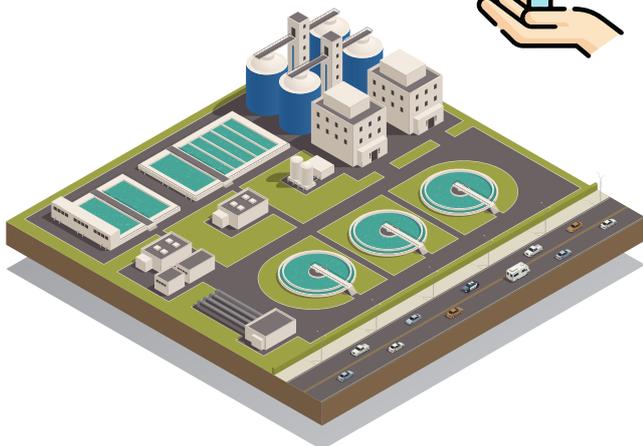
Supply Chain Management Strategy



Operational Goals in 2021

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)

264.00k

Kilogram

The Pathum Thani Water Treatment Plan

Maximum volume control (Max)

580.80k

Kilogram

Minimum volume control (Min)

396.00k

Kilogram

Business Partner 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 partner selling raw materials, products and services those are important to the Company's business processes
- They are the few partners in the market

3. Risk mitigation measures

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

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



Risks	Probability of Occurrence	Level	Risk Mitigation Measures	2020	2021
1. <u>Economy</u>					
1.1 The business partner is the manufacturer and the agent in the Country	Low	High	<ul style="list-style-type: none"> • Establish a contract purchase agreement and guaranteed delay 	None	None
1.2 The product delivery is not as expected	Low	High		None	None
2. <u>Social</u>					
2.1 Business partners engage in child labor or illegal labor	Low	High	<ul style="list-style-type: none"> • 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 • The business partner 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. 	None	None
2.2 The business partners are required to establish a health, occupational health, and safety policy on work and sanitation.	Low	High	<ul style="list-style-type: none"> • 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 	None	None
3. <u>Environment</u>					
Management of toxic transportation and waste disposal	Low	High	<ul style="list-style-type: none"> • Specify the environmental criteria of the contractor • Verify the license of the contractor • Review the employment contract with concise and secure adequate standards. 	None	None

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.

In 2021, the Company establishes backup plan and intensifies the delivery of products including looking for delivery channels that do not affect the production process as well as providing new sources of substitute products in the event of a crisis that the existing business partners are unable to deliver such products. The Company regards to screening new suppliers by emphasizing the quality of work and delivery including review of partner qualification measures in various

fields such as environmental management is used in the evaluation, and increasing review of the operating results throughout the year of such business partner.

Business Partner Sustainability Risk Management

“Sustainability high-risk business partner” mean the 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 Partner Sustainability Risk Assessment

Type of Business Partner	Number of business partner participated in ESG assessment in 2021	Proportion of ESG assessed business partners compared to the total number each category (%)
General Partner	9 Partners	0.77%
Major Partner	5 Partners	0.43%
Total	14 Partners	1.2%

Proportion of Sustainability High-Risk Business Partner

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

Training with Business Partners

The Company provides the training courses and reviews the expertise of engineering procurement officers, warehouse officers together with business partners to develop skills including product receipt and record in ERP (Enterprise Resource Planning) system, a tool for managing the organization's database in accordance with the regulations, with two related training courses are as follows:

1. Course: Cathodic Protection System



2. Course: Chlorine leakage suppression with KIT-B equipment, Maintenance of chlorine systems, and Use of SCBA breathing apparatus



Business Partners On-site Visit

The Company has visited major partners to promote work process improvements and develop products and services, as well as to create trust and good business relationships between TTW Group and its business partners. In 2021, the Company on-site visited seven business partners as follows:

Business Partners	Type of Business	Proposal
Numchai Industry Co., Ltd.	Manufacturer liquid alum	On-site visit
Siam Chemicals Pub Co., Ltd.	Manufacturer liquid alum	Business visit
Paradise Service Center Co., Ltd.	Manufacturer liquid alum	Business visit
Well Engineering Service Co., Ltd.	Motor, Water Pump Service Provider	Business visit
Herricane Corporation (Thailand) Co., Ltd.	Importer and distributor of cationic polymers - negative	Business visit
Max Motor Service Center Co., Ltd.	Motor, Water Pump Service Provider	Business visit
Kaowna Electric and Business Co., Ltd.	Motor, Water Pump Service Provider	Business visit



Performance in 2021

Goal	Key Performance Indicator (KPI)	2021	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%	94%	Achieved the Goal
Control the amount of liquid alum reserve (Chemical) to be in the (Max) and (Min) as specified			
<u>The Banglen Water Treatment Plant</u>			
• Maximum volume control (Max)	633.60k Kilogram	631.38k Kilogram	Achieved the Goal
• Minimum volume control (Min)	264.00k Kilogram	304.84k Kilogram	Achieved the Goal
<u>The Pathum Thani Water Treatment Plan</u>			
• Maximum volume control (Max)	580.80k Kilogram	554.40k Kilogram	Achieved the Goal
• Minimum volume control (Min)	396.00k Kilogram	396.00k Kilogram	Achieved the Goal

Other Performance in 2021

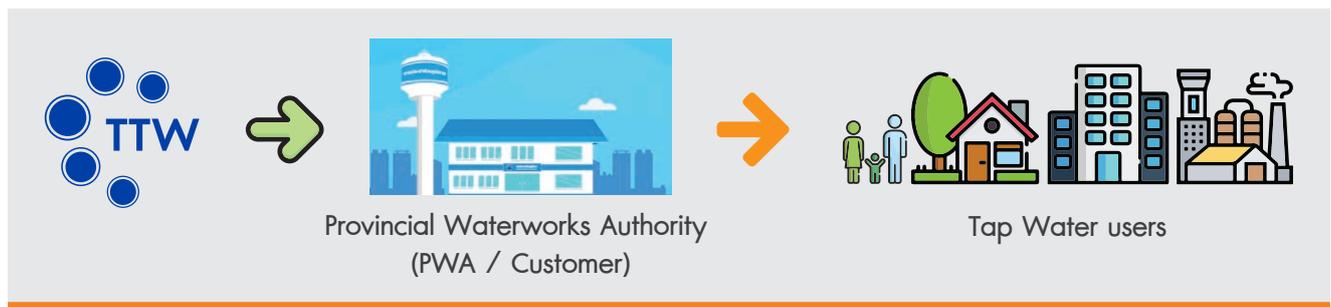
Other Performance	2019	2020	2021	Result
Cost of purchasing chemicals	100,412,916.40 Baht	102,589,855 Baht	82,729,530 Baht	Decreased 19.36%
Business partner assessment in ESG	15 Partners	20 Partners	21 Partners	Increased 5.00%
Disputes between the Company and its subsidiaries, business partners, or partners of contract	0 Time	0 Time	0 Time	Invariable

Business Partner Information

Business Partner List	2019	2020	2021	Result
All Business Partner	1,036 Partners	1,125 Partners	1,166 Partners	Increased 3.64%
General Business Partner	774 Partners	954 Partners	974 Partners	Increased 2.09%
Major Business Partner	262 Partners	171 Partners	192 Partners	Increased 12.28%
Domestic Business Partner	1,036 Partners	1,125 Partners	1,166 Partners	Increased 3.64%
Overseas Business Partner	0 Partners	0 Partners	0 Partners	Invariable
Old Business Partner	929 Partners	1,036 Partners	1,125 Partners	Increased 8.59%
New Business Partner	107 Partners	89 Partners	41 Partners	Decreased 53.93%
Domestic Business Partner				
• Bangkok	391 Partners	438 Partners	466 Partners	Increased 6.39%
• Business areas (Nakhon Pathom, Samut Sakhon, Pathum Thani, Ayuthaya, Rayong, and Chonburi)	157 Partners	176 Partners	183 Partners	Increased 3.98%
• Other areas	488 Partners	511 Partners	517 Partners	Increased 1.17%

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:



Quality

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

100%



Sufficiency

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

100%



Continuity

3. The continuous flow of tap water distribution is not less than

99.97%

Performance Goals for year 2021

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

165.92

Million cubic meters

Pathum Thani Water Company Limited

Tap water distribution volume
not less than

150.65

Million cubic meters

Development of Operational Process with Customers

1. Improve and develop operational processes

In 2021, in order to create customers satisfaction (PWA) with the Company' service as follows:

- 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.
- 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.
- 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.
- Supporting various activities of PWA covers all levels of PWA staff appropriately and continuously, especially during the COVID-19 epidemic situation. The Company cooperated with the PWA and supported tap water for consumption, including bottled water, as well as necessary items for medical personnel and staff of the Center for Covid-19 Situation Administration, Ministry of Interior as well 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 2021 serve the target

The Company has established measures and policies as follows:

- 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
- 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.
- 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.

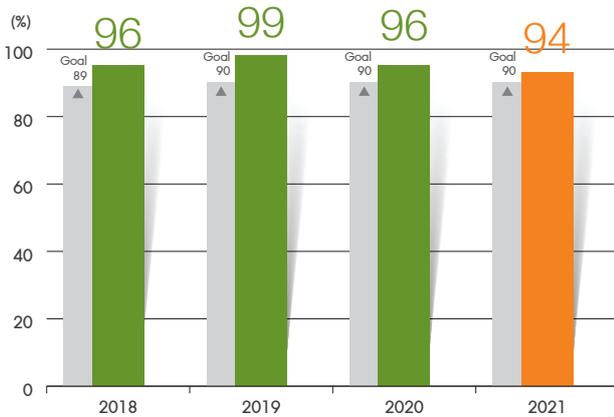
3. Customer Satisfaction Survey

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 - 2021



Customer Satisfaction Survey Results
Pathum Thani - Rangsit Area, Year 2018 - 2021



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 prevent the spread of COVID-19.
- 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 2021, customers complained about cleanliness and residual chlorine residual values in the range of 2.54 - 4.08 mg/l, which exceeded the control threshold set by the customer (PWA), may result in harm or irritation to tap water users in Pathum Thani-Rangsit area. In this regard, Pathum Thani Water Co., Ltd.

has controlled the chlorine residual in tap water distributed to customers (PWA) in an amount not exceed the control criteria and chlorine residual in tap water users’ homes at the end of the pipe not less than 0.5 mg/l. (Referring to the tap water quality standard of the Department of Health, year 2000)

The Company has repaired the (R-1) Water Treatment Plant and other four locations to maintain a higher level of chlorine residual in tap water at Pathum Thani Water Treatment Plant and all water distribution station, and prevent contamination from repairs and evaporation of chlorine stored in clear water tanks at all water distribution station by maintaining the quality of tap water delivered to tap water users’ homes in a safe manner during the COVID-19 situation. Muang Ake Water Distribution Station (R-5) located in the Pathum Thani Water Treatment Plant may result in the occasionally chlorine residual in tap water, especially in the morning when water samples are collected each day. At present, the roofs finished repairing and the chlorine residual value was controlled at the Muang Ake Water Distribution station (R-5) in accordance with the criteria set by the customers (PWA) since March 18, 2021.

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 Quality of products and services
 - Follow the recommendations of the WHO on disinfection of tap water
 - Increasing the chlorine addition rate in tap water to maintain the remaining free chlorine content of more than 0.8 mg/l.
 - Adjust the pressure to be suitable for the area using the tap water
 - Adjust the meeting format to be online, refrain from activities related to customers until the COVID-19 situation resolves
- 5.2 Mitigation the impact of COVID-19 epidemic situation
 - Waive the payment of tap water from the original schedule specified in the contract to be postponed for a period of two months from the date specified in the invoice without interest, no minimum tap water according to the contract
 - Deliver the medical equipment to the customers and closely monitor the COVID-19 situation

- Medical equipment support to hospitals and field hospitals, as well as waiting centers both within and outside the service area
- Supporting tap water bills for field hospitals in Samut Sakhon
- 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 wastewater 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 Drive Thru project at the PWA Samut Sakhon branch for the tap water bill payment by constructing Drive Thru lane, to serve the risk prevention policy from the spread of COVID-19 and reduce congestion and avoid exposure.
- 7.2 Lay water pipes project at Soi Bo Takua, Moo 1, Thammasala, Mueang Nakhon Pathom, increases the distribution of tap water to 365 households. The current progress was completed by inspecting the work and handing over the work on August 18, 2021.

