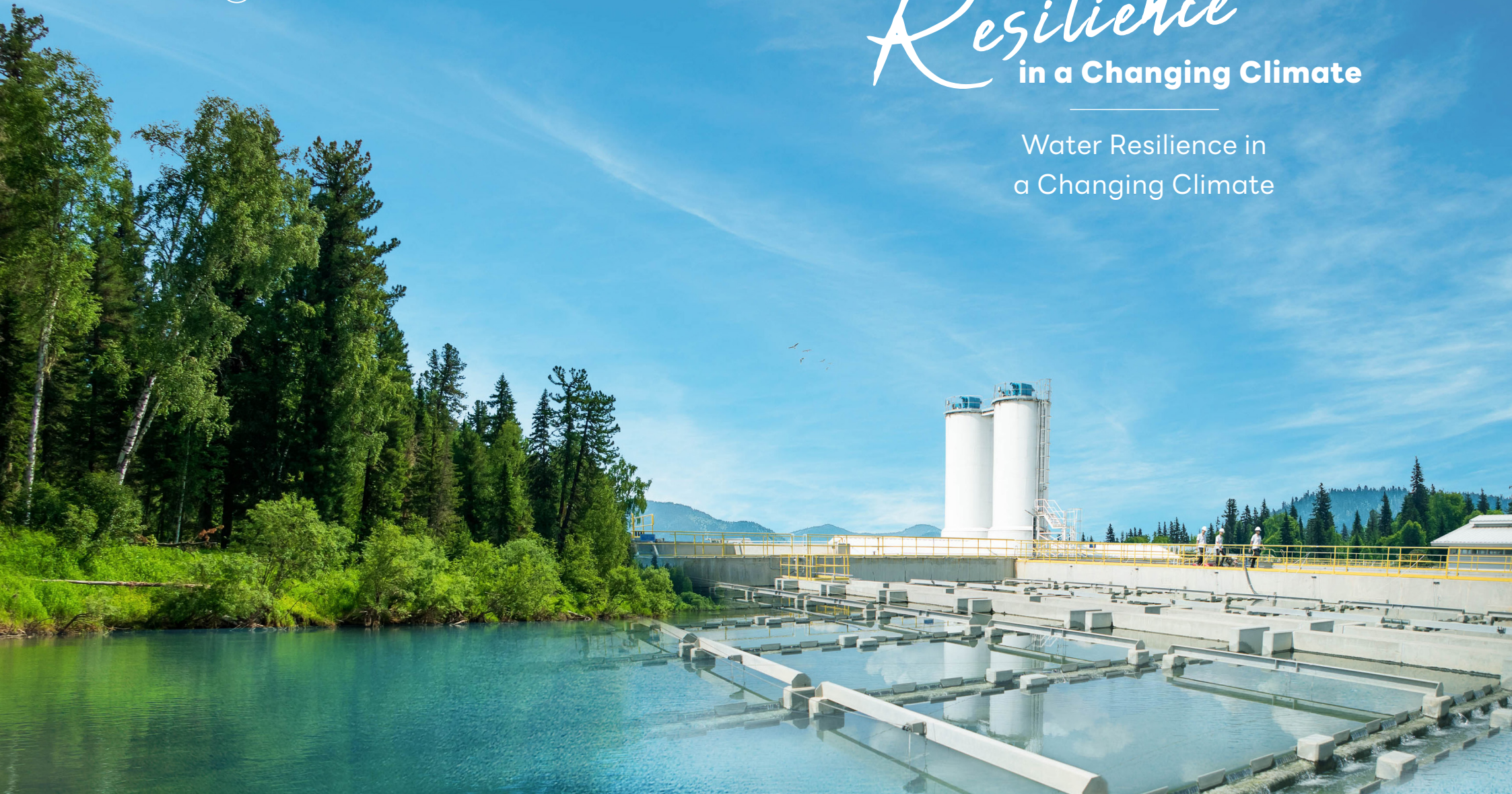




Sustainability Report 2024

Water *Resilience* in a Changing Climate

Water Resilience in
a Changing Climate





“Water”

and

climate change

Water and climate change are intrinsically interconnected. Extreme weather events have led to reduced water availability, increased unpredictability, and greater pollution. These impacts throughout the water cycle threaten sustainable development, biodiversity, and people's access to clean water and sanitation systems.

TTW recognizes the critical importance of water resource management in alignment with its mission to protect the environment and operate its business sustainably in every aspect of its operations. The Company fully understands that effective water resource management is essential to ensure that it fulfills its responsibilities regarding the use of natural resources.

TTW is committed to reducing water usage and minimizing both direct and indirect impacts on water resources. This includes avoiding operations in water-stressed areas and reducing the release of pollutants into water sources. Additionally, TTW promotes compliance with relevant legal requirements concerning water resource management to build trust among stakeholders and consumers of its tap water services.

By prioritizing sustainable water management, TTW not only protects and preserves the environment but also supports long-term business goals and enhances corporate value. This is achieved through a deep awareness of the interdependence between nature (land, oceans, freshwater, and atmosphere), business operations, and society/communities an approach that aligns with the United Nations Sustainable Development Goals (SDGs).




Goal 6:
Ensure availability and sustainable management of water and sanitation for all.



DELIVERING
**“QUALITY OF WATER
QUALITY OF LIFE”**
FOR SOCIETY SUSTAINABLY



A close-up photograph of a hand being washed under a stream of water from a modern, white, curved faucet. The hand is covered in white soap suds, and water is splashing around the fingers. In the background, another faucet handle is visible on the same white sink surface.

TTW is doing business with dedication and care to customers and tap water's users for a long time. The goal is to produce **“quality, sufficiency and continuity tap water”**

in order to serve the customer requirements and tap water's users with attention to detail and every production process, starting from source to consumers. In addition, We realizes the importance of sustainability for all stakeholders and all humanity to peaceful coexistence.

VISION MISSION

CORPORATE VALUES TOWARDS SUSTAINABILITY



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 :

01

Continuous Improvement

02

Proactive & Initiative

03

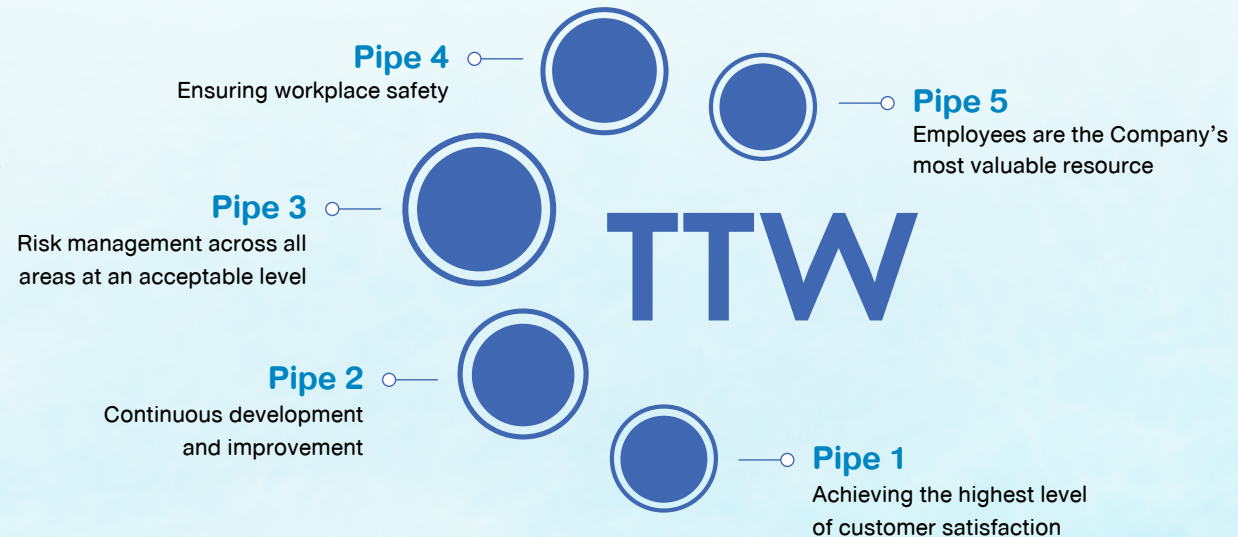
Teamwork



MEANING OF THE LOGO

The logo consists of five water pipes encircling the name “TTW.”

Each pipe represents one of the Company’s five core policies, as follows:



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MESSAGE FROM THE MANAGING DIRECTOR

TTW recognizes and places great importance on water resource management,
in alignment with the company's mission to protect the environment, support society, and uphold good governance (Environment, Social, and Governance – ESG).
This commitment reflects the company's competitive capability and long-term growth potential.





Amidst the challenging circumstances in 2024, TTW Public Company Limited remains committed to operating its core businesses namely the production and maintenance of tap water systems for the Provincial Waterworks Authority (PWA), as well as the provision of tap water production and wastewater treatment services for Bangpa-In Industrial Estate, Amata City Chonburi, and Amata City Rayong. The Company upholds its mission to be ***“a leading expert in a completely integrated water production supply chain to deliver superior quality water and services for better quality of lives in a sustainable society.”*** TTW adheres to the sustainable development approach across three key dimensions: Environmental, Social, and Governance (ESG), which reinforces its competitiveness and long term growth potential.

Environmental Dimension: TTW recognizes the critical impact of climate change, including rising temperatures and sea levels, which may lead to water scarcity and natural disasters such as floods and droughts, as well as biodiversity loss. In response, the Company has adopted the concept of “Water Resilience in a Changing Climate” to ensure water security. This includes Zero-Discharge water production processes, close monitoring of water conditions in collaboration with relevant authorities, and continuous participation in water conservation and natural water quality improvement projects with government agencies and local communities. Furthermore, TTW is committed to transitioning from fossil fuels to clean energy by installing Solar Power Systems including Rooftop and Floating Solar Cells at its water production and distribution facilities, with the goal of reducing GHG emissions. The Company is targeting carbon neutrality by 2050 and net zero emissions by 2065.

Social Dimension: TTW strives to be a model organization for social responsibility by ensuring employee well-being and workplace safety, supporting learning and professional development, and fostering career advancement. The Company actively engages with communities, building strong stakeholder relationships based on mutual

understanding and respect. TTW promotes equality and human rights through comprehensive Human Rights Due Diligence (HRDD) processes, identifying and mitigating potential human rights risks within its business operations. These practices align with the United Nations Guiding Principles on Business and Human Rights (UNGPs) and the Sustainable Development Goals (SDGs).

Governance Dimension: TTW recognizes the importance of conducting business in the utility sector with a commitment to enhancing quality of life and fostering sustainable well being for society. The Company emphasizes efficiency, transparency, fairness, accountability, and strict compliance with relevant laws and regulations. These efforts align with TTW’s corporate governance policy, anticorruption policy, the Corporate Governance Handbook, and the Code of Conduct. Moreover, the Company is committed to its corporate values, namely Continuous Improvement, Proactive & Initiative, and Teamwork, in order to drive business operations toward achieving its vision and mission while ensuring stakeholder satisfaction and maximizing mutual benefits. TTW is firmly dedicated to elevating its corporate governance practices to international standards, underpinned by a long term commitment to sustainable development.

TTW has been rated “Excellent” in the Corporate Governance Report of Thai Listed Companies 2024 by the Thai Institute of Directors Association (IOD) for the sixth consecutive year. The Company also achieved a perfect score of 100 points (5 stars) in the 2024 Annual General Meeting (AGM) Checklist, assessed by the Thai Investors Association. Additionally, TTW has maintained a long standing credit rating of “AA-” with a “Stable” outlook from TRIS Rating, reflecting its robust financial position and strong cash flow generation capabilities. TTW has been continuously recognized for its sustainability performance for the ninth consecutive year, being listed in the SET ESG Rating 2024 at the AA level. Furthermore, the Company received the Sustainability Disclosure Award 2024 from the Thaipat Institute for its commitment to sustainability disclosure in accordance with GRI standards for the sixth consecutive year. TTW also earned the Carbon Footprint for Organization certification from the Thailand Greenhouse Gas Management Organization (Public Organization) for the third consecutive year. In addition, TTW has participated in the S&P Global ESG Score assessment for four consecutive years, with continuous improvements in its performance scores.

On behalf of TTW Public Company Limited, we would like to express our sincere gratitude to all stakeholders for their trust and continuous support. TTW remains committed to driving sustainable business growth in accordance with good governance principles, social responsibility, and environmental stewardship moving forward toward achieving sustainable development based on stakeholder satisfaction and equitable benefit for all.

Ms. Walainut Trivisvavet
Managing Director



ABOUT THIS REPORT

The Company has prepared a Sustainability Report for the 13th consecutive year, commencing in 2012, when it was first issued as a separate publication from the Annual Report. Initially, it was developed in reference to the international standards of the Global Reporting Initiative (GRI-G3). In 2022, the report was prepared in accordance with the GRI Standards 2021 and has continued to be produced under these standards to the present.

Report Content

This report covers a total of 23 topics, comprising both key and other sustainability issues. A double materiality assessment has been conducted to identify the material sustainability issues, in alignment with the European Sustainability Reporting Standards (ESRS). Among these, 21 issues were identified as having medium to high significance, while two issues were assessed to have low significance.

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

Reporting Boundary

This report covers operations from January 1, 2024 - December 31, 2024 to report the organization's sustainability performance. It covers the organization's sustainability operations in all 3 dimensions, namely the Environmental, Social and Governance dimensions. Then aforementioned performance is linked with United Nations Sustainable Development Goals (SDGs) which covers the operations of the production and distribution of tap water in all five areas including Nakhon Pathom-Samut Sakhon area, Pathum Thani-Rangsit area, Bang Pa-in Industrial Estate area in Ayutthaya, Amata City Industrial Estate area in Chonburi Province and Amata City Industrial Estate area in Rayong Province.

Report Endorsement

This report has been certified by the Company's Sustainability Development Committee. Including received an award of honor "Sustainability Disclosure Award" for the year 2024 for the fifth consecutive year from the Thaipat Institute.

Contact Information

Sustainability Development Division,
TTW Public Company Limited,
30/130 Moo 12 Buddha Monthon Sai 5 Road, Raikhing,
Sampran, Nakhon Pathom Province 73210
Telephone numbers: 02-019-9490-3, extension number 3224
Fax number: 02-420-6064
Email Address SD@ttwplc.com



2024 PERFORMANCE SUMMARY



Environmental Performance

Water Quality & Sustainable Environmental Management



Reviewed

quality and
environmental policy



Issued

Biodiversity Policy



Raw water consumption:

1.03 m³/m³
(Tap Water Supplied)



No

legal or regulatory
violations related to
the environment



Water

reuse rate:
2.22%

No wastewater
discharge into natural
sources



Energy

use per unit
decreased by
3.47%

No chemical or
lubricant spills into nearby
communities



No Sludge
discharge incidents



GHG emissions:

Scope 1+2: **0.00028** tCO₂e/m³

Scope 1+2+3: **0.00033** tCO₂e/m³



Water leakage

in production:
2.60%



Non-hazardous waste

reduced: **0.11** kg/m³ (Tap Water Supplied)

No unresolved environmental complaints



100% hazardous waste sorted to avoid
contamination



Hazardous waste

ratio: **0.00001** kg/m³ (Tap Water Supplied)



Social Performance

Promoting Quality of Life & Respect for Human Rights



Employee

turnover rate:
3.60 %



Thai nationality

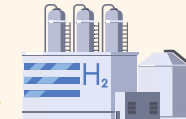
employee ratio: **100%**

Training hours

per employee: **20.27** hours/person



Employee satisfaction score: 92.60%



Employee engagement score: 77.25%



No unresolved community and social care complaints

No unresolved human rights complaints

No human rights violations throughout the value chain

No cases of discrimination

Access to tap water for community
well-being: **22.79** cubic meters (8.19%)
Beneficiaries: **18,664** people (2.97%)



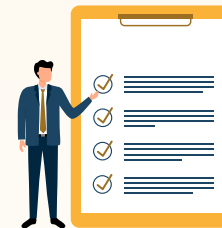
Scholarship coverage:

100% of employees' children



Human Rights Risk Management Framework in Place

(Including HRDD process, risk review
procedures, and grievance mechanisms)



345 students

in the community
awarded scholarships
by the Company.



Achieved 98.70% compliance in employee
code of conduct evaluation

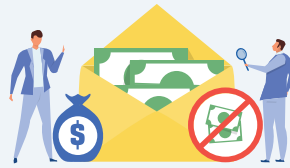


Governance & Economy Performance

Business Ethics & Leading Expert in a Completely Integrated Water Business



No violations or breaches of the Company's business code of conduct were reported.



No personal data breach incidents or complaints from stakeholders—such as employees, shareholders/investors, customers, suppliers, or communities—were recorded.



100% of employees **completed** the business ethics knowledge assessment.



Reported tap water volume by TTW and PTW: **301 million m³**, an **8.19%** increase.



Conducted ESG communications and feedback visits to **9 key** for critical suppliers/ high risk suppliers out of 10 planned – **90%** completion rate.

Recorded a total of **647,575** TTW and PTW water users, an increase of **2.97%**.



100% of employees completed training on basic corporate governance and business ethics.



Customer satisfaction with the Company reached **96.50%**



2024 AWARDS OF PRIDE

Sustainability Achievements:

TTW received the Sustainability Disclosure Award from Thaipat Institute for the 6th consecutive year.



TTW received rate “AA” in SET ESG Ratings by the Stock Exchange of Thailand.

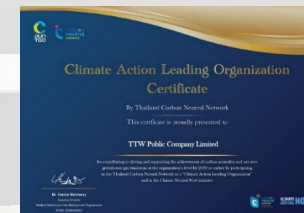


Energy & Climate Action Achievements:

TTW received a certificate for Corporate Carbon Footprint (CFO) by the Thailand Greenhouse Gas Management Organization (3rd consecutive year).



TTW recognized as a “Leading Organization” in GHG Management (CALO) by the Thailand Carbon Neutral Network (TCNN).



TTW received a certificate under the Low Emission Support Scheme (LESS) for rooftop solar installation, with verified GHG reductions of 2,263.422 tonCO₂eq/year.





Governance & Economic Achievements:

Social Achievements:

TTW received a certificate under the “ESG DNA” program from the Stock Exchange of Thailand, promoting sustainability knowledge for employees.

PTW awarded as a “CSR Outstanding Organization” by Pathum Thani Province.



TRIS Rating reaffirmed TTW’s corporate and bond credit rating at “AA-” with Stable Outlook.



SET AWARDS 2024: TTW received a Business Excellence Award in the Company Performance category (Market cap: THB 30–100 billion, 2 consecutive years).

TTW rated “Excellent” in the Corporate Governance Report of Thai Listed Companies 2024, by the Thai Institute of Directors (IOD).





Partnerships & Memberships

We Love Tha Chin River Club (Nakhon Pathom)

Thailand Carbon Neutral Network (TCNN)

Department of Alternative Energy Development and Efficiency (DEDE)

Thaipat Institute

Thailand Institute for Occupational Safety and Health (Public Organization)

Green Industry Ministry of Industry

Thailand Management Association (TMA)

Personnel Management Association of Thailand (PMAT)

Occupational Safety and Health Promotion Association

Thailand Productivity Institute

Technology Promotion Association (Thailand-Japan)

S&P Global

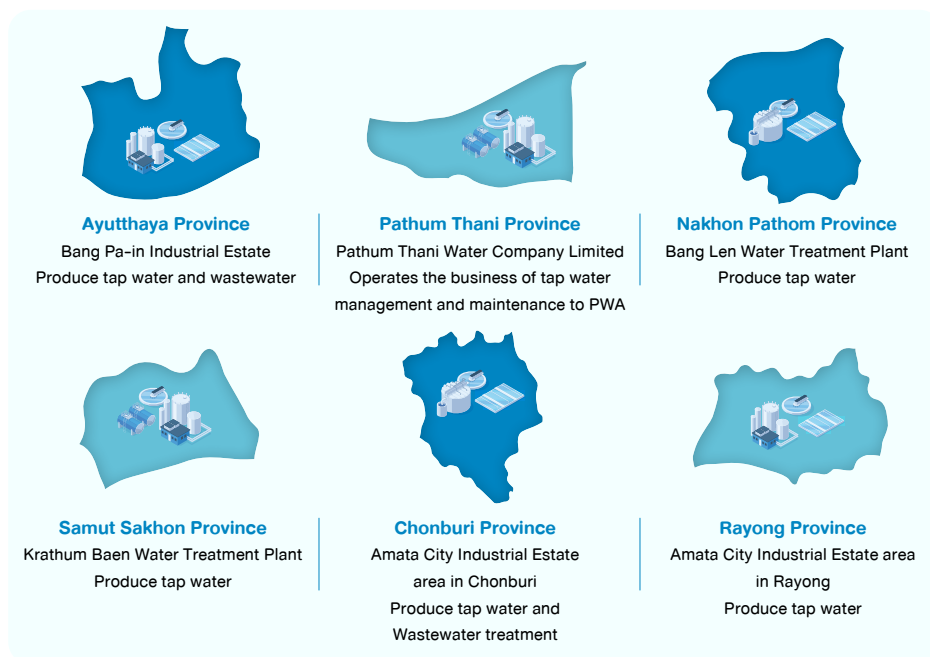
- TTW joined as a private sector representative to support water resource management and environmental conservation.
- TTW is a pioneering and leading member in carbon management initiatives.
- TTW is a member of the network under DEDE, where it prepares annual energy management reports, audit reports, and energy management certification reports for submission to DEDE.
- TTW participated in Thaipat Institute as a private sector organization that adopts international reporting standards (Global Reporting Initiative: GRI).
- TTW awarded Bronze Level for workplace accident reduction efforts under the Zero Accident Campaign.
- TTW certified Green Industry Level 3 (Green System) for 2024–2027, recognizing continuous improvement in environmental management.
- TTW is a member of the Thailand Management Association.
- TTW is a member of the Personnel Management Association of Thailand.
- TTW is a member of the Occupational Safety and Health Promotion Association.
- TTW is a member of the Thailand Productivity Institute.
- TTW is a member of the Technology Promotion Association (Thailand-Japan).
- TTW participated in the sustainability assessment by S&P Global for consideration to join the S&P ESG Index.





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, tap water and wastewater management in industrial estate business, as well as other businesses to become “To be Thailand’s Leading Company in Water, Energy and Eco-Friendly Businesses” according to the organization’s vision. TTW places importance on managing the production process with modern technology and quality according to international standards, safety and environmental friendliness.