- 7.3 Lay additional water pipes project for the transfer of water users of Rai Khing Municipality, increases the distribution of tap water at the amount of 2,000 m³/day by hiring a plumbing contractor. The current progress is under construction to lay water pipes and is expected to be completed in March 2022.

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 in accordance with the Personal Data Protection Policy announced on June 1, 2021

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 2021. 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.



9.2 The Company supports the Government Easy Contact Center (GECC) for the year 2021 to PWA Om Noi branch to prepare for the project assessment to obtain the GECC certification for PWA toward excellence.



9.3 The Company supports the project to increase tap water and installation of water pipes at the entrance of Soi Bo Takua, Moo. 1, Thammasala, Mueang, Nakhon Pathom Province of PWA Nakhon Pathom branch.



Performance in 2021

Goal	Key Performance Indicator (KPI)	2021	Result
The customers are satisfied with the Company's service	Not less than 90%	94.50%	Achieved the Goal
TTW Public Company Limited Tap water distribution volume	Not less than 165.92 Million cubic meters	153.27 Million cubic meters	Less than the Goal
Pathum Thani Water Company Limited Tap water distribution volume	Not less than 150.65 Million cubic meters	138.03 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 Policies and Strategies

The Company's innovation promotion is stated in the Sustainable Development Policy section "Continuity business process development" and No. 2 of Sustainability Policy, No.4 of Sustainability Strategy, to encourage the development and creation of business innovations along with social and environmental innovations as published on the website: <https://www.ttwplc.com/en/sd/sustainable-management-and-policy/key-strategy-in-sustainable-development>

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.

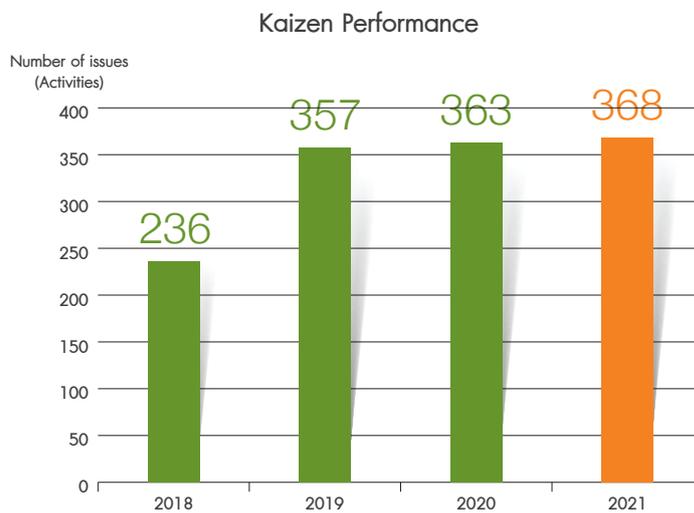
2. Innovation

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.

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.

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 2021, there were 368 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

Due to maintenance of suction butterfly valve, distribution pump at Muang Ake Water Distribution Station (R-5) requires more than five operators to open three sets of penstock valve due to its large size and requires a lot of force to rotate, this results in operator fatigue because it takes more than 120 minutes (two hours). Therefore, switched to a tool to close - open the penstock valve that can be carried or moved, which effectively reduce the number of operators and operating period.

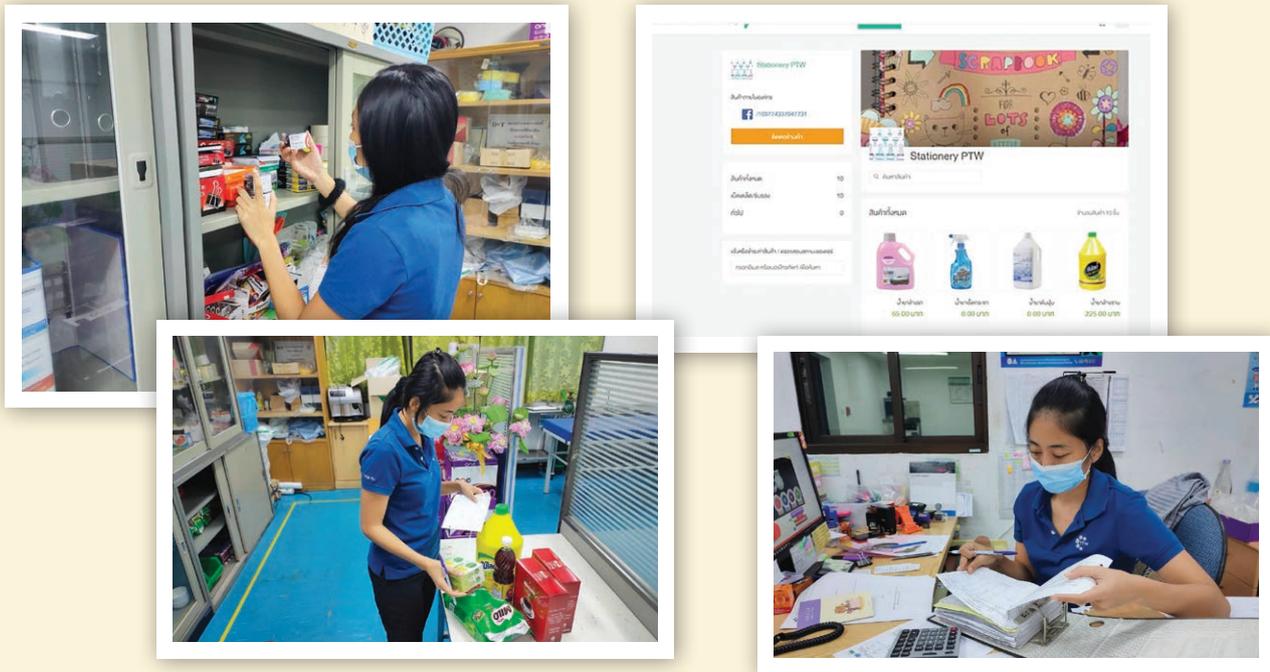


A Performance Comparison Before - After

Detail	Before	After	Result
Number of operators	5 Persons	1 Person	Decreased 80.00%
Operating period	120 Minutes	10 Minutes	Decreased 91.67%

2. PTW Shopping Mall Project

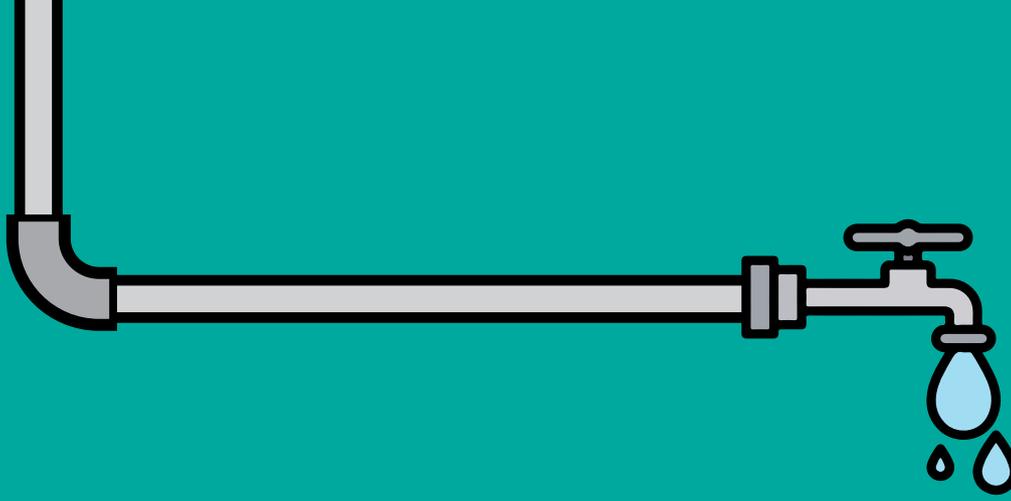
Nowadays, the administrative unit of the Pathum Thani Water Treatment Plant faces the problem of disbursement of stationery equipment due to the difficulty in the multi-step process and takes a long time, resulting in wasted resources. Therefore, it has applied the use of mobile phones to improve work with Page 365 application, for stationery disbursement, which reduce the lengthy process of work and reduce costs.



A Performance Comparison Before - After

Detail	Before	After	Result
Number of disbursement procedures	8 Processes	5 Processes	Decreased 37.50%
Operating period	20 Minutes	10 Minutes	Decreased 50%
Expenses	1.5 Baht / Time	None	Decreased 100%

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:

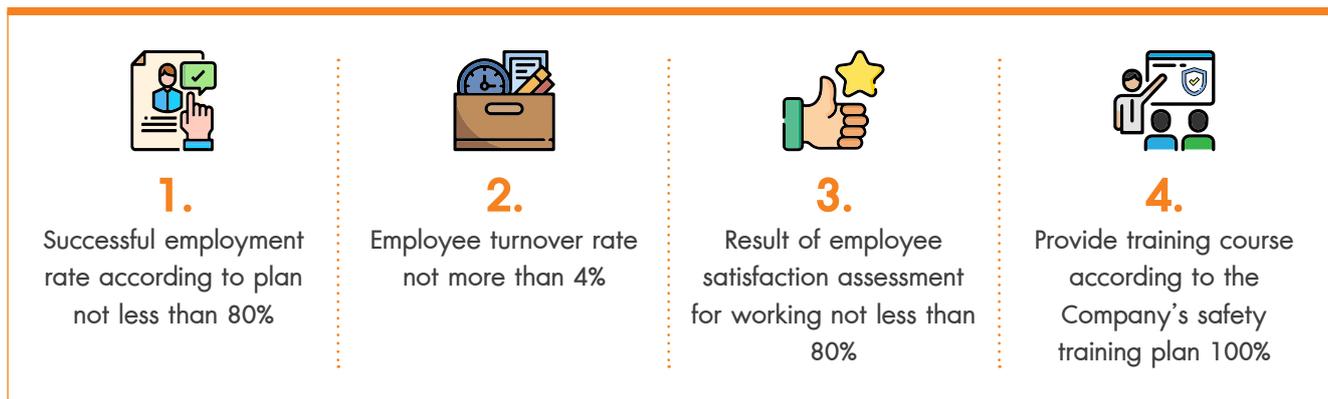
Operational Goals

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 2021



Employment

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. <https://www.ttwplc.com/storage/about/policy/20220124-ttw-human-right-policy-en.pdf> 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.

Respect for Human Rights

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 Impact, Universal Declaration of Human Right (UDHR), United Nation Guiding Principles on Business and Human Rights (UNGPs) 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 to adhere to as follows:



An organization model respecting human rights by encouraging and promoting in the business value chain



No human rights violations both inside and outside the Company

Human Rights Issues

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.

Respecting Human Rights to Stakeholders

The result of human rights risk assessment in the Company's business operations revealed that, in 2021 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:

1. Employee Rights

Risk Issues	Impact	Risk Reduction Measure
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
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. Customer Rights

Risk Issues	Impact	Risk Reduction Measure
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

3. Business Partner Rights

Risk Issues	Impact	Risk Reduction Measure
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 https://www.ttwplc.com/storage/about/policy/20220124-ttw-supplier-coc-en.pdf There is a screening process for business partners and business alliance as required by law
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

4. Community Rights

Risk Issues	Impact	Risk Reduction Measure
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

5. Contractor Rights

Risk Issues	Impact	Risk Reduction Measure
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

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 2021 is marked by the spread and mutation of COVID-19, the Company is concerned about the health of its employees and therefore has taken preventive measures by providing face masks, cloth masks, alcohol, measuring temperature and testing COVID-19 with ATK every Monday morning before entering the workplace, dividing the workplace, spraying disinfection the workplace, this includes distributing equipment for on-site work and COVID-19 insurance for employees for good hygiene in accordance with government measures of social distancing.