Background

September 11, 2000

Registered under the name of Thai Tap Water Supply Company Limited

July 6, 2006

Registered as the public company

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)



Click
Form 56-1 One Report 2024

Investment Details

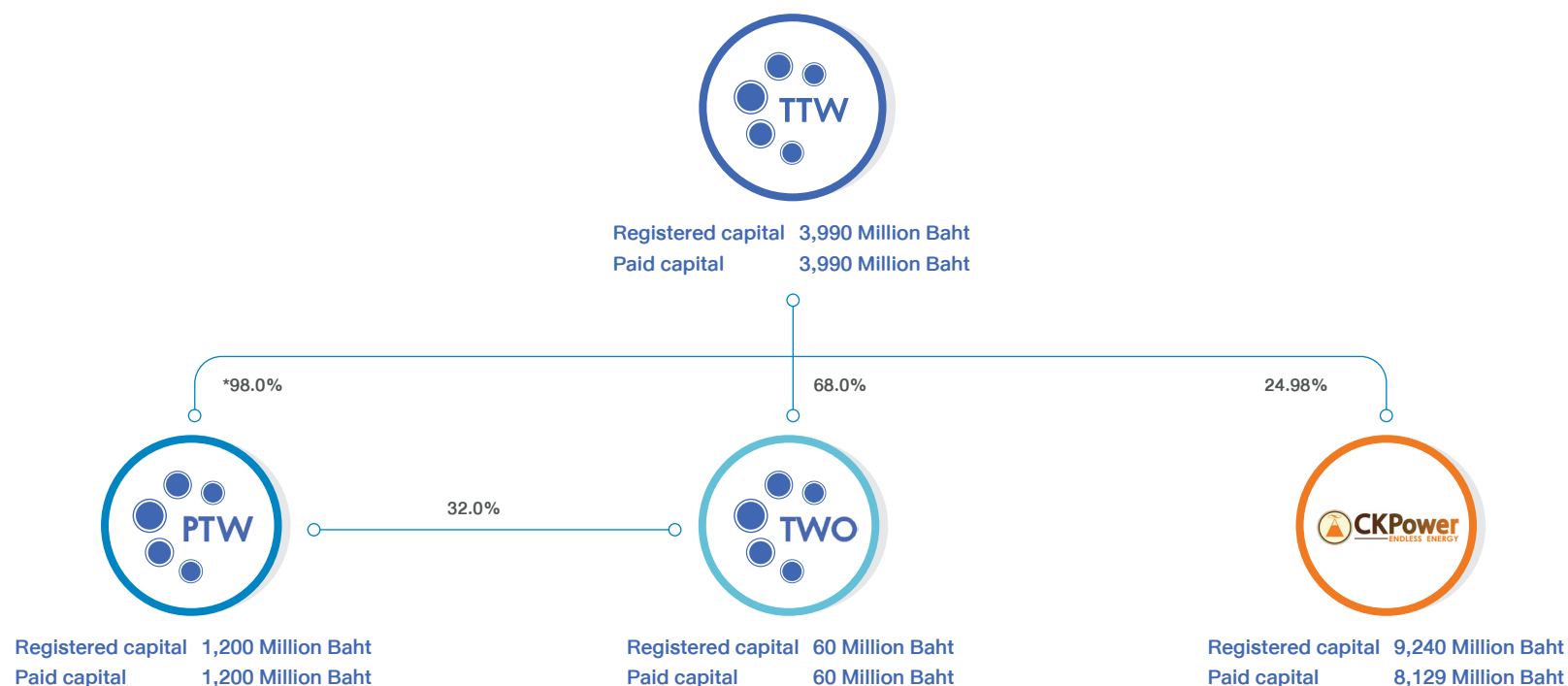
TTW has business operations and investments of tap water production business, wastewater treatment business and energy business in many companies, including Pathum Thani Waterworks Company Limited (PTW), Thai Water Operations Company Limited (TWO) and CK Power Public Company Limited (CKP). By operating the business of tap water to the Provincial Waterworks Authority (PWA) in Nakhon Pathom-Samut Sakhon area, and operating the business of tap water management and maintenance to the Provincial Waterworks Authority (PWA) in Pathum Thani-Rangsit area. Including the business of producing tap water and wastewater treatment to Bang Pa-in Industrial Estate and Amata City Industrial Estate area in Chonburi, and the business of producing tap water to Amata City Industrial Estate area in Rayong. There is information of business operation and investment details from the 2024 Form 56-1 One Report details as published on the website <https://ttw.listedcompany.com/misc/one-report/20250310-ttw-one-report-2024-en.pdf>.



SHAREHOLDING STRUCTURE OF TTW GROUP

Chart of Shareholding Structure and the TTW Shareholding Percentage

as of December 31, 2024 (Unit : %)



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

TTW is listed on the Stock Exchange of Thailand ; its main shareholders are Mitsui Water Holdings (Thailand) Company Limited, CH Karnchang Public Company Limited, Bangkok Expressway and Metro Public Company Limited and investors in Thailand and abroad. There is information on TTW's group shares from the 2024 Form 56-1 One Report details as published on the website <https://ttw.listedcompany.com/misc/one-report/20250310-ttw-one-report-2024-en.pdf>

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, to build confidence among stakeholders through transparent and inspection processes. Therefore, the Company has established a sustainable development policy to serve as a management framework for the long-term sustainability development of the organization.

In addition, the company has created a sustainability development strategy. The objective is to determine operational measures for sustainable development 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 (UN) by details of sustainable development policy and strategy as follows,




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



Sustainable Development Policy	Sustainable Development Strategy
3. Social Value Creation 	<ol style="list-style-type: none"> 1. Manage human resources with efficiency and fairness in accordance with the standards, requirements of laws, and international labor charters. 2. Encourage personnel to develop necessary knowledge and skills according to the employee potential development plan and promote creativity in working through Kaizen activities. 3. Support the occupational health and safety management system by establishing operational manuals and safety standards in accordance with the nature of work and creating a safe working culture throughout the organization. 4. There is a policy on human rights and labor, encouraging executives and employees to respect and comply with international human rights principles based on equality and non-discrimination. 5. Create satisfaction for employees and communities surrounding the Company's business areas. 6. Promote engagement with communities and relevant stakeholders to create strong relationships, comprehension, and cooperation to reduce conflicts arising in the future.

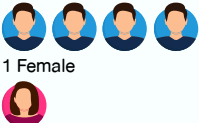



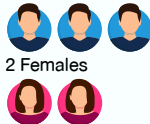

Sustainable Development Policy	Sustainable Development Strategy
4. Sustainable Environmental Management 	<ol style="list-style-type: none"> 1. Realize the importance of doing business without affecting the environment. 2. Conserve energy and climate change through the reduction measures of electricity consumption and GHG emissions from business processes according to the specified goals. 3. Manage water resources by raising awareness of water utilization with value, establishing measures and goals for reusing wastewater from production processes to reproduce tap water. 4. Manage waste and unused materials by using sludge for product research and social use, as well as promoting the valuable use of unused materials. 5. Manage biodiversity for the benefit and value of organizations and ecosystems by establishing preventive measures for tap water and wastewater treatment production systems from negative impacts on living organisms in ecosystems. 6. Promote cooperation and participation in 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), including internal monitoring and certification from external agencies according to the plan.



SUSTAINABLE DEVELOPMENT STRUCTURE

The Company's Board of Directors operates under a one-tier system and comprises four sub-committees tasked with overseeing business operations in alignment with legal requirements, company objectives, and regulations. These committees also ensure adherence to shareholder meeting resolutions within the updated guidelines provided by the Board of Directors, which are regularly reviewed and adjusted to maintain consistency with evolving business conditions and corporate governance principles. The Board of Directors consists of a total of 12 committee members, selected based on diversity and qualifications, distributed among the various committees and sub-committees as follows :

Sub-committees	Categorized by characteristics	Duties and Responsibilities
Executive Committee (Total 5 persons)	<ul style="list-style-type: none"> Non-Executive Director of 4 persons Executive Director of 1 person Non-Independent Director of 5 persons 4 Males 1 Female 	<ul style="list-style-type: none"> Supervise the Managing Director's performance in accordance with the policies and strategies stipulated by the Board of Directors, as well as provide advice to the Managing Director. Supervise feasibility studies for new projects as well as consider approving various projects. Has the authority to approve any juristic acts which are binding on the Company, in the amount not exceeding 50 million baht under the policy and strategy framework by the Board of Directors. Perform other tasks as assigned by the Board of Directors.
Audit Committee (Total 3 persons)	<ul style="list-style-type: none"> Non-Executive Director of 3 persons Independent Director of 3 persons 3 Males 	<ul style="list-style-type: none"> Review the Company's financial reports for accuracy and adequate disclosure. Review the internal control system and internal audit of the company. Consider the disclosure of the information in case of connected transactions or transactions that may cause conflicts of interest to be accurate, complete, and timely.

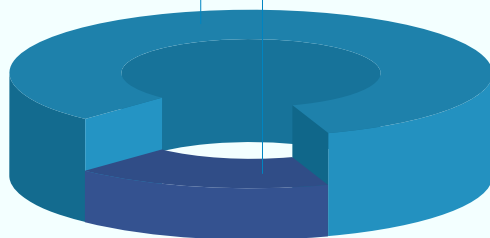
Sub-committees	Categorized by characteristics	Duties and Responsibilities
Risk Management and Corporate Governance Committee (Total 5 persons)	<ul style="list-style-type: none"> Non-Executive Director of 4 persons Executive Directors of 1 person Independent Director of 2 persons Non-Independent Director of 3 persons 3 Males 2 Females 	<ul style="list-style-type: none"> Consider policies, strategies, and risk management plans. Monitor and control overall risk management at an acceptable level Supervise the performance of the Board of Directors as well as the management according to the principles of good corporate governance. Review the corporate governance policy and the corporate governance manual and code of conduct for business operations. Follow up on policy compliance through complaints channels. Supervise operations; provide advice and recommendations for corporate sustainability development. Covers Environmental, Social and Governance : ESG) including climate change management. Supervision and Advisory on Organizational Sustainability: <ol style="list-style-type: none"> Climate Change: Including the management of greenhouse gas emissions from business processes. Human Rights: Respecting the rights of stakeholders. Occupational Health, Safety, and Work Environment: Ensuring workplace safety and well-being. Information Technology and Cybersecurity: Maintaining data integrity and protecting against cyber threats.
Nomination and Remuneration Committee (Total 4 persons)	<ul style="list-style-type: none"> Non-Executive Director of 4 persons Independent Director of 2 persons Non-Independent Director of 2 persons 4 Males 	<ul style="list-style-type: none"> Recruiting people for the positions of the Board of Directors and Managing Director. Propose opinions on compensation management and other benefits for the Board of Directors, Sub-Committees and Managing Director.

Remark : The duties and responsibilities of the Sub-Committees disclosed in the 2024 Form 56-1 One report as published on the website <https://ttw.listedcompany.com/misc/one-report/20250310-ttw-one-report-2024-en.pdf>.