The company has assessed employee satisfaction survey, employee engagement survey including employee participation in welfare management, occupational health and safety, through the Occupational Health and Safety Committee to improve employees' opinions and modify operations in accordance with their needs, creating a happy working environment.

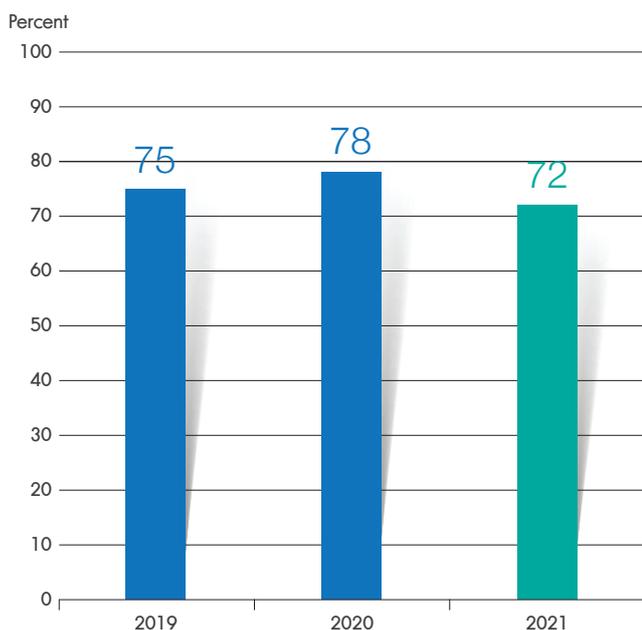


Employee Satisfaction Survey

In 2021, the employee satisfaction survey with the organization was 72% of the total number of employees surveyed of 279, representing 85% of all eligible employees. (Employees eligible to fill out the survey must have been employed for at least 6 months)

1. The Result of Employee Satisfaction Survey

The results of the Employee Satisfaction Survey decreased by 8% over the previous year.



2. Operational Process Improvement

The data obtained from the 2021 Employee Engagement Survey will be used to develop the 2022 employee stewardship plan to increased employee satisfaction.

- 2.1 Fair team management, such as transparent assignments and assessments.
- 2.2 Provision of welfare that is suitable for the current economic situation.

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, maintaining the working environment by defining policies and guidelines on safety and hygiene in the workplace. 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:

Salary	Maternity Allowance	Campaign to vaccinate from government agencies
Position Allowance	Medical Expenses Subsidy	COVID-19 Protective Equipment
Overtime Wage	Marriage Allowance	Expenses for traveling to work abroad
Fuel Allowance	Social Security Subsidy	Training Fee
Travel Allowance	Employee Funeral Benefits	Uniform
Provident Fund	Father - Mother Funeral Benefits	Operational Car
Annual Bonus	Compensation for injury or death during operation	Position Car
Salary increases annually	Life Insurance Money	Staff Housing
Allowance for working in other provinces	COVID-19 Insurance	Fitness
Social Security Pension	Annual Health Check-ups	Dining Room
Retirement Allowance	Weekly ATK Testing	Scholarship for Employees' Child

Types of Leaves

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

Employee Wage Rate

The Company has determined the wages of employees according to their educational background and work experience. In 2021, the Company has classified wages according to gender, position and business area as follows:

1. Employee wage rates classified by gender:



2. Employee wage rates classified by gender and position:



3. Employee wage rates classified by gender and business area:



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 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.

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



To 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

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:



The Company has provided training courses to enhance human competence, such as Cathodic Corrosion Protection Course, Pipeline Network Management - Tap Water Distribution and Wastewater Management Course, Impact of Seawater for Tap Water Production and Water Quality Analysis Course and Basic Labor Law Courses that Personnel Work must know.

Training Courses	Number of participants (person)	Training proportion compared to the total number of employees (%)
1. Cathodic Protection Course	23	7.00%
2. Pipeline Network Management - Tap Water Distribution and Wastewater Management Course	23	7.00%
3. Impact of Seawater on Water Quality for Tap Water Production and Water Quality Analysis Course	10	3.00%
4. Basic Labour Courses that Personnel Work must know	1	0.30%

Training

The Company has trained a total of 3,273 hours of staff, with the proportion of training hours increasing by 3% from 2020.

1. The number of training hours classified by gender:

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	5,262.50	3,712	3,768	2,636	2,544
 Female	1,710.50	1,007	730	541	729
Total	6,973	4,719	4,498	3,177	3,273

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

Executive Level

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	1,588	925	495	309	157
 Female	928.5	432	252	193	221
Total	2,516.50	1,357	747	502	378

Employee Level

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	3,102	2,378	2,456	1,985	2,387
 Female	1,354.5	984	1,295	690	508
Total	4,456.50	3,362	3,751	2,675	2,895

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

Professional Course

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	2,545	1,645	1,590	1,084.50	456
 Female	1,330	808	433	270.50	381
Total	3,875	2,453	2,023	1,355	837

Vocational Course (Optional)

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	395	410	386.50	102	75
 Female	45	52	26.50	33	39
Total	440	462	413	135	114

Safety Course

(Unit : Hour)

	2017	2018	2019	2020	2021
 Male	2,322.50	1,657	1,791.50	1,449.50	2,013
 Female	335.50	147	270.50	237.50	309
Total	2,658	1,804	2,062	1,687	2,322

4. The Average number of training hours

(Unit : Hour/Person)

	2017	2018	2019	2020	2021
	22	15	14	10	10

Performance in 2021

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



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. In addition, the Company performed in accordance with the international standard ISO 14001:2015.

Performance Goals for year 2021



Zero of Injury & Illness Free Operation

0 Time



Practice emergency plans at least once a year

1 Time

Occupational Health and Safety Strategy



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



2. Increase the potential and awareness of work safety



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	Risk management methods
Chemical spills (chlorine)	<ul style="list-style-type: none"> Follow the action plan procedure manual
Work accident	<ul style="list-style-type: none"> Follow the rules and strictly perform in accordance on occupational health and safety Training on working methods Chemical emergency drills according to operational plans Risk assessments on a regular basis





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, establishment of a walking and running sports club, badminton club, football club, 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 established an annual occupational health and safety training plan in 2021 with the following programs:

Training Courses	Participants (Person)	Training proportion compared to the total number of employees (%)
1. Safety in working with forklifts	17	5.18%
2. Energy Conservation: Air Conditioning Systems	30	9.15%
3. Energy Conservation: Techniques in Buildings	30	9.15%
4. Chlorine leakage suppression with KIT-B equipment, Maintenance of chlorine systems	44	13.41%
5. Initial Firefighting and Fire Escape Drills	266	81.10%

There were five training courses and 2,322 hours of occupational health and safety training in 2021 compared to 2020, an increase of 635 hours or 38%.

7. Employee Stewardship in Occupational Health and Safety

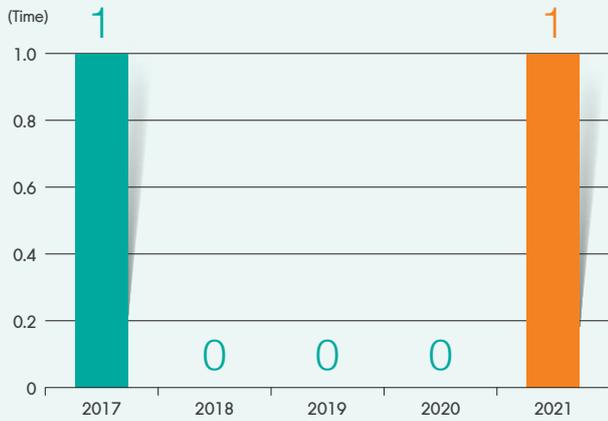
Operational safety and employees' health are important, therefore, the Company has continuously provided employee stewardship in occupational health and safety on an annual basis, such as safety training and annual health check-ups etc.



Accident statistics

1. Employee

Accident statistics



Accident frequency rate



Accident severity rate



2. Contractor

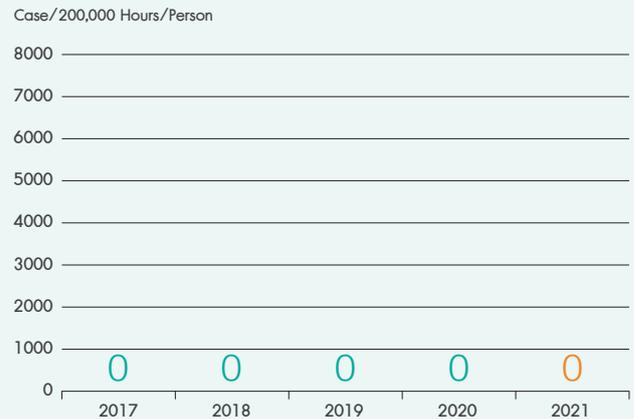
Accident statistics



Accident frequency rate



Accident severity rate



Goal	Key Performance Indicator (KPI)	2019	2020	2021	Result
Injury & Illness Free Operation	0 Time	0 Time	0 Time	1 Time	Higher than the Goal
Practice emergency plans	Not Less than 1 Time/Year	1 Time	1 Time	1 Time	Achieved the Goal

Social and Community Development

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 Unit 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 2021

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 Management in 2021

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

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

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 for the development of educational quality
- Employee pride and participation
- Employee's child receives educational support

The Results toward Society / Environment

- The 23 schools in the service area received scholarships
- The 345 students received scholarships
- The 3 Provincial Special Education Center received lunch scholarships
- The 1 university has received research grants
- The 1 school have been renovated school buildings and landscapes



2. Clean Drinking Water

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 the promoting public utilities and good hygiene
- Good image in tap water business
- Zero of communities' complaints from the impacts of the Company's business operation

The Results toward Society / Environment

- The 1 school in the service has been equipped with a drinking water filtration system
- The communities received 445,888 support bottled water
- The community earns income from the production of bottled water in the amount of 272,800 Baht
- The 1 community received tap water support



from reuse, to create value for society in long term. Therefore, the Company has established a circular economy project, such as

3.1 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 waste management at source, which is one of the real drivers of the circular economy, that is, 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 waste, create cooperation in the community according to the “Baworn” approach, including houses, temples, schools, with proper waste management from the beginning linked to waste management within the organization.

3.2 Produce tiles from sludge mixed with clay, a research in collaboration between TTW and the Center of Excellence on Hazardous Substance Management (HSM). It is another approach to waste management within the organization in order to manage waste for the benefit of business and society. The Company believes that waste management requires a change in behavior and management system by utilizing the tiles from the research, such as decorating the site and improving the landscaping of the Company’s water treatment plant and deprived schools in service areas.

3. Circular Economy

Due to the increasing impact of 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

The Results toward Business

- Employees have changed their sorting behavior and littering more correctly
- The amount of concentrated compost from food waste was 0.70 kg/day
- Zero of external complaints on the environmental issue
- The amount of food waste of the headquarters decreased by 2.90 kg/day

The Results toward Society / Environment

- The 2 schools in the service area were supported the terracotta tiles to decorate the school buildings
- The 2 schools in the service area were encouraged to participate in the sludge composting project



4. Coping with Climate Change

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 Join SET' Care the Bear program, the objectives is to reduce the amount of GHG emission, the resource consumption, and the cost of organizing events for listed companies. In 2021, the Company halted the events with large numbers of attendees by adjusting the arrangement of activities that reduce the risk of the spread of COVID-19, such as held the General Meeting of Shareholders and awarding scholarships to students in the service area for the year 2021, etc.

4.2 The one-million seedlings project to create watershed forests, the restoration of degraded forest areas with local communities to improve ecosystems from upstream to downstream and solve the problem of drought and flood according to the royal initiative, a part of mitigating the impacts of climate change problems by creating knowledge, comprehension, and engaging with communities to sustainable water resource management in their area to cope with severe climate change and promote better incomes and livelihoods for communities.

4.3 Support donations for officers and forest guards of the Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation who were injured and killed in the performance of their duties, or able to arrested the offender from the inspecting areas to suppress illegal forestry to support the work of government agencies in the conservation of forest resources and wildlife of protected forest areas as part of mitigating the impacts of climate change that may affect livelihoods and business operations in the future.

4.4 Establish a GHG Emission Assessment Plan from the business processes and the Carbon Footprint Report for Carbon Footprint Certification to the Greenhouse Gas Management Organization (Public Organization) or TGO, including appointing a working group to establish goals and guidelines for GHG emissions from business processes.

The Results toward Business

- Serve the United Nations Sustainable Development Goals regarding Climate Action: SDG13 of the United Nations
- Support Thailand's GHG emission reduction target under the Paris Agreement by controlling the global average temperature increase of not more than 1.5 degrees Celsius
- Strengthen good relations and cooperation between TTW and the communities as well as government agencies for the conservation of natural resources and the environment
- Reduce the cost of organizing the 2 events for listed companies in 2021, including: the Annual General Meeting of Shareholders for the year 2021 and awarding scholarships to students in the service area for the year 2021
- Good image in corporate GHG emissions management

The Results toward Society / Environment

- The 4 environmental stewardship projects or activities
- Reduce the carbon footprint of 1,283.54 kgCO₂e equivalent to the CO₂ absorption of 143 trees per year from 2 activities, including: the Annual General Meeting of Shareholders for the year 2021 and awarding scholarships to students in the service area for the year 2021
- The Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation has been supported by donations for officers and forest guards to encourage the performance of conservation of natural resources and the environment



Community Survey

The community survey is the study of the characteristics and conditions, by using those data to analyze and develop the problems and needs of the community. The Company conducted an opinion survey of communities along the Bang Sue Canal, Moo 10, Rai Khing, Sampran, Nakhon Pathom Province, to use the data obtained as a guideline for the participation in the management of wastewater problems among the communities in Bang Sue Canal under the project “Restore the water quality of Bang Sue Canal and its tributaries to conserve the Tha Chin River” with the objective is to create an integrated cooperation on wastewater management in the canal within the community from government agencies, the private sector, and the community, with 18 villagers in Moo 10, Rai Khing, as representatives to answer the survey and representatives from Rai Khing Municipality joined to observe the Bang Sue Canal area, which summarized the interesting community survey results as follows:

1. Behavioral data to participate in the prevention and resolution of wastewater problems

- Most household and businesses do not have wastewater treatment before draining at 67% while 33% are treated through septic tanks or seepages
- Most of the community’s sewage is discharged to the ground and natural water sources, followed by the discharge into the sewers and seep into the ground
- Most household solid waste management is incinerated, followed by municipal waste disposal sites and vacant areas in the community
- Separating food waste for composting 37%

2. Comments on Environmental Management

2.1 The environmental problems of Bang Sue Canal that should be improved

- The rotten and foul-smelling water
- Housing estates and factories not have wastewater treatment before draining into rivers and canals
- Dumping garbage into rivers and canals
- Poor water quality during rainy season

2.2 The suggestions for solving environmental problems in Bang Sue Canal

- Housing estates and factories should be equipped with wastewater treatment systems and inspected by the competent authorities
- Cultivate waste separation and waste disposal properly, do not throw garbage into rivers and canals
- Establish a project to manage wastewater in the canals and fix the sewage for better quality
- Improve the landscape on both sides of the canal
- Incentivize engagement between old and new residents

2.3 Guidelines for participation in environmental management of Bang Sue Canal that can be operated by the community

- Sorting waste without draining rotten water into rivers and canals
- Cooperate with environmental conservation activities organized by government agencies or private companies



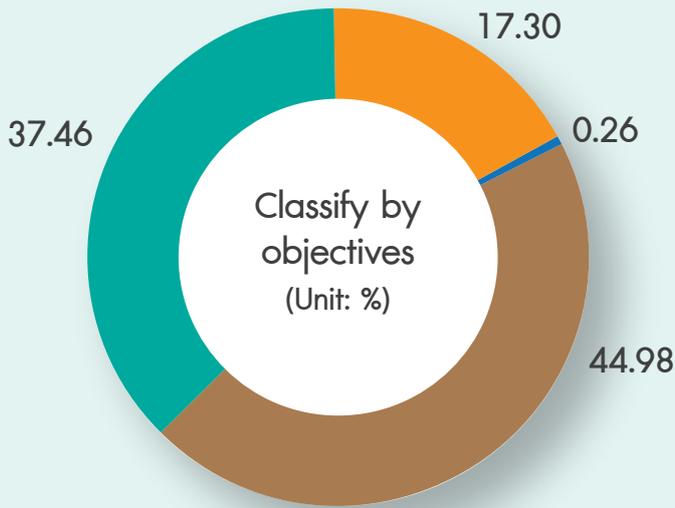
Respond to the Communities' Need

“Water” is essential to life and economic development, therefore it is considered a natural resource that must be managed in both quantity and quality in a concrete way both in the short and long term. The Company therefore emphasizes the restoration of water quality from natural sources as one of its sustainable development strategies to be a part of achieving the Sustainable Development Goals regarding Clean Water and Sanitation: SDG6 of the United Nations. Due to the current situation “water” is important to the life and business of the company, with the changing environment affecting the quality and quantity of water, the Company has established a project to restore the water quality of Bang Sue Canal and its tributaries to conserve the Tha Chin River by conducting a community survey at the end of 2021 and will undertake a new project in 2022 with the following objectives:

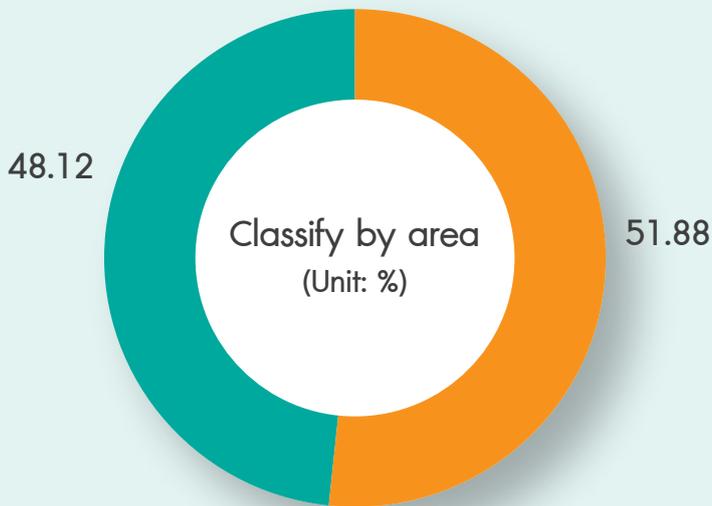
1. To adopt the Company’s knowledge, expertise, and experience in wastewater treatment and environmental management to develop communities into a model community and use them as a learning center for other communities in the future.
2. To achieve efficiency in the management of raw water quality before entering the Company’s tap water production process
3. To create good relationships and participate in integrated environmental management between organizations, communities and government agencies

Supporting Activities of External Agencies

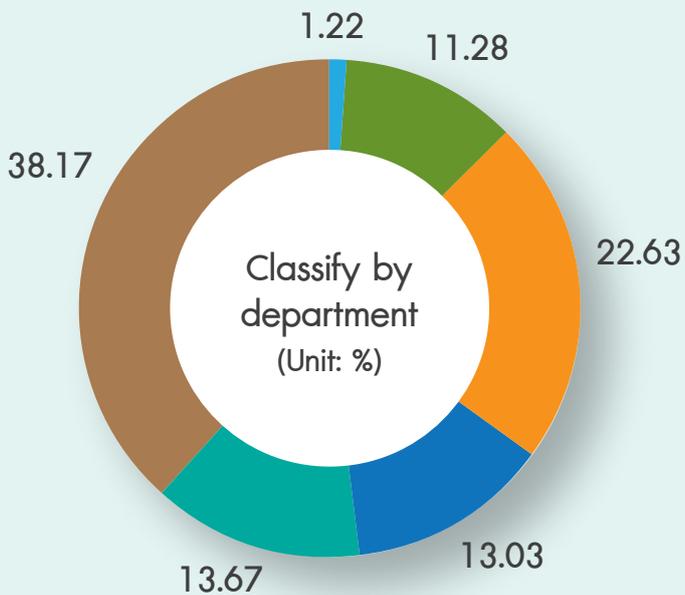
The Company provides budgets and necessities for social and environmental activities to external agencies both in the service area and outside the service area. In 2021, the Company has supported the budget for external agencies in the amount of 31,425,913.51 Baht, divided into the following categories of support:



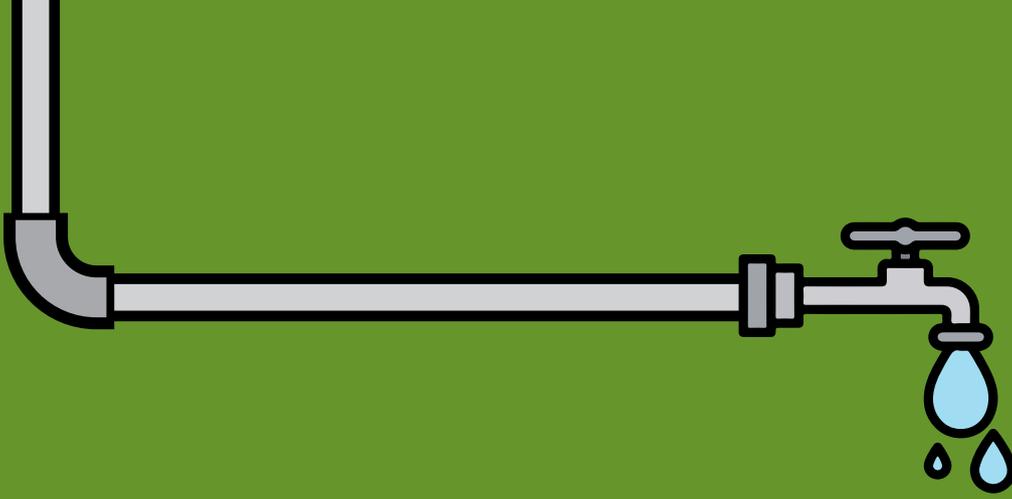
- General donation
- Social investment
- Environmental investment
- Support the COVID-19 crisis



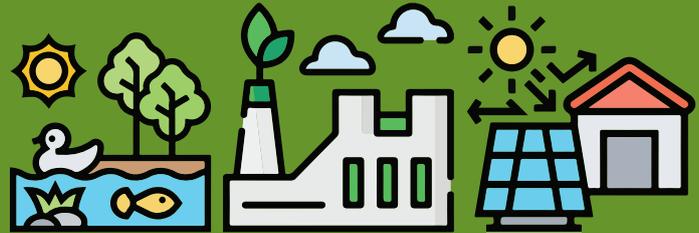
- In the three service area; (Nakhon Pathom, Samut Sakhon, and Pathum Thani)
- Outside service area



- Local authorities
- Schools
- Temples
- Hospitals
- National agencies / institutions
- Other agencies



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" which are disclosed on the website <https://www.ttwplc.com/storage/about/policy/policy-environment-en.pdf> and applied as a guideline for environmental management, including: ISO 14001:2015, Global Reporting Initiative (GRI), and guidelines for improvement for listed companies requiring to participate in the S&P Global Sustainability Assessment to be selected as members of the S&P ESG Index with Sustainable Environmental Management and Social Responsibility Standards, as well as the implementation of good corporate governance principles to supervise and develop the management system continuously, starting from risk assessment and establishing measures to control and reduce environmental impacts, monitoring, reporting and improving continuously to develop the production process toward the product through the value chain.