Classified by gender

Male **83%** Female **17%**



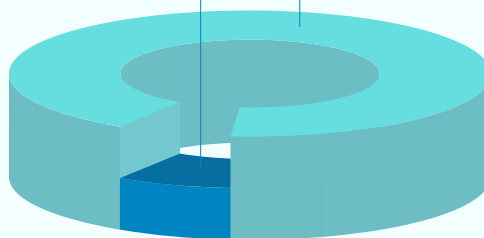
Male
10 Persons



Female
2 Persons

Classified according to duties and responsibilities

Executive Director **8%** Non-Executive Director **92%**



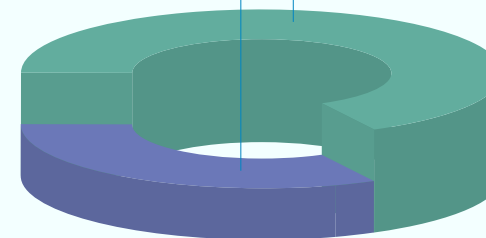
Executive Director
1 Person



Non-Executive Director
11 Persons

Classified by properties

Independent Director **33%** Non-Independent Director **67%**



Independent
Director
4 Persons



Non-Independent
Director
8 Persons

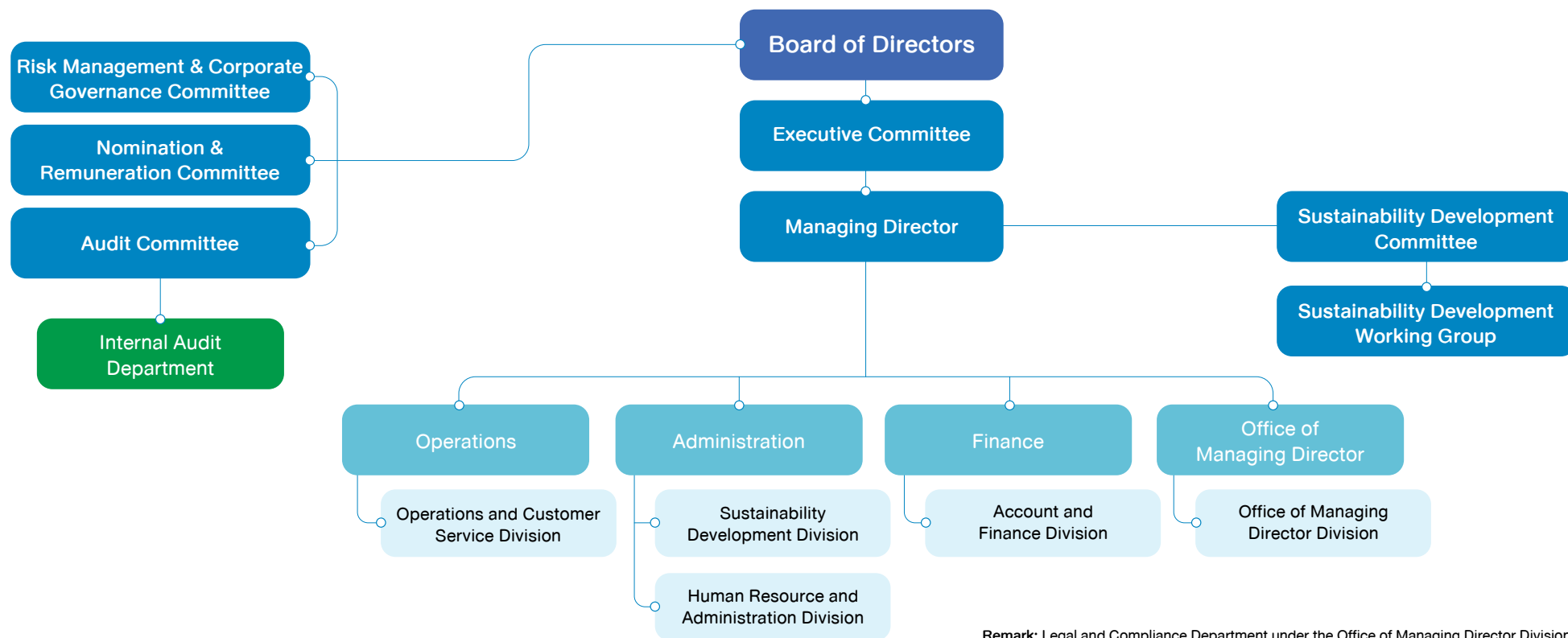


The tenure for the Board of Directors Years' Experience in 2024

- 10 Years

Follow up, evaluate and report on sustainability development performance

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



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

Sustainability Development Committee

The Company has established a “**Sustainability Development Committee**” responsible for overseeing and managing sustainability within the organization. The committee comprises the Managing Director, Deputy Managing Directors, and Division Directors. The Committee operates under the supervision of the Risk Management and Corporate Governance Committee. In addition, the Company has appointed a “**Sustainability Development Working Group**,” consisting Section Managers and Department Managers from various units, to implement the assigned sustainability policies and measures. The Working Group is tasked with expanding and executing these initiatives into concrete actions across all business areas of the Company.

Sustainability Development Division

In 2024, the Company undertook an organizational restructuring to align with its vision and mission, as well as to adapt to the evolving business landscape that increasingly emphasizes sustainable business practices in line with global sustainability trends. As part of this initiative, the Company established the “**Sustainability Development Division**” to support the long-term advancement of the organization’s sustainability efforts.

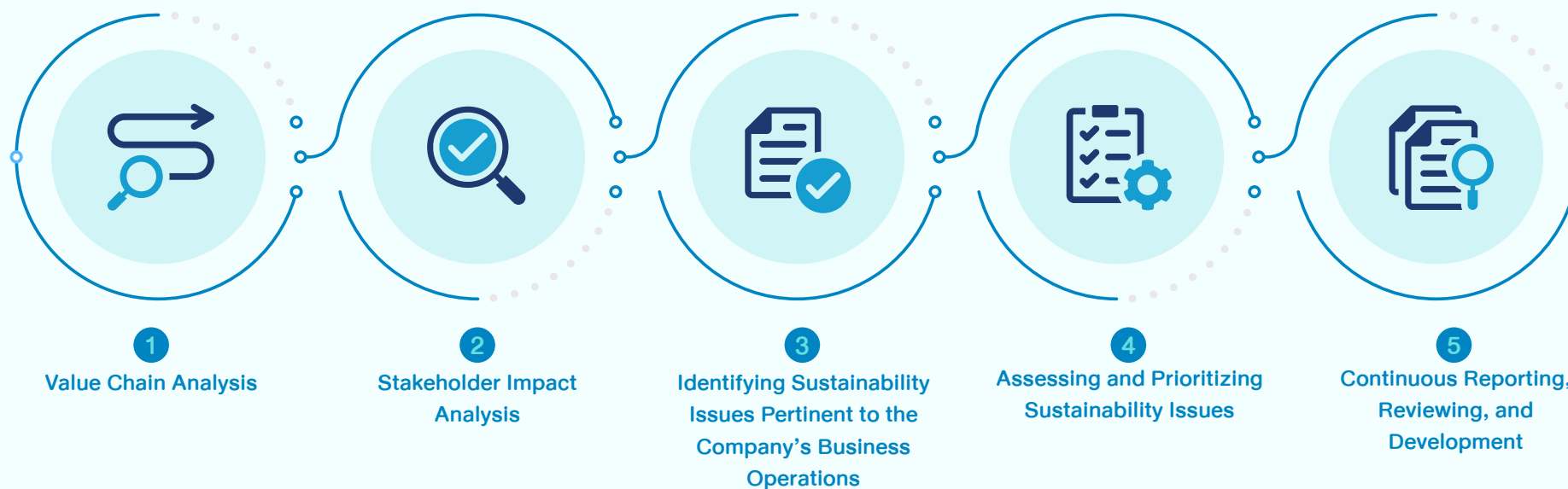


ASSESSMENT OF SUSTAINABILITY ISSUES

The Company employs a sustainable engagement approach, aligning with stakeholder needs while creating societal and environmental value. Consequently, key sustainability issues are annually reviewed and developed to uphold national and global sustainability standards. This process involves gathering insights from

neighboring industries and stakeholders to identify pertinent issues, supplemented by input from external experts versed in the GRI Standard 2021. The details of the sustainability assessment are published on the website <https://www.ttwplc.com/en/sd/response/sustainability-issue-assessment>

Process for Identifying Sustainability Issues





1. Value Chain Analysis

The Company conducts a comprehensive analysis of its business operations across the entire value chain, encompassing both primary and Support activities. This examination aims to gather information regarding the impact on various stakeholders, spanning employees, shareholders / investors, customers, business partners, communities/society, and environmental agencies.

2. Stakeholder Impact Analysis

The Company evaluates the effects of its business operations on each stakeholder group across the environmental, social, and corporate governance (ESG) dimensions, while also establishing connections to human rights issues associated with each impact. This process involves engaging in interviews with stakeholders to identify affected issues and concerns, as well as gathering insights from relevant departments both internally and externally. This comprehensive approach encompasses both positive and negative impacts, considering both short-term and long-term on each stakeholder group, including current and potential impacts.

3. Identifying Sustainability Issues Pertinent to the Company's Business Operations

Identification of sustainability issues pertinent to the Company's business operations sets forth a comprehensive framework for addressing sustainability matters, encompassing both internal and external factors within the organization. The Company's endeavors and operational structure consider issues pertinent to the tap water sector and global sustainability trends. Drawing from reputable sustainability entities such as the GRI Standard, the Sustainable Development Goals (SDGs), the Corporate Sustainability Assessment Framework of the Stock Exchange of Thailand, and S&P Global, the originator of ESG Indices and the Principles of the United Nations Global Compact (UNGC).

4. Assessing and Prioritizing Sustainability Issues

The Company convened a workshop to brainstorm ideas from executives and employee representatives, facilitating the analysis and evaluation of stakeholder impact on diverse sustainability issues. Complementing insights garnered from prior steps, this process incorporates assessments of impact severity, likelihood, polarity, and connections to human rights considerations. The severity of impacts in each domain is duly weighed to aid in categorizing pivotal sustainability matters (Materiality Topics) and foundational issues within the company's business operations (Business Fundamental Topics).

5. Continuous Reporting, Reviewing, and Development

The Company has devised and implemented operational protocols aimed at mitigating the adverse effects of critical sustainability matters and foundational issues within its business operations. Following the assessment of initial significant issues, the outcomes are presented to the Company's management team and Sustainability Development Committee for deliberation and approval regarding information disclosure. A systematic review process is instituted to identify sustainability concerns, ensuring ongoing disclosure in the Company's sustainable development report. This enables the Company to assess impacts and adopt management strategies aligned with evolving environmental, social, and economic dynamics annually.

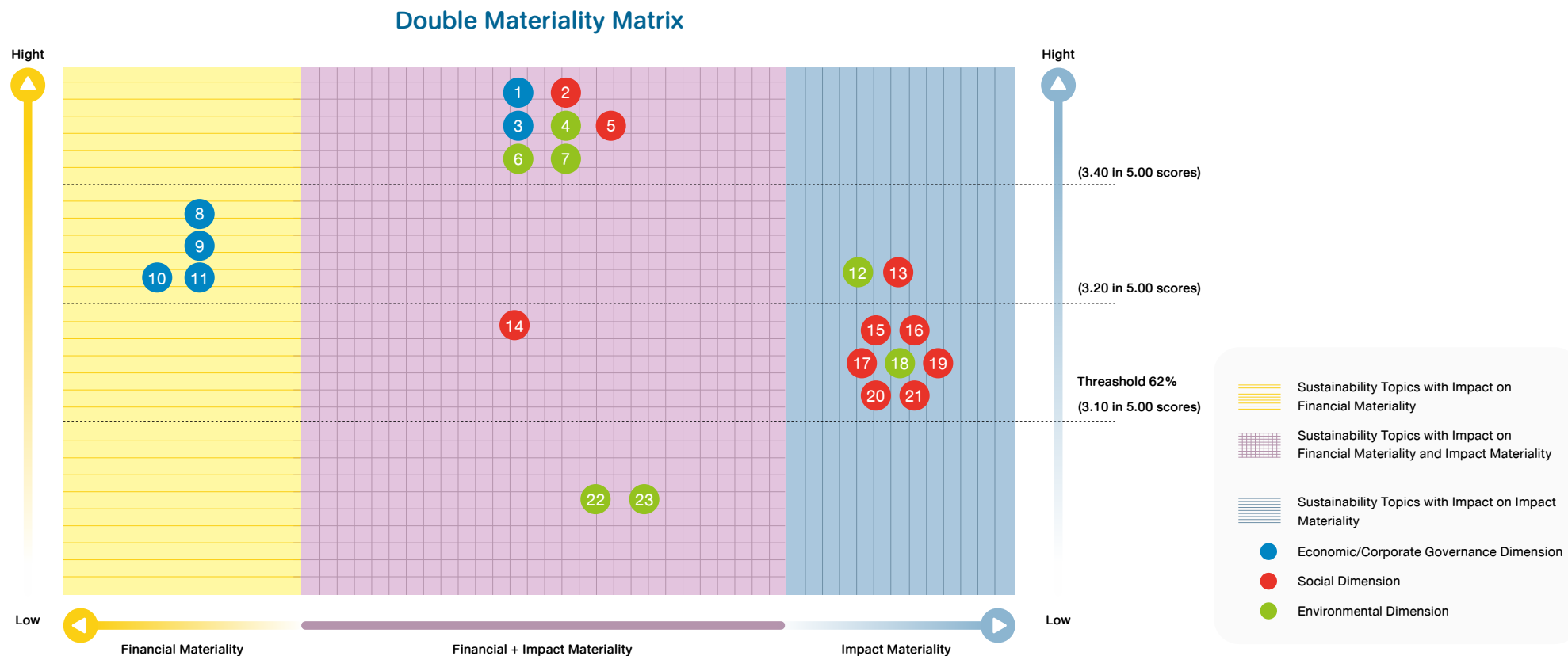




Double Materiality Principle

The Company recognizes and acknowledges the importance of managing the impacts on stakeholders resulting from business operations. Therefore, the Company has reviewed the process for identifying sustainability topics based on the Double Materiality standard by reporting information in two aspects: Impact Materiality and Financial Materiality.