The Company emphasizes on doing business without affecting the environment in order to prevent and control environmental impacts sustainably. Therefore, the Company has set environmental objectives as a guideline for TTW Group to implement effectively as follows:



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 7.1 Tap water production and distribution system <ul style="list-style-type: none"> • Bang Len Water Treatment Plant (BLN) < 0.68 kWh/m³ • Bang Pa-In Project (BIE) < 0.18 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 year)	1 Time / Plan

Environmentally Friendly Process of Products and Services

Tap Water Production without Loss of Water

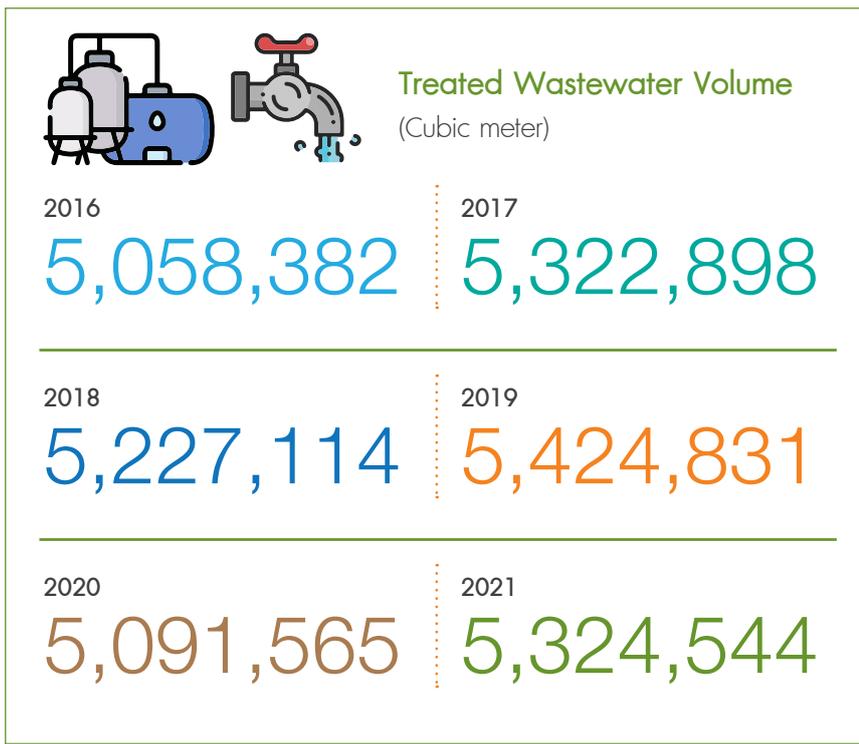
The key of the production of environmentally friendly goods and services is the effort to recycle waste from production or waste from the production process into raw materials, by keeping waste to zero or as least as possible, it promotes the cost-effective utilization of limited resources.

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, 8,144,476 cubic meters of water recycled in new production processes in 2021.

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 2016-2021 are as follows:



Application of Membrane Technology in Tap Water Production Processes

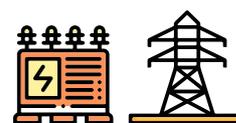
The Company realizes the importance of risk management from continual declining quality of raw water and may affect the Company's business operations, therefore, membrane technology was used in production process at the Krathum Baen Water Treatment Plant, Samut Sakhon Province. Membrane technology has 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 2021, 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:



**Standby Generator 1st
Phutthamonthon Water
Distribution Station**



**Passed the
benchmark**

**Standby Generator 2nd
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 2021, the Bang Len and Krathum Baen Water Treatment Plant use 158.34 million cubic meters of raw water from the Tha Chin River, the Pathum Thani Water Treatment Plant use 146.95 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	Result
Tha Chin River (Bang Len and Krathum Baen Water Treatment Plant)	Million cubic meters	166.02	179.75	158.34	Decreased 11.91%
Chao Phraya River (Pathum Thani Water Treatment Plant)	Million cubic meters	161.48	161.00	146.95	Decreased 8.73%
Total		327.50	340.75	305.29	Decreased 10.41%

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 2021, the Bang Len and Krathum Baen Water Treatment Plant recycle water of 3.64 million cubic meters or equivalent to 2.30% compared with the total amount of water entering the production process. The Pathum Thani Water Treatment Plant recycles water of 4.50 million cubic meters or equivalent to 3.06% 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	Result
Bang Len and Krathum Baen Water Treatment Plant	Percent	1.07	2.05	2.30	Increased 12.20%
Pathum Thani Water Treatment Plant	Percent	2.95	2.29	3.06	Increased 33.62%

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
1. Water leakage in the production process	m ³	6,543,016	7,370,081	8,144,476
2. Water drained into the natural water source	m ³	0	0	0
3. Recycled water	m ³	6,543,016	7,370,081	8,144,476

Waste and Unused Materials Management

Waste and unused materials management is an issue that the Company focuses on and strictly complies with the law by adhering to waste management is the 3Rs principle; Reduce, Reuse, and Recycle according to guidelines for utilization of resources cost-effectively to reduce environmental impact as waste disposal aims to create added value from waste and unused materials in the production process and create mutual values between the organization, society and the environment.

Nowadays, the economic growth rate and the rising population rate have resulted in the exploitation of limited natural resources to drive continued economic growth. The lavish utilization of natural resources leads to a race for resources that tend to be scarce in both raw materials and labor, which may lead to lack of resource stability and higher waste estimates, which is the reason for climate change. The circular economy thus balances humans and resources by shifting from using limited resources to renewable resources as well as reduce GHG emissions. All of this will be a revolutionary solution to the efficient use of energy and raw materials.

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.

Operating Procedures

1. Explore all waste within the Company.
2. Prepare waste containers according to the quantity, type and storage method, by considering the Material Safety Data Sheet (MSDS) 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

Type of waste	Disposal method
General waste	Disposed of by the local authorities
Recycle	Sell

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

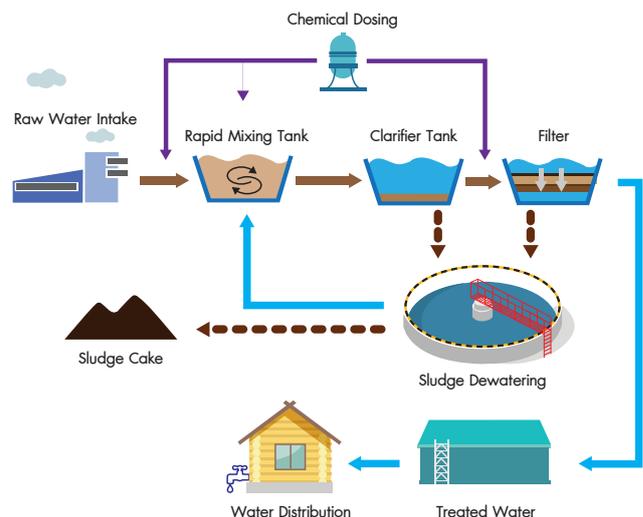
Type of waste	Disposal method
Chemical containers can be returned to the seller	Notify the engineering procurement division, proceed to contact the seller for return
Sludge	<ol style="list-style-type: none"> 1) Request permission from the Department of Industrial Works, landfill or notify to extend the 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

Type of waste	Disposal method
Non-hazardous waste materials	<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 materials (Hazardous waste)	<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

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, tap water production consists of; raw water pumping process, chemical dosing process, clarifier process, filtration process and sterilization process.



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 2021, the Bang Len and Krathum Baen Water Treatment Plant have 21,986 tons of sludge generated from the tap water production process; the Pathum Thani Water Treatment Plant has 9,280 tons of sludge generated from the tap water production process, which are shown in the table as follows:

Quantity	Unit	2019	2020	2021	Result
Bang Len and Krathum Baen Water Treatment Plant	Tons	13,683	18,677	21,986	Increased 17.72%
Pathum Thani Water Treatment Plant	Tons	11,838	9,909	9,280	Decreased 6.35%
Total		25,521	28,586	31,266	Increased 9.38%
Sludge used in social research	Tons	10	10	0	Decreased 100.00%

In addition the Company has studied the feasibility of sludge research to develop into a product with the objective of reducing the burden of waste disposal, production costs, and increasing value to the sludge as well as promoting a good image for social and environmental stewardship as follows:

1. The Company collaborates with Center of Excellence on Hazardous Substance Management (HSM), Chulalongkorn University; has studied the feasibility of using sludge to develop into products from this research four new products have emerged which are: 1) Fluoride absorbent 2) Interlocking bricks 3) Floor tiles 4) Clay tile. Currently, the products that have been further developed in the areas of social responsibility are “Clay tile” using for decorated the school building of Wat Rat Thammaram School, Samut Sakhon Province and Wat Sukwattanaram School, Nakhon Pathom Province under campaign enhance the students’ quality of life in underprivileged school of the Office of Air Chief Marshal Prachin Juntong
2. The Company collaborates with the Faculty of Environment, Kasetsart University and Laem Phak Bia Environmental Research and Development Project, due to the Royal Decree; has studied the feasibility of using sludge to develop into products from this research three new products have emerged which are: 1) Compost for Suphanburi rice 1 and baby corn 2) Brick 3) Fuel pellets. Currently, the research “compost” is used in social activities by developing a project of sludge compost mixed with fresh waste within the head office to enable employees engage environment stewardship within the organization, a ratio of sludge to fresh waste 1: 2 and transformed knowledge to the school in the service areas: Thairath Wittaya 4 School, Bang Rakam, Bang Len, Nakhon Pathom Province with the

representatives of the Company and Faculty of Environment, Kasetsart University, has delivered knowledge on composting to selected schools act as a model school for transferring knowledge in composting to other schools in the neighborhood.

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 2021 is as follows:

Type of waste	Amount (Kg)	Percent (%)
General waste	4,954.00	51.02
Recycle	3,175.00	32.70
Hazardous waste	1,580.00	16.28
Total	9,709.00	100.00

Disposal methods/ Utilization	Amount (Kg)	Percent (%)
Disposal agencies	14,632.00	74.41
Local authorities	5,025.00	25.55
Sell	7.20	0.04
Total	19,664.20	100.00

“Composting Project from the Automatic Food Waste Disposal Machine”

Most of the full-time employees at the Company’s head office bring their own food, resulting in approximately 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 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.



A Performance Comparison Before - After

Detail	Before	After	Result
The amount of food waste	2.90 Kg / Day	None	Decreased 100%
The amount of concentrated compost	None	0.70 Kg / Day	Increased 100%

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
The results of the wastewater quality analysis	Qualified	Qualified	Qualified

Pathum Thani Water Treatment Plant

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

In 2021, 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 (C.E. 1992), issued under the Factory Act, C.E. 1992, published in the Government Gazette, Volume 134, Special Part 153, dated 7 June 2017.

Climate Change and Energy Conservation

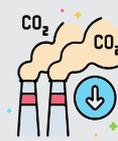
Greenhouse Gas Emissions

The Conference of Parties in the United Nations Framework Convention on Climate Change, the 26th Conference of Parties (COP26) in Glasgow, Scotland on November 13, 2021, an agreement was reached to curb climate change and push for an end to the use of fossil fuels. General Prayut Chan-o-cha, Prime Minister, has announced his intention; Thailand is ready to fully leverage climate solutions to achieve the Carbon Neutrality goal by C.E. 2050 and achieve net zero GHG emissions target by C.E. 2065. With support from international cooperation and mechanisms under the Convention, Thailand will raise Thailand's NDC (Nationally Determined Contribution) level to 40%, which can reduce net GHG emissions to zero by C.E. 2050, achieve the Sustainable Development Goals regarding Climate Action: SDG13 of the United Nations.

At the end of 2021, the Company initiated a project to assess GHG emissions from the business process by directly evaluating GHG emissions from the business process (Scope 1), GHG emissions from indirect business processes (Scope 2), and from other indirect business processes (Scope 3) by hiring consultants registered with the Thailand Greenhouse Gas Management Organization (Public Organization) (TGO) or equivalent to assess GHG emissions. Reporting of GHG emissions, Carbon Footprint for Organization (CFO), as well as data verification and certification with the TGO, which will disclose GHG emissions according to the Annual Report 2021

(form 56-1 One Report) of the Securities and Exchange Commission (SEC) for listed companies. In this regard, the Company has established a corporate greenhouse gas management policy and published it on the Company's website: <https://www.ttwplc.com/storage/about/policy/20220401-ttw-company-policy01-en.pdf>

Company's Goals: Greenhouse Gas Emissions



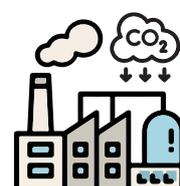
GHG emission proportion of the Bang Len, Krathum Baen, and Pathum Thani Water Treatment Plant decrease:

Year 2021: Not less than **0.05%**

Year 2022 - 2025: Not less than **0.03%**

In 2021, the Company assessed the GHG emissions from indirect business processes (Scope 2) generated by the sole use of external electricity to distribute tap water to the distribution process for the users, its scope covers all three water treatment plants, namely Bang Len Water Treatment Plant in Nakhon Pathom Province, Krathum Baen Water Treatment Plant in Samut Sakhon Province, and Pathum Thani Water Treatment Plant in Pathum Thani Province.

The Company has used the amount of electricity in the production and distribution of tap water, as well as the number of users in the service area, to assess the GHG emissions into the environment. It was stated that Bang Len Water Treatment Plant emitted GHG emissions in 2021 of 58,691 tCO₂e, an increase of 13.50% from 2020. The Pathum Thani Water Treatment Plant emitted GHG emissions in 2021 of 36,747 tCO₂e, a decrease of 16.50% from 2020, which are shown the amount of GHG emission as follows:



GHG Emission in 2021 at

95,438

(tCO₂e)

The Amount of GHG Emission	Unit	2019	2020	2021	Result
Bang Len and Krathum Baen Water Treatment Plant	tCO ₂ e	63,260	67,887	58,691	Decreased 13.50%
Pathum Thani Water Treatment Plant	tCO ₂ e	44,663	44,026	36,747	Decreased 16.50%
Total	tCO₂e	107,923	111,913	95,438	Decreased 14.72%

GHG Emission Rate per Product Unit	Unit	2019	2020	2021	Result
Bang Len and Krathum Baen Water Treatment Plant	Kg.CO ₂ ep. / m ³	0.381	0.409	0.383	Decreased 6.36%
Pathum Thani Water Treatment Plant	Kg.CO ₂ ep. / m ³	0.300	0.288	0.266	Decreased 7.64%
Average	Kg.CO₂ep. / m³	0.340	0.348	0.325	Decreased 6.61%

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.

The Company emphasizes the energy efficiency and therefore has measures to conserve energy according to the Energy Management Report to reduce the amount of GHG due to the rate of electricity consumption, the only main energy in business operations as well as the selection of environmentally-friendly technologies and raw materials, which are align with the Company's GHG emission reduction goals.

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, including GHG emissions from business processes into the global atmosphere, the organization's energy conservation policy is set as follows:

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: budget, human resources, 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.

Company's Goals: Electricity Consumption



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

Year 2021: Not less than **0.05%**

Year 2022 - 2025: Not less than **1%**

The Company defines the energy conservation measures in accordance with the Energy Management Report in order to reduce the GHG emission from electricity consumption with the following information:

- Replacement of Metal Halide lamps with 400-watt power to LED High Bay lamps with 200-watt power
- Maintenance of split air conditioners
- Replacement of LED at machinery room with 200-watt power in the amount of 10 lamps
- Replacement of LED at machinery room, the water distribution station with 200-watt power in the amount of 14 lamps

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 2021, the Company's electricity consumption in the tap water production process of Bang Len and Krathum Baen Water Treatment Plant amounted to 102,236,151 kWh or 0.667 kWh/m³ Pathum Thani Water Treatment Plant amounted to 61,422,632 kWh or 0.445 kWh/m³ showing the information as follows:

The Amount of Electricity Consumption	Unit	2019	2020	2021	Result
Bang Len and Krathum Baen Water Treatment Plant	GWh	101.21	112.62	102.24	Decreased 9.22%
Pathum Thani Water Treatment Plant	GWh	71.46	70.28	61.42	Decreased 12.61%
Total	GWh	172.67	182.90	163.66	Decreased 10.52%

The Electricity Consumption Rate per Product Unit	Unit	2019	2020	2021	Result
Bang Len and Krathum Baen Water Treatment Plant	GWh	0.611	0.679	0.667	Decreased 1.77%
Pathum Thani Water Treatment Plant	GWh	0.480	0.459	0.445	Decreased 3.05%
Total	GWh	0.546	0.569	0.556	Decreased 2.28%

In 2021, 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.

In 2021, the total electricity generated from the Solar Rooftop system is **4,235,331** kWh



The performance in 2021 is able to generate electricity from the Solar Rooftop system totaling 4,235,331 kWh and reduce GHG emission of 2,546 tCO₂e

Solar Rooftop Detail	Unit	2019	2020	2021	Result
The amount of electricity from the Solar Rooftop system	kWh	5,329,481	4,367,503	4,235,331	Decreased 3.03%
Reduce Greenhouse Gas Emission	tCO ₂ e	3,340	2,727	2,546	Decreased 6.64%

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 seedlings project to create watershed forests "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 2021, the Company suspended visiting the area due to the COVID-19 situation; there has been coordination with the authorities regularly.

In 2021, the Company has supported donation with officer and forest guards of the Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation to encourage the performance of conservation of natural resources and the environment for the second year in a row.



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 joins the SET's Care the Bare project with the objective to reduce the GHG emission, resource use, and event expenses of listed companies. In 2021, two activities have been introduced to join the project which are: 2021 AGM meeting event and offering scholarships to student in service area event for the year 2021, This reduced the carbon footprint of 1,283.54 kgCO₂e, equivalent to CO₂ absorption of 143 trees per year.
2. 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 2021, the Company participated in surveying the water content of the Tha Chin River during the flood crisis and providing survival bags, bottled water for communities in Lan Tak Fa Subdistrict and Bang Rakam Subdistrict, Nakhon Pathom Province.
3. The Company collaborates with the Center of Excellence on Hazardous Substance Management (HSM), Chulalongkorn University used sludge research results, such as "clay tiles" decorate the school building for Wat Sukwattanaram School, Nakhon Pathom Province.
4. The Company collaborates with Faculty of Environment, Kasetsart University and Laem Phak Bia Environmental Research and Development Project, due to the Royal Decree used the results of sludge research such as "Compost" to produce compost from sludge mixed with fresh waste in Thairath Wittaya 4 School and Wat Sukwattanaram School, Nakhon Pathom Province.
5. The Company, together with the Protected Areas Regional Office 3, Department of National Parks, Wildlife and Plant Conservation, followed up the growth of trees planted under one-million seedlings to create watershed forests and support donations with officer and forest guards to encourage the performance of conservation of natural resources and the environment.
6. The Company, together with Bang Rakam Subdistrict Administrative Organization, Bang Len, Nakhon Pathom Province, supported tap water from Bang Len Water Treatment Plant to alleviate the suffering during the flood crisis of villagers in Moo 8.
7. The Company supported research grants in engineering projects for engineering graduate students, Mahidol University, Kanchanaburi Campus, Subject: Estimation of manganese concentration in raw water before entering the tap water production system by using artificial neural networks.



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.

Operational Goals

The Company aware of environmental management along with business operations by establishing an environmental management system (ISO14001:2015) 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, 2020 - January 15, 2021 by considering and appointing a competent person to act as an internal auditor from the environmental management department. In 2021, 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 by SGS (Thailand) Co., Ltd. on 29 - 31 March, 2021. The 2021 performance, there were no serious issues or processes that did not comply with environmental laws.

Environmental Law Violations

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

2021 Performance Summary

Economic Performance

Economic success

Detail	2017	2018	2019	2020	2021	Unit
Net gross income	5,747,448,016	5,948,536,254	6,165,591,032	6,203,116,678	5,822,385,785	Baht
EBITDA	4,699,899,949	4,910,525,378	5,269,752,426	5,098,231,739	5,249,403,981	Baht
Net profit	2,680,751,538	2,860,903,791	3,147,333,971	2,971,811,031	3,119,974,681	Baht
Earnings per share	0.67	0.71	0.78	0.74	0.78	Baht
Return on assets	11.52	12.26	13.59	12.92	13.76	%
Return on Equity	22.57	23.14	23.98	22.16	22.37	%

Value Distribution to Shareholders

Detail	2017	2018	2019	2020	2021	Unit
Dividends to shareholders (only in the first half of 2021)	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 2021)	0.60	0.60	0.60	0.60	0.30	Baht / Share

TTW's Investment Value and its Subsidiaries

Unit : Million Baht

Detail	2017	2018	2019	2020	2021
Utilities investment and other support	349.53	20.89	140.07	431.49	157.44

TTW's Other Economic Value

Unit : Baht

Detail	2017	2018	2019	2020	2021
Financial cost	407,025,029	371,677,534	304,542,661	274,534,160	249,486,104
Tax payment to the Government	632,221,086	616,091,619	696,977,417	685,387,474	650,959,542

TTW's Tap Water Distribution and its Subsidiaries

Unit : Million m³

Detail	2017	2018	2019	2020	2021
Nakhon Pathom - Samut Sakhon areas	145.90	158.30	166.10	165.85	153.27
Pathum Thani - Rangsit area	135.80	145.90	148.90	153.12	138.03
Total	281.70	304.20	315.00	318.97	291.30

TTW's Tap Water Users and its Subsidiaries

Unit : Users

Detail	2017	2018	2019	2020	2021
Nakhon Pathom - Samut Sakhon areas	174,577	183,853	193,903	203,225	211,504
Pathum Thani - Rangsit area	321,048	335,324	345,683	356,351	369,273
Total	495,625	519,177	539,586	559,576	580,777

TTW's Customers Satisfaction Survey Result and its subsidiaries

Unit : Percent

Detail	2017	2018	2019	2020	2021
Nakhon Pathom - Samut Sakhon areas	89.00	95.00	98.00	97.00	95.00
Pathum Thani - Rangsit area	89.00	96.00	99.00	96.00	94.00
Average	89.00	95.50	98.50	96.50	94.50

Social Performance

Value of Investment in Personnel of TTW and its Subsidiaries

Unit: Million Baht

Detail	2017	2018	2019	2020	2021
Employee Compensation (salary and bonus)	157.13	140.03	149.42	149.94	151.96
Executive Compensation (salary and bonus)	33.03	26.10	26.57	25.50	29.52
Total	190.16	166.13	175.99	175.44	181.48

Value of Investment in Community and Society of TTW and its Subsidiaries

Unit: Baht

Detail	2017	2018	2019	2020	2021
Community donation and development	41,298,352.00	6,468,125.60	15,371,569.54	25,178,964.52	31,345,673.51

Employee Information

All Employee

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
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Classify by gender

	Male	264	267	268	270	270
	Female	58	54	56	58	58
	Total	322	321	324	328	328

Classify by age

Not over 30 years	Male	68	65	68	63	62
	Female	15	10	10	10	10
	Total	83	75	78	73	72

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by age						
30 - 39 years	Male	112	100	99	97	98
	Female	25	22	23	26	26
	Total	137	122	122	123	124
40 - 49 years	Male	69	77	75	85	86
	Female	15	16	16	13	13
	Total	84	93	91	98	99
Above 50 years	Male	15	25	26	25	24
	Female	3	6	6	9	9
	Total	18	31	32	34	33
Classify by position						
Chief Executive (Division Director and above)	Male	5	4	4	4	5
	Female	2	2	2	2	2
	Total	7	6	6	6	7
Executive, Middle Level (Department Manager)	Male	5	7	7	7	6
	Female	4	5	5	5	5
	Total	9	12	12	12	11
Executive, Primary Level (Section Manager)	Male	13	13	12	10	9
	Female	12	11	11	11	11
	Total	25	24	23	21	20
Employee	Male	241	243	245	249	250
	Female	40	36	38	40	40
	Total	281	279	283	289	290
Classify by business area						
Nakhon Pathom	Male	112	106	103	104	105
	Female	45	42	43	44	44
	Total	157	148	146	148	149
Samut Sakhon	Male	28	33	35	35	35
	Female	2	2	2	2	2
	Total	30	35	37	37	37

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by business area						
Pathum Thani	Male	52	53	52	51	51
	Female	5	5	5	6	6
	Total	57	58	57	57	57
Chonburi	Male	36	38	41	41	40
	Female	1	1	2	2	2
	Total	37	39	43	43	42
Rayong	Male	15	16	15	16	16
	Female	0	0	0	0	0
	Total	15	16	15	16	16
Ayutthaya	Male	21	21	22	23	23
	Female	5	4	4	4	4
	Total	26	25	26	27	27