In 2024, the Company conducted a survey on sustainability topics that have impacts on stakeholders and the Company's sustainability, with cooperation from the Company's executives and the Sustainability Development Committee. The Company prioritized sustainability topics in alignment with GRI standards and the Double Materiality principle. There were 23 sustainability topics identified, of which 21 were assessed as having medium to high importance, and 2 were assessed as having low importance. The results of the survey on sustainability topics that have impacts on stakeholders and the Company's sustainability are summarized in the Double Materiality Matrix.





Sustainability issues

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

Analysis of the Organization's Material Sustainability Issues

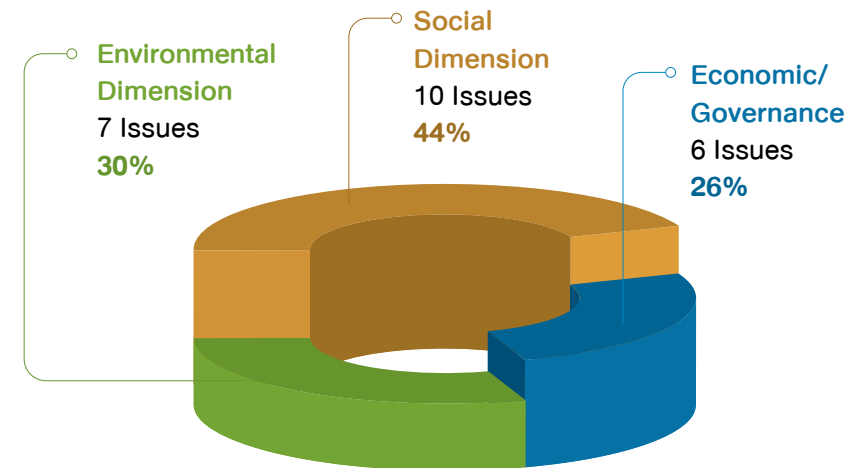
Based on the analysis of stakeholder impact and materiality prioritization, the Company has identified a total of 23 sustainability topics that are relevant to its business operations. These topics are categorized into two main groups as follows:

1. Material Sustainability Topics

- 1.1 High-Priority Material Topics: 7 topics identified as highly material to the Company.
- 1.2 Medium-Priority Material Topics: 14 topics identified as moderately material to the Company.

2. Business Fundamental Topics

There are 2 topics identified as fundamental to the Company's business operations, with low materiality.



1. Economic/Governance Dimension

Operates to achieve its vision and mission based on stakeholder satisfaction and maximizing benefits. (This involves 6 key issues.)



2. Social Dimension

Conducts business ethically, taking responsibility for and caring for communities and society both within and outside the service area. (This involves 10 key issues.)



3. Environmental Dimension

Committed to environmental care within the production process, valuing resource efficiency, conservation of natural resources, and sustaining a balanced and sustainable environmental system. (This involves 7 key issues.)














Environmental Dimension

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
1. Environmental Compliance			
	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of regulations and laws, it may affect production costs and can disrupt business operations. 	<ul style="list-style-type: none"> Reviewing quality and environmental policies. Reviewing the company's environmental objectives and ensuring compliance with the specified indicators. Conduct an Internal Audit ISO 14001 the Company's environmental operations comply with the specified standards at least once per year.
2. Environmentally Friendly Process of Products and Services			
	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. The prudent use of resources. Complaints regarding breaches of terms and agreements may affect satisfaction and the volume of transactions for goods and services, potentially leading to business interruptions. 	<ul style="list-style-type: none"> Production of tap water without water wastage, using a Zero Discharge system. Implementation of projects for environmentally friendly procurement of goods and services. The implementation of Membrane Technology in water production. Air pollution management. Operating in accordance with environmental standards ISO 14001.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
3. Water Management			
	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. The prudent use of resources. The inefficiency of water management may lead to resource shortages and business interruptions. 	<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, to support standardized tap water accession. Campaign to promote activities to maintain water sources and water quality of the Tha Chin River and canals in the service area. Monitor water sources with relevant external agencies. Follow up on the Water Quality of Bang Sue Canal to Conserve the Tha Chin River Project.
4. Waste and Unused Materials Management			
	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. The prudent use of resources. Complaints regarding violations of regulations and laws can disrupt business operations. 	<ul style="list-style-type: none"> Waste is sorted into 3 types: general waste, recycle waste and hazardous waste. The head office separates food waste from general waste to make compost from the automatic food waste sorting machine. Monitor the outcomes of the "Compost project to save the soil and save the environment" by Thairath Wittaya 4 School, Wat Sukwatthana Ram School and Wat Weluwanaram School in Nakhon Pathom Province.






Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
5. Climate Change and Energy Conservation			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. The prudent use of resources. Managing greenhouse gas emissions from business processes. The inefficiency of managing GHG emissions from business processes may lead to increased production costs, reduced confidence, and cooperation from stakeholders. 	<ul style="list-style-type: none"> Setting targets to reduce GHG emissions from business processes. Establish project for procurement of products and services that are environmentally friendly. Implementing the Solar Roofing and Floating Solar Cell projects. Join the energy conservation project of the Department of Alternative Energy Development and Efficiency, Ministry of Energy. Participating in the “Care the Bear” project by SET. Organize the Greenhouse Gas Emission Assessment from the Business Process Project Implementing measures to control electricity usage. Join the TCNN network as an innovator and leader in greenhouse gas management. Received certification for the project to support greenhouse gas reduction activities (LESS) under the Rooftop Solar Cell project of tap water distribution stations and tap water production plants in the Nakhon Pathom-Samut Sakhon area.




Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
6. Environment Cooperation between Organization			
    	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. The prudent use of resources. Lack of cooperation with the environment between organizations may affect the environmental conservation and long-term business operation. 	<ul style="list-style-type: none"> Organize environmental projects to create cooperation in protecting the environment with with government agencies, businesses and communities. Participate in environmental activities together with outside agencies.
7. Biodiversity			
  	<ul style="list-style-type: none"> Employees Customers Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. The prudent use of resources. If biodiversity risks are not properly managed and does not cover the impact from business operations, It may affect the scarcity of resources that are important to business operations. There may also be conflicts over the use of resources in the future. 	<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 wastewater into the Tha Chin River and Chao Phraya River. Establish campaign to promote the conservation of the Tha Chin River and its branch canal. Monitoring the results of the Bang Sue Canal to Conserve the Tha Chin River Project, Implementing a composting project to conserve soil and protect the environment, reducing waste disposal. Undertaking a project to assess greenhouse gas emissions from business operations. Controlling air pollution in the production process.













Social Dimension







Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
1. Employee Stewardship and Development			
   	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Skills, knowledge, and expertise in the workplace. Satisfaction with working conditions. Efficiency in Operations. If the level of skills, knowledge, and expertise of employees is low, it may affect the efficiency of work and the quality of products and services. 	<ul style="list-style-type: none"> Regularly review the employee performance appraisal process. Review of the compensation determination process. Establish employee potential development plan. Establish employees training plans at all levels. Consider selecting internal personnel before recruiting external personnel. Arrange for an election of the Welfare Committee. Employees satisfaction survey. Assess comprehensive human rights risks (Human Rights Due Diligence:HRDD) and follow up.






Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
2. Occupational Health and Safety			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Occupational health and safety Satisfaction with working conditions. Efficiency in Operations. If the workplace safety and occupational health conditions are low, it can adversely affect the efficiency of work and the quality of life of employees, as well as the quality of products and services. 	<ul style="list-style-type: none"> Reviewing policies regarding workplace safety, occupational health, and environmental conditions. Provide employees an annual check-up, adding a special health check for employees working at risk area and employees over 35 years. Assess environmental factors that may affect the health and safety of employees, such as light, noise, dust, pollution, etc. Regularly training and developing safety knowledge. Regular rehearsal of emergency plans to prepare for critical situations. Annual review of risks and emergencies in working processes.






Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
3. Social and Community Stewardship			
    	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Participation and pride in the organization. Business Stability and Security. Fair business practices. Quality of life and well-being. A favorable environment. Complaints from the community affected by business operations may result in a lack of cooperation and potential business interruption. 	<ul style="list-style-type: none"> Organize social projects. Transfer knowledge of composting from organic waste mixed with sludge to schools in business areas. Transferring knowledge on water conservation to schools and communities. Solving social problems in times of crisis. Community opinion survey, Bang Rakam Subdistrict, Bang Len District, Nakhon Pathom Province. Provide a channel for receiving complaints or suggestions from communities affected by the company's business operations.
4. Social Contributions and Donations			
    	<ul style="list-style-type: none"> Employees Shareholders/ Investors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Participation and pride in the organization. Business Stability and Security. Fair business practices. Quality of life and well-being. A favorable environment. Complaints from the community affected by business operations may result in a lack of cooperation and potential business interruption. 	<ul style="list-style-type: none"> Support scholarships for students in schools in service areas that have scarcity. Support budgets for stakeholders in activities that are beneficial to society. Solving social problems in times of crisis.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
5. Roles and Responsibilities of Human Rights Committees and Executives			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. If the roles and responsibilities of the board and executives regarding human rights are not clear. It may affect the image of the organization. confidence and cooperation from stakeholders. 	<ul style="list-style-type: none"> Review human rights and labor policies. Set guidelines for the process of respecting human rights to stakeholders, board , executives, and employees to adhere to. Additional duties and responsibilities of the Risk Management and Corporate Governance Committee to supervise respect for human rights of stakeholders.
6. Employment and Respect for Human Rights			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Satisfaction with working conditions. Equality and equitable practices. Fair business practices. Complaints regarding breaches of employment contracts and violations of human rights may affect work performance, satisfaction, and trust, as well as potentially disrupt business operations. 	<ul style="list-style-type: none"> Personal Data Protection Policy for Employees. No child labor under the age of 15 is employed. No forced labor employment. No illegal foreign workers. Pregnant employees are not allowed to work that is hazardous to their health and body as required by law. Supporting the prevention of human rights violations in all employment circumstances. Supporting and follow policies regarding children's rights.










Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
7. Human Rights Communication and Training			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of employment contracts and respect for human rights may affect the inefficiency of work, satisfaction and trust Including that potential business interruption. 	<ul style="list-style-type: none"> Provide human rights training to employees. Participate in a practical training course on HRDD throughout the value chain for listed companies by the Stock Exchange of Thailand in collaboration with Global Compact Network Thailand.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
8. Human Rights Risk Assessment			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of employment contracts and respect for human rights may affect the inefficiency of work, satisfaction and trust Including that potential business interruption. 	<ul style="list-style-type: none"> Establish a process for monitoring and reviewing human rights risks and Mechanisms for redress in cases of human rights violations. Consider human rights risks as enterprise Risk risks.







Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
9. Managing Human Rights Complaints and Remedies			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of employment contracts and respect for human rights may affect the inefficiency of work, satisfaction and trust Including that potential business interruption. 	<ul style="list-style-type: none"> Establish a process for monitoring and reviewing human rights risks and Mechanisms for redress in cases of human rights violations. Establish procedures for managing complaints and human rights remedies.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
10. Cooperation with Human Rights Suppliers/Deliverers/Contractors			
   	<ul style="list-style-type: none"> Employees Shareholders/ Investors Suppliers/ Deliverers/ Contractors 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of employment contracts and respect for human rights may affect the inefficiency of work, satisfaction and trust Including that potential business interruption. 	<ul style="list-style-type: none"> Review the Supplier Code of Conduct or procurement manual/ procurement regulations to cover the issue of respecting human rights. Site visit to assess ESG risks for critical suppliers/ high-risk suppliers. Follow up on ESG audits of suppliers

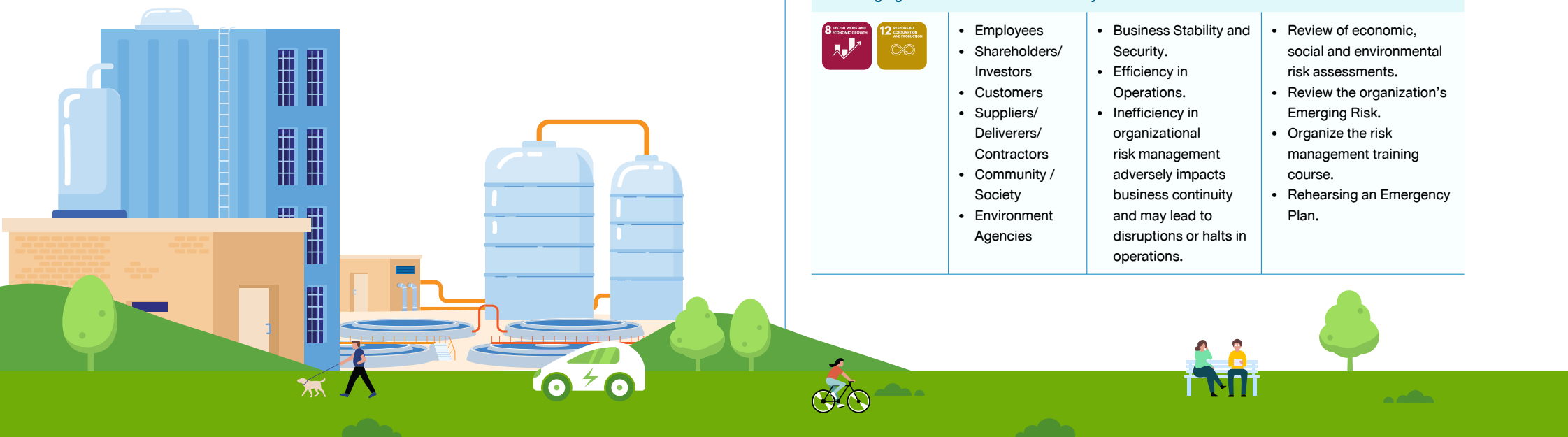









Economic/Governance Dimension




Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
1. Business Performance			
 	<ul style="list-style-type: none"> Employees Shareholders/ Investors 	<ul style="list-style-type: none"> Employee Compensation and Benefits. Shareholder/Investor Returns. If the Company's performance is poor, it may lead to employee resignations and a lack of interest from shareholders/ investors. 	<ul style="list-style-type: none"> Review policies and strategies in economic and sustainable development. Review of water supply targets. Create confidence in business operations for stakeholders. Seek opportunities in new business operations.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
2. Corporate Governance			
   	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Transparency in business operations. Fair business practices. Complaints regarding violations of regulations and laws can disrupt business operations. 	<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.
3. Managing Risk and Business Continuity			
 	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Efficiency in Operations. Inefficiency in organizational risk management adversely impacts business continuity and may lead to disruptions or halts in operations. 	<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.





Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
4. Supply Chain Management			
 	<ul style="list-style-type: none"> Employees Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Business Stability and Security. Fair business practices. Efficiency in Operations. Ineffective management of the organization's supply chain can result in operational difficulties, including resource shortages and potential disruptions or halts in business operations. 	<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. Site visit to assess ESG risks for critical suppliers/ high-risk suppliers.
5. Products and Services Responsibility			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors Community / Society Environment Agencies 	<ul style="list-style-type: none"> Skills, knowledge, and expertise in the workplace. Efficiency in Operations. Business Stability and Security. Fair business practices. Products and services are standardized and of high quality. 	<ul style="list-style-type: none"> Produce and distribute tap water to customers according to quality standards that are sufficient and consistent. Provide regular consultation and meetings for working with customers. Provide training courses to develop skills for customers.

Alignment with the SDGs	Stakeholders related	Impact on stakeholders	Methods
		<ul style="list-style-type: none"> Complaints about violations of terms and agreements may affect satisfaction and the volume of transactions for products and services. 	<ul style="list-style-type: none"> Supporting customer relations activities.
6. Innovation and Technology			
  	<ul style="list-style-type: none"> Employees Shareholders/ Investors Customers Suppliers/ Deliverers/ Contractors 	<ul style="list-style-type: none"> Skills, knowledge, and expertise in the workplace. Efficiency in Operations. Business Stability and Security. If a business lags behind in innovation and technology, it may affect production costs and business growth. 	<ul style="list-style-type: none"> Provide training to develop Kaizen skills both inside and outside the Company. Transferring knowledge and exchange experiences among departments through the Kaizen Project and Exchange Program. 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.



SUSTAINABILITY ISSUES ALIGNED WITH SUSTAINABLE DEVELOPMENT GOALS (SDGs)

The company recognizes the importance of supporting the global agreements of the United Nations and is committed to operating in line with international sustainability principles to contribute to the achievement of the United Nations Sustainable Development Goals (UN SDGs). This framework guides the organization in its sustainability efforts.

Sustainability Issues Analysis

The Company evaluates and prioritizes sustainability issues of mutual importance to both the Company and its stakeholders, considering risk factors throughout the supply chain in accordance with the GRI (Global Reporting Initiative) Standards 2021. In 2024, the Company and its stakeholders identified 23 key sustainability issues. These issues are detailed in relation to the Sustainable Development Goals (SDGs), including an analysis of risks and opportunities, as published on the Company's website.



Click
Sustainability issues aligned with Sustainable
Development Goals (SDGs)





Economic/Governance Dimension

6 Sustainability Issues

Operates to achieve its vision and mission based on stakeholder satisfaction and maximizing benefits. (This involves 6 key issues.)



Sustainable Development Goals–SDGs



Social Dimension

10 Sustainability Issues

Conducts business ethically, taking responsibility for and caring for communities and society both within and outside the service area. (This involves 10 key issues.)



Sustainable Development Goals–SDGs



Environmental Dimension

7 Sustainability Issues

Committed to environmental care within the production process, valuing resource efficiency, conservation of natural resources, and sustaining a balanced and sustainable environmental system. (This involves 7 key issues.)



Sustainable Development Goals–SDGs



Summary of Points

Sustainability
Issues

23

Sustainable
Development
Goals–SDGs

15



Report developing to manage and resilience of business after crisis with Sustainable Development Goals.

The Development of Capacity for Effective Management and Recovery (Resilience) of the Business Sector after a Crisis, in Alignment with the Sustainable Development Goals (SDGs)

The company recognizes and prioritizes the integration of a Culture of Health, as per the global reporting standards set by GRI, into its business practices and corporate strategy. This integration aims to seamlessly incorporate post-COVID-19 health practices into business operations and activities, adapting to the new patterns of living and working that have emerged. The company focuses on managing the health impacts on employees and stakeholders and aligning corporate strategies to support business operations in the New Normal.

The Company, in collaboration with the Thaipat Institute, has conducted research to enhance the resilience and effective recovery of the business sector post-crisis, aligned with the Sustainable Development Goals (SDGs). This research project, supported by a grant from Thailand Science Research and Innovation (TSRI), aims to assist businesses in adopting 16 health culture practices across 4 areas: strategy, innovation and welfare, labor and workplace, and community. These practices are intended to be used as inputs for materiality analysis, guiding the determination of key health culture issues for the organization, as detailed on the company's website, <https://www.ttwplc.com/storage/sustainable/sustainability-esg/20240308-ttw-resilience-sdgs-th.pdf>



STAKEHOLDER ENGAGEMENT

The Company recognizes the importance of stakeholder engagement, believing that positive relationships based on trust, as well as the opinions and feedback from stakeholders, are crucial for achieving sustainable development and growth. Effective stakeholder management enables the Company to meet stakeholders' needs efficiently, reducing risks that could harm the Company's image and cause business disruptions. This approach ensures maximum benefits for all stakeholders, including vulnerable groups, by promoting stakeholder participation in evaluating and disclosing the social and environmental impacts of the Company's operations.

Relationship between the Business and Stakeholders in the Value Chain

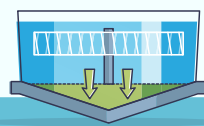
The Company analyzes relationship between business and stakeholders each operating activity, which leading to analysis and management of key sustainability issues which is important to added value to products and services and creating the Company competitiveness, consisting of five main activities which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

Value Chain



1. Raw Materials Procurement

Sourcing raw materials for water production involves ensuring quality and sustainability practices of suppliers. This includes assessing ESG risks.



2. Production Process

Producing tap water with a focus on quality, sufficiency, and continuity to meet customer demands, while also considering social and environmental impacts.



3. Product Delivery

Storing and distributing tap water to customers / consumers with a focus on maintaining quality, sufficiency, and continuity.



4. Sales and Marketing

Distributing tap water through pipelines to customers, ensuring equal focus on quality, sufficiency, and continuity.



5. Service

Receiving and managing complaints, as well as suggestions from customers, while considering feasibility and maintaining a balance of expectations from stakeholders through the value chain.



Stakeholders Analysis in the Business Value Chain

Business Value Chain	Employees	Shareholders/ Investors	Customers	Suppliers/ Deliverers/ Contractors	Community/ Society	Environment Agencies
1	✓			✓	✓	✓
2	✓		✓	✓	✓	✓
3	✓		✓	✓	✓	✓
4	✓	✓	✓	✓		
5	✓	✓	✓	✓	✓	✓

By establishing operational procedures with stakeholders as published on the website <https://www.ttwplc.com/en/sd/sustainable-management-and-policy/stakeholder-engagement> with details on managing impacts on stakeholders as published on the website from the 2024 Form 56-1 One Report as disclosed on the Company's website <https://ttw.listedcompany.com/misc/one-report/20250310-ttw-one-report-2024-en.pdf>.

Defining Internal Organizational Responsibilities to Stakeholders



Department / Division	Stakeholders
Deputy Managing Director Company Secretary: Office of Managing Director Division	• Shareholders and Investors
Deputy Managing Director Operation Group: Operations and Customer Service Division	• Customers, Government Sectors and Environmental Agency
Deputy Managing Director Administration Group: • Human Resource and Administration Division • Sustainability Development Division	• Employees, Suppliers/ Deliverers/ Contractors, Customers and Communities
Deputy Managing Director Finance Group: Account and Finance Division	• Financial Institutions, Shareholders and Investors

The Company requires executives responsible for each stakeholder group to establish activities or projects that foster stakeholder engagement. This aims to address the needs or expectations of stakeholders affected by the organization's business operations, which is a key issue the Company must continuously address in line with its vision. The involvement of stakeholders is integrated into the organization's strategic planning, ensuring a balance between value creation and equitable business operations for all stakeholders.