New Employees

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	33	25	18	9	5
	Female	3	4	2	3	3
	Total	36	29	20	12	8
Classify by age						
Not over 30 years	Male	19	13	8	6	3
	Female	2	4	1	2	3
	Total	21	17	9	8	6
30 - 39 years	Male	13	9	10	3	1
	Female	1	0	1	1	0
	Total	14	9	11	4	1
40 - 49 years	Male	1	3	0	0	0
	Female	0	0	0	0	0
	Total	1	3	0	0	0

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by age						
Above 50 years	Male	0	0	0	0	1
	Female	0	0	0	0	0
	Total	0	0	0	0	1
Classify by position						
Chief Executive (Division Director and above)	Male	0	0	0	0	1
	Female	0	0	0	0	0
	Total	0	0	0	0	1
Executive, Middle Level (Department Manager)	Male	1	0	0	0	0
	Female	0	0	0	0	0
	Total	1	0	0	0	0
Executive, Primary Level (Section Manager)	Male	0	1	1	1	0
	Female	0	0	0	0	0
	Total	0	1	1	1	0
Employee	Male	32	24	17	8	4
	Female	3	4	2	3	3
	Total	35	28	19	11	7
Classify by business area						
Nakhon Pathom	Male	13	8	5	2	4
	Female	0	0	0	3	3
	Total	13	8	5	5	7
Samut Sakhon	Male	16	6	2	1	0
	Female	2	0	0	0	0
	Total	18	6	2	1	0
Pathum Thani	Male	0	4	1	1	0
	Female	0	0	1	0	0
	Total	0	4	2	1	0
Chonburi	Male	0	7	4	0	1
	Female	0	0	1	0	0
	Total	0	7	5	0	1

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by business area						
Rayong	Male	2	2	5	4	0
	Female	0	0	0	0	0
	Total	2	2	5	4	0
Ayutthaya	Male	2	2	1	1	0
	Female	1	0	0	0	0
	Total	3	2	1	1	0

Internally Recruited Employees to Hold Vacancies

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	0	12	2	3	3
	Female	0	3	1	0	0
	Total	0	15	3	3	3
Classify by age						
Not over 30 years	Male	0	3	0	0	1
	Female	0	1	0	0	0
	Total	0	4	0	0	1
30 - 39 years	Male	0	4	0	3	0
	Female	0	1	1	0	0
	Total	0	5	1	3	0
40 - 49 years	Male	0	4	2	0	1
	Female	0	1	0	0	0
	Total	0	5	2	0	1
Above 50 years	Male	0	1	0	0	1
	Female	0	0	0	0	0
	Total	0	1	0	0	1

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by position						
Chief Executive (Division Director and above)	Male	0	1	0	0	1
	Female	0	0	0	0	0
	Total	0	1	0	0	1
Executive, Middle Level (Department Manager)	Male	0	2	1	0	0
	Female	0	1	0	0	0
	Total	0	3	1	0	0
Executive, Primary Level (Section Manager)	Male	0	0	1	2	1
	Female	0	1	1	0	0
	Total	0	1	2	2	1
Employee	Male	0	9	0	1	1
	Female	0	1	0	0	0
	Total	0	10	0	1	1
Classify by business area						
Nakhon Pathom	Male	0	2	0	1	2
	Female	0	2	1	0	0
	Total	0	4	1	1	2
Samut Sakhon	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Total	0	0	0	0	0
Pathum Thani	Male	0	0	2	0	0
	Female	0	0	0	0	0
	Total	0	0	2	0	0
Chonburi	Male	0	10	0	1	1
	Female	0	0	0	0	0
	Total	0	10	0	1	1
Rayong	Male	0	0	0	1	0
	Female	0	0	0	0	0
	Total	0	0	0	1	0

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by business area						
Ayutthaya	Male	0	0	0	0	0
	Female	0	1	0	0	0
	Total	0	1	0	0	0

Employee Resignation

Unit: Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	26	23	10	5	1
	Female	1	7	-	2	2
	Total	27	30	10	7	3

Classify by age

Not over 30 years	Male	5	5	2	2	1
	Female	0	2	0	1	2
	Total	5	7	2	3	3
30 - 39 years	Male	12	12	4	3	0
	Female	0	4	0	1	0
	Total	12	16	4	4	0
40 - 49 years	Male	4	5	4	0	0
	Female	1	1	0	0	0
	Total	5	6	4	0	0
Above 50 years	Male	5	1	0	0	0
	Female	0	0	0	0	0
	Total	5	1	0	0	0

Classify by position

Chief Executive (Division Director and above)	Male	0	1	0	0	0
	Female	0	0	0	0	0
	Total	0	1	0	0	0

Unit: Person

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

Unit: Person

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

Employee Parental Leave

Unit: Person

Detail	2017	2018	2019	2020	2021
The amount of employee parental leave					
NaKhon Pathom	4	3	2	2	1
Samut Sakhon	0	0	0	1	0
Pathum Thani	0	0	0	1	0
Chon Buri	0	0	0	0	0
Rayong	0	0	0	0	0
Ayutthaya	0	0	1	0	0
Total	4	3	3	4	1

Unit: Percent

Detail	2017	2018	2019	2020	2021
Employee back to work after parental leave (percent)					
NaKhon Pathom	100	100	100	100	100
Samut Sakhon				100	
Pathum Thani				100	
Chon Buri					
Rayong					
Ayutthaya			100		
Total	100	100	100	100	100

Employment

Wage Information (only salary) from 2019-2021

Unit: Baht / Month

Detail	Gender	2019	2020	2021
Classify by gender				
	Male	7,109,581	7,233,968	7,704,235
	Female	2,569,052	2,769,567	2,811,510
	Total	9,678,633	10,003,535	10,515,745
	Average/Person	29,508	30,498	32,060
Classify by position				
Executive (Section Manager and above)	Male	1,988,960	1,933,190	2,302,980
	Female	1,611,467	1,706,980	1,740,600
	Total	3,600,427	3,640,170	4,043,580
	Average/Person	90,010	95,793	106,410
Employee	Male	5,120,621	5,300,778	5,401,255
	Female	957,585	1,062,587	1,070,910
	Total	6,078,206	6,363,365	6,472,165
	Average/Person	21,104	21,942	22,317
Classify by business area				
Nakhon Pathom	Male	3,663,317	3,636,800	4,047,555
	Female	2,255,147	2,438,597	2,473,010
	Total	5,918,464	6,075,397	6,520,565
	Average/Person	29,721	41,049	43,762
Samut Sakhon	Male	512,466	559,960	575,150
	Female	0	0	0
	Total	512,466	559,960	575,150
	Average/Person	16,531	17,498	17,973
Pathum Thani	Male	1,293,890	1,384,639	1,412,360
	Female	113,560	119,220	121,600
	Total	1,407,450	1,503,859	1,533,960
	Average/Person	23,855	25,064	25,566

Unit: Baht / Month

Detail	Gender	2019	2020	2021
Chonburi	Male	843,898	821,210	841,510
	Female	0	0	0
	Total	843,898	821,210	841,510
	Average/Person	21,097	21,610	22,197
Rayong	Male	415,480	447,428	460,900
	Female	0	0	0
	Total	415,480	447,428	460,900
	Average/Person	18,885	19,453	20,039
Ayutthaya	Male	468,220	476,510	459,730
	Female	112,655	119,180	121,930
	Total	580,875	595,690	581,660
	Average/Person	21,513	22,062	22,371

Training hour

Unit : Hour

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	5,262.50	3,712	3,768	2,636	2,544
	Female	1,710.50	1,007	730	541	729
	Total	6,973	4,719	4,498	3,177	3,273
Classify by position						
Executive (Section Manager and above)	Male	1,588	925	495	309	157
	Female	928.50	432	252	193	221
	Total	2,516.50	1,357	747	502	378
Employee	Male	3,102	2,378	2,456	1,985	2,387
	Female	1,354.50	984	1,295	690	508
	Total	4,456.50	3,362	3,751	2,675	2,895

Unit : Hour

Detail	Gender	2017	2018	2019	2020	2021
Classify by course						
Professional Course	Male	2,545	1,645	1,590	1,084.50	456
	Female	1,330	808	433	270.50	381
	Total	3,875	2,453	2,023	1,355	837
Vocational Course (Optional)	Male	395	410	386.5	102	75
	Female	45	52	26.5	33	39
	Total	440	462	413	135	114
Safety Course	Male	2,322.50	1,657	1,791.50	1,449.50	2,013
	Female	335.50	147	270.50	237.50	309
	Total	2,658	1,804	2,062	1,687	2,322
Average training hour (Hour/Person)	-	22	15	14	10	10

Trainee

Unit : Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	198	198	220	174	226
	Female	56	49	43	45	48
	Total	254	247	263	219	274
Classify by position						
Executive (Section Manager and above)	Male	28	23	14	15	17
	Female	19	12	10	12	19
	Total	47	35	24	27	36
Employee	Male	180	187	195	154	201
	Female	27	25	44	38	37
	Total	207	212	239	192	238

Unit : Person

Detail	Gender	2017	2018	2019	2020	2021
Classify by course						
Professional Course	Male	102	98	92	48	50
	Female	29	30	25	21	22
	Total	131	128	117	69	72
Vocational Course (Optional)	Male	15	12	7	8	11
	Female	10	5	2	4	11
	Total	25	17	9	12	22
Safety Course	Male	81	88	121	118	165
	Female	17	14	16	20	15
	Total	98	102	137	138	180

Training Course

Unit : Course

Detail	2017	2018	2019	2020	2021
Classify by course					
Professional Course	126	97	81	51	55
Vocational Course (Optional)	3	1	10	9	8
Safety Course	6	12	20	11	7
Total	135	110	111	71	70

Classify by training organization

In-house Training	27	34	35	25	15
External Training	108	76	76	46	55
Total	135	110	111	71	70

Training Expense

Unit : Baht

Detail	Gender	2017	2018	2019	2020	2021
Classify by gender						
	Male	1,855,592	813,992	478,050	155,965	224,800
	Female	463,899	218,498	119,513	38,991	56,200
	Total	2,319,491	1,032,490	597,563	194,956	281,000

Unit : Baht

Detail	Gender	2017	2018	2019	2020	2021
Classify by position						
Executive (Section Manager and above)	Male	1,320,844	516,760	208,855	95,996	2,500
	Female	330,211	129,191	139,238	24,000	13,500
	Total	1,651,055	645,951	348,093	119,996	16,000
Employee	Male	601,592	401,885	224,523	67,464	238,550
	Female	66,844	44,546	24,947	7,496	26,450
	Total	668,436	446,431	249,470	74,960	265,000
Average training expense (Baht/Person)	-	7,203	3,403	1,844	594	856

Employee Satisfaction Survey

Unit : Percent

Detail	2019	2020	2021
Employee satisfaction survey results	75	78	72

Environmental Performance

Environmental Stewardship Value

Unit : Baht

Detail	2017	2018	2019	2020	2021
Environmental Stewardship	1,161,395	1,741,155.00	12,753,618.20	2,203,870.00	80,240

Water Consumption

Unit : Million m³

Detail	2017	2018	2019	2020	2021
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Water Consumption from Natural Sources

Tha Chin River (Bang Len and Krathum Baen Water Treatment Plant)	155.64	165.79	166.02	179.75	158.34
Chao Phraya River (Pathum Thani Water Treatment Plant)	147.96	159.77	161.48	161.00	146.95
Total	303.6	325.56	327.50	340.75	305.29

Water Recycling

Bang Len and Krathum Baen Water Treatment Plant	2.32	1.82	1.78	3.68	3.64
Pathum Thani Water Treatment Plant	8.14	3.33	4.76	3.69	4.50
Total	10.46	5.15	6.54	7.37	8.14

Electricity Consumption

Unit : GWh

Detail	2017	2018	2019	2020	2021
The Amount of Electricity Consumption					
Bang Len and Krathum Baen Water Treatment Plant	97.19	100.39	101.21	112.62	102.24
Pathum Thani Water Treatment Plant	66.23	69.61	71.46	70.28	61.42
Total	163.42	170.00	172.67	182.90	163.66

Unit : GWh / m³

Detail	2017	2018	2019	2020	2021
Electricity Consumption Rate per Product Unit					
Bang Len and Krathum Baen Water Treatment Plant	0.666	0.632	0.611	0.679	0.667
Pathum Thani Water Treatment Plant	0.488	0.477	0.480	0.459	0.445
Average	0.577	0.555	0.546	0.569	0.556

Greenhouse Gas Emission

หน่วย : tCO₂e

Detail	2017	2018	2019	2020	2021
The Amount of Greenhouse Gas Emissions					
Bang Len and Krathum Baen Water Treatment Plant	61,837	63,795	63,260	67,887	58,691
Pathum Thani Water Treatment Plant	42,112	44,231	44,663	44,026	36,747
Total	103,949	108,026	107,923	111,913	95,438

หน่วย : kgCO₂e

Detail	2017	2018	2019	2020	2021
Greenhouse Gas Emission Rate per Product Unit					
Bang Len and Krathum Baen Water Treatment Plant	0.424	0.403	0.381	0.409	0.383
Pathum Thani Water Treatment Plant	0.310	0.303	0.300	0.288	0.266
Average	0.367	0.353	0.341	0.349	0.325

Awards of Pride



Listed for Thailand Sustainability Investment (THSI) for the year 2021 from the Stock Exchange of Thailand for the sixth consecutive year. This reflects the business operation of company that realizes the importance of sustainable development.