Empowering Skills and Knowledge for Stakeholder Engagement

The Company recognizes the importance and responsibility of fostering engagement with all stakeholder groups. Accordingly, it mandates that relevant executives possess the necessary skills and knowledge to interact with each stakeholder group effectively and appropriately. To support this, the Company promotes the participation of responsible executives in the S02 course: Value Chain and Stakeholder Analysis, part of the ESG DNA project for employees of the Stock Exchange of Thailand. The company has brought additional knowledge from SET to create the ESG DNA project, additional knowledge of the year 2025, for employees of the organization to expand the basic ESG knowledge base to employees at a more in-depth professional level of knowledge.



Results of Stakeholder Engagement

The success metrics index for stakeholder engagement activities by each group are as follows :

Stakeholders	Key Performance Indicator
 Employees	Employee satisfaction with job performance is not less than 70%
 Shareholders/ Investors	Shareholders'/Investors' satisfaction from participating in the Company activities is not less than 80%
 Customers	Customer satisfaction with the Company services is not less than 91%
 Suppliers/ Deliverers/ Contractors	Suppliers'/Deliverers'/Contractors satisfaction with the Company operations is not less than 80%
 Community/ Society	Communities' satisfaction from participating in the Company activities is not less than 80%
 Environment Agencies	Environmental Agencies' satisfaction from participating in the Company activities is not less than 80%



Negotiation Activities

Stakeholders	Expression Activity
 Employees	<ul style="list-style-type: none"> The Managing Director visits and employee meetings in each business area to listen to suggestions and exchange ideas for work improvement The Welfare Committee meetings with employer representatives to discuss and provide suggestions on employee welfare. Surveying employee satisfaction with job performance. Receiving and managing complaints appropriately and effectively.
 Shareholders/ Investors	<ul style="list-style-type: none"> Holding Annual General Meetings (AGM) as an opportunity for shareholders to engage with the board and management to review performance and consider key issues, also as a mechanism for exercising voting rights.
 Customers	<ul style="list-style-type: none"> Holding monthly and annual meetings or on important occasions. To discuss and listen to work suggestions to meet customer needs. Surveying customer satisfaction with services provided. Receiving and managing complaints appropriately and effectively.
 Suppliers/ Deliverers/ Contractors	<ul style="list-style-type: none"> Holding meetings for discussion and listening to work improvement suggestions to enhance collaborative work processes. Surveying Business Partners / Suppliers satisfaction with operations. Receiving and managing complaints appropriately and effectively. Onsite - ESG Audit for partners.
 Community/ Society	<ul style="list-style-type: none"> Holding meetings for discussion and listening to proposals for community engagement activities/projects. Surveying community satisfaction with the Company activities. Receiving and managing complaints appropriately and effectively. Survey the opinions of communities around business areas that are affected by the company's business operations.
 Environment Agencies	<ul style="list-style-type: none"> Holding meetings for discussion and listening to proposals for environmental activities/ projects with relevant agencies. Surveying environmental organizations' satisfaction with the Company activities. Receiving and managing complaints appropriately and effectively.



Activities to create engagement with stakeholders

Employees



Shareholders/ Investors



Customers



Suppliers/ Deliverers/ Contractors



Community/ Society









Environment Agencies





Stakeholders' Feedback to the Company

Stakeholders	Name-Surname / Position / Department	Feedback
Employee 	Ms. Benjamaporn Chairit Human Resources Officer Human Resources and Administration Division Head Office TTW Public Company Limited	In my perspective, TTW is an organization that nurtures people, creates opportunities, and contributes to sustainable development in society. In terms of people development, TTW provides employees with valuable opportunities to gain hands-on experience and enhance their knowledge and capabilities in their respective roles. Moreover, employees are given the chance to grow professionally alongside the Company, fostering mutual advancement and long-term success.
Shareholder / Investors 	Mr. Phonladon Somkiatprayoon Retail Investor	In my view, TTW is one of the stocks that consistently provides good dividend returns every year. It is well-suited for long-term investment and helps bring balance to my investment portfolio.
Customers 	Ms. Kanungkwan Kananap Head of Administration Provincial Waterworks Authority (PWA), Omnoi Branch	TTW places great importance on supporting the PWA Omnoi Branch, as well as other branches across the region. The Company has continuously collaborated and supported us in various areas, from discussions on tap water operations to providing educational scholarships for the children of PWA employees. TTW has also supported many projects and initiatives, such as CSR activities, GECC certification, and office building and parking area improvements, to enhance public service delivery.
Suppliers/Deliverers/Contractors 	Mr. Saneh Rinkaw Senior Manager, Sales & Marketing Chlor-Alkali AGC Vinythai Public Company Limited	It is both an honor and a pleasure to be a business partner of TTW. As a supplier of liquid chlorine a high-risk chemical we greatly appreciate TTW's commitment to strict safety practices. The Company ensures that equipment is consistently maintained in good condition and ready for use. Moreover, TTW provides training and communicates safety information clearly to all relevant personnel, resulting in accurate and safe operations.
Communities / Societies 	Miss Alita Phrasrithon Grade 6 Student Wat Sukhawatttharam School	Thank you to TTW for granting me this scholarship. I will use it to support my education and help ease the financial burden on my family. I promise to study hard and continue improving myself.
Environmental Agency 	Dr. Kongdej Lithochawit, M.D. President, We Love Tha Chin River Club	TTW has consistently supported the We Love Tha Chin River Club in organizing community care activities based on the Baworn approach (Home, Temple, School). The Company also actively participates in natural resource and environmental conservation projects in collaboration with government agencies, local communities, and other stakeholders. TTW is genuinely committed to solving social issues and continues to stand by the community, especially during the annual flood crises.

Remark: The Company has received consent from the aforementioned individuals to publish their opinions and personal photographs in the 2024 Sustainability Development Report, in compliance with the Personal Data Protection Act B.E. 2562



LEADING EXPERT

IN A COMPLETELY INTEGRATED WATER BUSINESS

TTW Public Company Limited





BUSINESS PERFORMANCE

Operational Approach

The company is committed to operating the business with good performance. By creating profits to grow continuously and steadily to increase competitive potential and create additional value for the organization and stakeholders. In 2024, information about the company’s income, expenses, and tax management can be summarized as follows:

Revenue

In 2024, the Company and its subsidiaries generated total revenue of 5,152.21 million baht from the tap water production business, tap water system maintenance business, industrial estate tap water and wastewater management business, and other investments, marking an increase of 12.06 % compared to the previous year.

Expenses

The Company and its subsidiaries incurred operating expenses totaling 1,940.88 million baht in 2024, representing an increase of 23.44% from the previous year. The majority of these expenses stemmed from electricity and chemical costs, in line with increased revenue and service provision. Other expenses of the Company include :

1. Social care expenses, including donations and contributions, amounted to 34.03 million baht, increasing by 78.07 % from the previous year.
2. Expenses related to employee welfare of the company amounted to 302.11 million baht, increasing by 25.41 % from the previous year.
3. Other expenses amounted to 1,604.74 million baht, decreasing by 4.44 % from the previous year.
4. Taxes paid to the government and local authorities amounted to 616.37 million baht, decreasing by 3.45 % from the previous year.

Tax Management

The company is conscious and emphasizes the importance of paying taxes accurately in accordance with the law, as taxes are considered a crucial resource for managing and developing the country. It aims to promote the creation of maximum value for both taxpayers and society, while aligning tax planning and practices both domestically and internationally. The company adheres to the principles of transparency and fairness towards all stakeholders and complies with good corporate governance practices. Recognizing the risks associated with taxation, both direct and indirect, the organization has established tax policies. These policies are regularly reviewed and updated to stay current and relevant each year.



Legal Tax



2022

656.54
million baht

2023

595.81
million baht

2024

616.37
million baht



Actual Tax



2022

656.54
million baht

2023

595.81
million baht

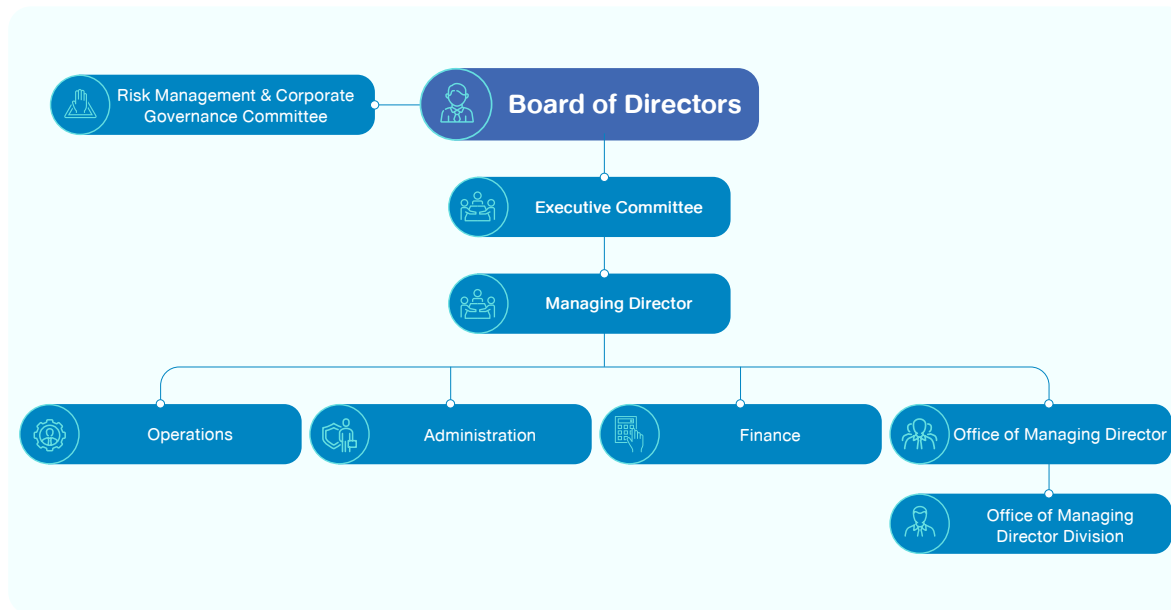
2024

616.37
million baht



CORPORATE GOVERNANCE

Structure



Operational Guidelines

The Company will treat all stakeholders with honesty, fairness, and equality without discrimination. Under good corporate governance Rules of law, rules, regulations, traditions, good morals. The details of good corporate governance are disclosed on the website. <https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf>



Click
Good Corporate Governance



Goals



Long-Term Goals

100% of Suppliers to comply with anti-corruption policies and the Supplier Code of Conduct

Zero incidents of corruption or bribery

Zero incidents of discrimination or harassment

Zero incidents of conflict of interest

Zero incidents of insider trading

Zero incidents of personal data breaches involving employees, customers, Suppliers, or other stakeholders

Zero incidents of corporate data breaches or leaks



Goals for 2024

100% of executives and employees acknowledge and apply the Anti-Corruption Policy as a framework in their work practices

100% of executives and employees complete training on basic corporate governance and business ethics

100% of Suppliers to comply with the Anti-Corruption Policy and Supplier Code of Conduct

Zero incidents of corruption or bribery

Zero incidents of discrimination or harassment

Zero incidents of conflict of interest

- **Zero** incidents of insider trading
- **Zero** incidents of personal data breaches involving employees, customers, Suppliers, or other stakeholders
- **Zero** incidents of corporate data breaches or information leaks

Performance in 2024

Achieved 100% of executives and employees acknowledged the Anti-Corruption Policy and applied it as a framework in their work practices

Achieved 100% of Suppliers complying with the Anti-Corruption Policy and Supplier Code of Conduct.