Listed for the corporate governance assessment at “Excellent level” for the year 2021 from the Thai Institute of Directors Association.



Received an “AA-” rating for Corporate Credit and Bonds for the year 2021 with a “stable” outlook from TRIS Rating Co., Ltd.



Received an award of honor “Sustainability Disclosure Award” for the year 2021 for the 3rd 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.



Received an honorary award for the 4th consecutive year of Zero Accident Campaign from the Institute for the Promotion of Occupational Safety, Health and Work Environment (Public Organization)



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

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207-4	Country-by-country reporting	-		
Environment				
GRI 301: Materials 2016				
103-1	Explanation of the material topic and its Boundary	100,101	34-35	
103-2	The management approach and its components	100,101	34-35	
103-3	Evaluation of the management approach	101,104	52-53	
301-1	Materials used by weight or volume	100,104		
301-2	Recycled input materials used	101,104		
301-3	Reclaimed products and their packaging materials	104		
GRI 302: Energy 2016				
103-1	Explanation of the material topic and its Boundary	107		
103-2	The management approach and its components	107-108		
103-3	Evaluation of the management approach	108-109		
302-1	Energy consumption within the organization	108		
302-2	Energy consumption outside of the organization	-		
302-3	Energy intensity	109,128		
302-4	Reduction of energy consumption	108		
302-5	Reductions in energy requirements of products and services	109		
GRI 303: Water and Effluents 2018				
103-1	Explanation of the material topic and its Boundary	100		
103-2	The management approach and its components	100		
103-3	Evaluation of the management approach	101,126-127		
303-1	Interactions with water as a shared resource	100		
303-2	Management of water discharge-related impacts	100		
303-3	Water withdrawal	100		
303-4	Water discharge	101		
303-5	Water consumption	100		
GRI 304: Biodiversity 2016				
103-1	Explanation of the material topic and its Boundary	110		
103-2	The management approach and its components	110		
103-3	Evaluation of the management approach	29		
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	110		
304-2	Significant impacts of activities, products, and services on biodiversity	110		
304-3	Habitats protected or restored	-		
304-4	"IUCN Red List species and national conservation list species with habitats in areas affected by operations"	-		
GRI 305: Emissions 2016				
103-1	Explanation of the material topic and its Boundary	106		
103-2	The management approach and its components	106		
103-3	Evaluation of the management approach	106-107		

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		Sustainability Report	Form 56-1 One Report	
305-1	Direct (Scope 1) GHG emissions	-		
305-2	Energy indirect (Scope 2) GHG emissions	106-107		
305-3	Other indirect (Scope 3) GHG emissions	-		
305-4	GHG emissions intensity	107,128		
305-5	Reduction of GHG emissions	107		
305-6	Emissions of ozone-depleting substances (ODS)	99		
305-7	Nitrogen oxides (NOX), sulfur oxides (Sox),and other significant air emissions	99		
GRI 306: Waste 2020				
103-1	Explanation of the material topic and its Boundary	101		
103-2	The management approach and its components	102-103		
103-3	Evaluation of the management approach	104		
306-1	Waste generation and significant waste-related impacts	103		
306-2	Management of significant waste-related impacts	102		
306-3	Waste generated	104		
306-4	Waste diverted from disposal	104		
306-5	Waste directed to disposal	104		
GRI 307: Environmental Compliance 2016				
103-1	Explanation of the material topic and its Boundary	112		
103-2	The management approach and its components	112		
103-3	Evaluation of the management approach	112		
307-1	Non-compliance with environmental laws and regulations	112		
GRI 308: Supplier Environmental Assessment 2016				
103-1	Explanation of the material topic and its Boundary	56		
103-2	The management approach and its components	57		
103-3	Evaluation of the management approach	62		
308-1	New suppliers that were screened using environmental criteria	62		
308-2	Negative environmental impacts in the supply chain and actions taken	58		
Social				
GRI 401: Employment 2016				
103-1	Explanation of the material topic and its Boundary	71		
103-2	The management approach and its components	71		
103-3	Evaluation of the management approach	82,123-127		
401-1	New employee hires and employee turnover	116-118, 120-122		
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	77-78		
401-3	Parental leave	122		
GRI 402: Labor/Management Relations 2016				
103-1	Explanation of the material topic and its Boundary	71		
103-2	The management approach and its components	75-76		
103-3	Evaluation of the management approach	76		
402-1	Minimum notice periods regarding operational changes	-		
GRI 403: Occupational Health and Safety 2018				
103-1	Explanation of the material topic and its Boundary	83	131	
103-2	The management approach and its components	83-84	131-132	
103-3	Evaluation of the management approach	87-89	133	
403-1	Occupational health and safety management system	83-85	131-132	
403-2	Hazard identification, risk assessment, and incident investigation	87-89		
403-3	Occupational health services	85		
403-4	Worker participation, consultation, and communication on occupational health and safety	85		
403-5	Worker training on occupational health and safety	86-87		

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		Sustainability Report	Form 56-1 One Report	
403-6	Promotion of worker health	76-77		
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	83-85		
403-8	Workers covered by an occupational health and safety management system	83-85		
403-9	Work-related injuries	89		
403-10	Work-related ill health	89		
GRI 404: Training and Education 2016				
103-1	Explanation of the material topic and its Boundary	80	127	
103-2	The management approach and its components	80	127-129	
103-3	Evaluation of the management approach	81-82	128-129	
404-1	Average hours of training per year per employee	82	128-129	
404-2	Programs for upgrading employee skills and transition assistance programs	82	128-129	
404-3	Percentage of employees receiving regular performance and career development reviews	82		
GRI 405: Diversity and Equal Opportunity 2016				
103-1	Explanation of the material topic and its Boundary	71	82-83	
103-2	The management approach and its components	71-72	82-83	
103-3	Evaluation of the management approach	72	82-83	
405-1	Diversity of governance bodies and employees	17,36,72, 114-122		
405-2	Ratio of basic salary and remuneration of women to men	78		
GRI 406: Non-discrimination 2016				
103-1	Explanation of the material topic and its Boundary	36,75	82-83, 86-89	
103-2	The management approach and its components	75	82-83, 86-89	
103-3	Evaluation of the management approach	72	82-83, 86-89	
406-1	Incidents of discrimination and corrective actions taken	72		
GRI 407: Freedom of Association and Collective Bargaining 2016				
103-1	Explanation of the material topic and its Boundary	80		
103-2	The management approach and its components	80		
103-3	Evaluation of the management approach	72		
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	72		
GRI 408: Child Labor 2016				
103-1	Explanation of the material topic and its Boundary	71	84	
103-2	The management approach and its components	72	84	
103-3	Evaluation of the management approach	72		
408-1	Operations and suppliers at significant risk for incidents of child labor	72		
GRI 409: Forced or Compulsory Labor 2016				
103-1	Explanation of the material topic and its Boundary	71		
103-2	The management approach and its components	72		
103-3	Evaluation of the management approach	72		
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	72		
GRI 410: Security Practices 2016				
103-1	Explanation of the material topic and its Boundary	83	131	
103-2	The management approach and its components	83-85	131-133	
103-3	Evaluation of the management approach	86	133	
410-1	Security personnel trained in human rights policies or procedures	86		
GRI 411: Rights of Indigenous Peoples 2016				
103-1	Explanation of the material topic and its Boundary	-		Not a material topic
103-2	The management approach and its components	-		
103-3	Evaluation of the management approach	-		
411-1	Incidents of violations involving rights of indigenous peoples	-		

Disclosure	Description	Page		Detail/ Omission
		Sustainability Report	Form 56-1 One Report	
GRI 412: Human Rights Assessment 2016				
103-1	Explanation of the material topic and its Boundary	72	89	
103-2	The management approach and its components	73-75	89-90	
103-3	Evaluation of the management approach	72	89-90	
412-1	Operations that have been subject to human rights reviews or impact assessments	73-75		
412-2	Employee training on human rights policies or procedures	-		
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	72		
GRI 413: Local Communities 2016				
103-1	Explanation of the material topic and its Boundary	89	50, 88-89	
103-2	The management approach and its components	89	50, 57, 88-89	
103-3	Evaluation of the management approach	27,96		
413-1	Operations with local community engagement, impact assessments, and development programs	95	50, 57, 88-89	
413-2	Operations with significant actual and potential negative impacts on local communities	47		
GRI 414: Supplier Social Assessment 2016				
103-1	Explanation of the material topic and its Boundary	56		
103-2	The management approach and its components	58		
103-3	Evaluation of the management approach	58		
414-1	New suppliers that were screened using social criteria	58,62		
414-2	Negative social impacts in the supply chain and actions taken	58		
GRI 415: Public Policy 2016				
103-1	Explanation of the material topic and its Boundary	-		Not a material topic
103-2	The management approach and its components	-		
103-3	Evaluation of the management approach	-		
415-1	Political contributions	-		
GRI 416: Customer Health and Safety 2016				
103-1	Explanation of the material topic and its Boundary	63		
103-2	The management approach and its components	63		
103-3	Evaluation of the management approach	26		
416-1	Assessment of the health and safety impacts of product and service categories	67		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	-		
GRI 417: Marketing and Labeling 2016				
103-1	Explanation of the material topic and its Boundary	63		
103-2	The management approach and its components	63		
103-3	Evaluation of the management approach	67		
417-1	Requirements for product and service information and labeling	63		
417-2	Incidents of non-compliance concerning product and service information and labeling	-		
417-3	Incidents of non-compliance concerning marketing communications	-		
GRI 418: Customer Privacy 2016				
103-1	Explanation of the material topic and its Boundary	72	85-86	
103-2	The management approach and its components	74	85-86	
103-3	Evaluation of the management approach	72	85-86	
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	72	85-86	
GRI 419: Socioeconomic Compliance 2016				
103-1	Explanation of the material topic and its Boundary	35	50-53	
103-2	The management approach and its components	35-36	50-53	
103-3	Evaluation of the management approach	44	50-53	
419-1	Non-compliance with laws and regulations in the social and economic area	44		

Feedback from Reader

Feedback Form for Sustainability Report 2021 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 Corporate Governance | <input type="radio"/> Risk Management and Business Continuity |
| <input type="radio"/> Crisis Management from the COVID-19 Situation | <input type="radio"/> Supply Chain Management |
| <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"/> Water Management |
| <input type="radio"/> Waste and Unused Materials Management | <input type="radio"/> Climate Change and Energy Conservation |
| <input type="radio"/> Biodiversity | <input type="radio"/> Environment Cooperation between Organization |
| <input type="radio"/> Environmental Compliance | |

Employees & Society

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

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

- | | |
|---------------------------|--------------------------|
| <input type="radio"/> Yes | <input type="radio"/> No |
|---------------------------|--------------------------|

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

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6. Please rate your satisfaction towards our Sustainability Report 2021

- | | | | | |
|--------------------------|----------------------------|------------------------------|---------------------------|------------------------------------|
| 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.



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

TTW Public Company Limited

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