Zero

cases of corruption or bribery

Zero

incidents of conflict of interest

Zero

occurrences of discrimination or harassment

Zero

incidents of insider trading

Zero

cases of personal data breaches involving employees, customers, Suppliers, or other stakeholders

Zero

incidents of corporate business data breaches or information leaks

No complaints on corruption or bribery were reported

No complaints on violations of the business code of conduct were reported

No complaints on personal data breaches of employees, customers, Suppliers, or other stakeholders were reported

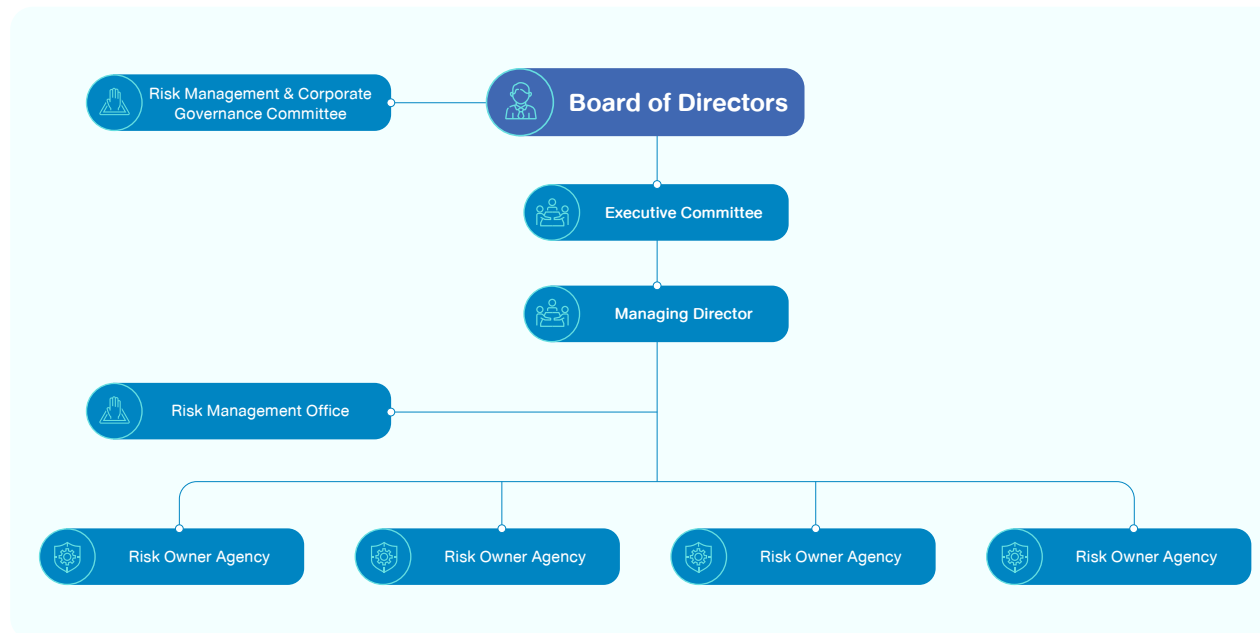
No complaints on corporate business data breaches or information leaks were reported





RISK MANAGEMENT AND BUSINESS CONTINUITY

Structure





Goals



Long-Term Goals

100% establishment of a risk management culture throughout the entire organization and its subsidiaries



Goal for 2024

- **100%** of directors, executives, and employees are aware of and understand the organization's risk management practices
- **100%** of the organization's risk exposures are managed within acceptable risk levels

Performance in 2024

Achieved 100%

of directors, executives, and employees were aware of and understood the organization's risk management practices

Achieved 100%

of the organization's risk exposures were managed within acceptable risk levels



Operational Approach

The Company prioritizes enterprise risk management amidst changes impacting both internal and external factors. This includes economic risks such as strategic, operational, and financial risks, as well as social and environmental risks and emerging risks. Detailed information on risk management and business continuity is available on the company's website.



Click
Risk Management and Business Continuity

Promoting a Risk-aware Culture

The company emphasizes instilling a risk-conscious mindset and raising awareness of the importance of risk management among all levels of management and employees. To achieve an effective implementation of the risk management system within business operations, the company fosters a continuous risk culture across the organization. This is achieved by establishing a systematic risk management foundation aligned with international standards and guided by various committees to identify business risks or opportunities promptly. The details of these efforts include :

1. The Company annually reviews its risk management policies and acceptable risk levels (Risk Appetite). These policies are communicated across all management levels, employees, and departments. This ensures awareness of potential risks, their impacts, the importance of risk management, and shared responsibility in mitigating risks. The risk management policies are integrated into daily operations, guiding decision-making, and planning.
2. Risk assessments are integrated with strategic and business planning. The process includes translating Risk Appetite into departmental or department that takes care of important projects of the organization.



3. The Company promotes interdepartmental collaboration by developing guidelines for risk coordinators within each department. These coordinators act as liaisons, ensuring consistent risk management practices and monitoring the implementation of risk management plans.
4. Policies are in place to enhance risk management skills and knowledge. Employees involved in risk management must undergo relevant certifications, ensuring they can provide appropriate and effective advice to management and colleagues. A standardized risk database (Risk Inventory) is maintained to collect and organize risk-related information.
5. Employee participation is encouraged, particularly in safety and occupational health risk assessments. For example, every operational employee serves as a "Safety Man" on a rotational basis, with one employee taking on the role each week. This initiative promotes safety awareness and active participation in maintaining workplace safety. Further details on employee engagement and fostering a risk-aware culture are available on the Company's website.



Click
Occupational Health and Safety

Policies are in place to enhance risk management skills and knowledge.

Employees involved in risk
management must undergo
relevant certifications





SUPPLY CHAIN MANAGEMENT

Operational Approach

The Company aims to continuously enhance the efficiency of supply chain management with transparency and fairness, while considering human rights and being responsible to all stakeholders. This is done under the Supplier Code of Conduct (SCOC) in accordance with the Company's ethical guidelines, social, and environmental practices. The Company promotes collaboration with primary and secondary suppliers on key issues such as environmental standards in production processes, product and service quality, child labor, fundamental human rights, working conditions, fair compensation, safety and occupational health, business ethics, and the adoption of SCOC to manage the supply chain sustainably. Additionally, the Company assesses supplier risks across all groups and develops appropriate risk assessment tools tailored to the business context of each supplier group. This helps enhance capabilities and improve sustainability performance, reducing supply chain management risks and promoting quality of life and good relationships between suppliers, communities, and society. The Company also contributes to mitigating environmental and ecological impacts, adhering to sustainable supply chain management policies and goals. Detailed information on supply chain management can be found on the Company's website.



Click
Supply Chain Management

Goals



Long-Term Goals

100% of Critical Tier 1 Suppliers who conduct business with the Company have acknowledged and agreed to comply with the Company's Supplier Code of Conduct

5% cost reduction by procuring goods or services below the allocated budget

Conduct ESG risk assessments with Critical Tier 1 Suppliers, targeting at least **5 suppliers** per year, covering **100%** of the assessment plan

No complaints related to operations or code of conduct from Critical Tier 1 Suppliers

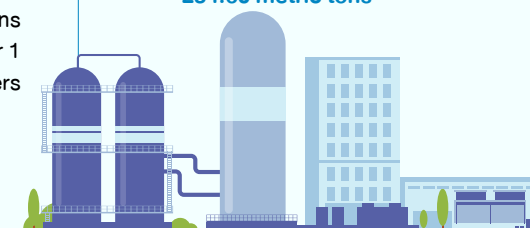


Goal for 2024

At least 90% of goods must be received according to the agreed terms with buyers and sellers, or on the dates specified in the purchase orders

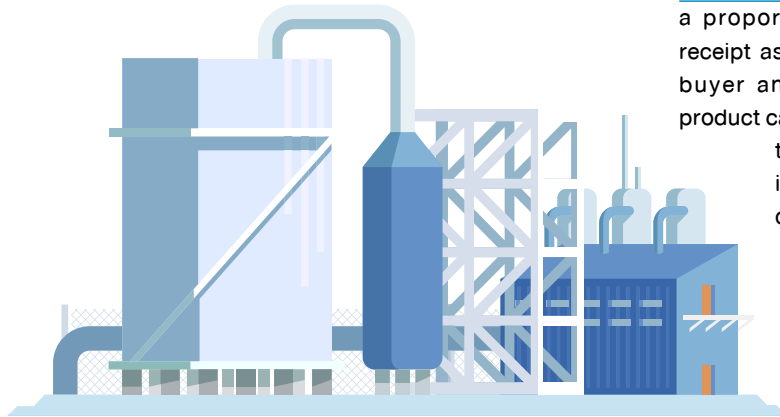
- Chemical stock levels (Alum) at Bang Len Water Treatment Plant:
 - Maximum stock level: not exceeding **633.60 metric tons**
 - Minimum stock level: not less than **264 metric tons**

- Chemical stock levels (Alum) at Pathum Thani Water Treatment Plant:
 - Maximum stock level: not exceeding **580.80 metric tons**
 - Minimum stock level: not less than **234.60 metric tons**





Performance in 2024



There is

a proportion of product receipt as agreed with the buyer and seller or the product can be received on the date specified in the purchase order, **98%.**



Amount of chemical reserve (Liquid alum)
The Bang Len Water Treatment Plant

- Maximum volume (Max) not more than **599.28k Kilogram**
- Minimum volume (Min) not less than **353.76k Kilogram**



Amount of chemical reserve (Liquid alum)
The Pathum Thani Water Treatment Plan

- Maximum volume (Max) not more than **561k Kilogram**
- Minimum volume (Min) not less than **364.32k Kilogram**

Criteria for Screening New Approved Vendor/Supplier and Current Approved Vendor/Supplier

Vendor/Supplier Type	Social Criteria and/or Environmental Criteria in Procurement
New Approved Vendor	<p>1. Social Criteria Consider policies related to employment, safety practices, community involvement and disputes.</p> <p>2. Environmental Criteria Consider policies related to the environment, environmental operations, resource utilization, effects on pollution and greenhouse gases.</p>
Current Approved Vendor	<p>1. Social Criteria Consider policies related to employment, safety practices, community involvement and disputes.</p> <p>2. Environmental Criteria Consider policies related to the environment, environmental operations, resource utilization, effects on pollution and greenhouse gases.</p>





Classification and Quantity of Suppliers

In 2024, the company has a total of 1,456 suppliers who trade products or services, the suppliers can be categorized as follows:

1. Critical Suppliers and General Suppliers

Type of Suppliers	Unit	2023	2024	Percentage Breakdown of Total Purchases in 2024 (Percent)
1. Critical Suppliers				
1.1 Critical Tier 1 Suppliers	Supplier	56	61	32
1.2 Critical Non-Tier 1 Suppliers	Supplier	0	0	0
2. General Suppliers (Not significant suppliers as defined in 1.1 and 1.2)	Supplier	1,263	1,395	68
Total		1,319	1,456	100

Note : The 61 direct significant suppliers come from both chemical suppliers and those listed in the Approved Vendor List for the year 2024. It is important to note that the total of 1,456 suppliers is derived from the entire Vendor List, comprising suppliers with transactions in 2024 and those without. The proportion to the total purchase volume is based solely on the purchase amount for the year 2024.

2. Local and regional suppliers

Type of Suppliers	Unit	2023	2024	Percentage Breakdown of Total Purchases in 2024 (Percent)
1. Local suppliers operating in the business areas of 6 provinces (Nakhon Pathom, Samut Sakhon, Pathum Thani, Ayutthaya, Chonburi, and Rayong)	Supplier	83	89	19
2. Suppliers in other areas (excluding local suppliers as per section 1)	Supplier	256	279	81
Total	Supplier	339	368	100

Note : The total number of 368 suppliers, includes both local and non-local suppliers. The proportion of total purchases is based on transactions with these suppliers in the year 2024 only.

Promoting Critical Suppliers to Adhere to Supplier Code of Conduct

1. Business Operation Plan with Critical Suppliers

Type of Critical Suppliers	Operation Plan in 2024	Performance in 2024
Critical Tier 1 Suppliers	1) Acknowledged and agreed to adhere to the trade ethics of all 61 critical suppliers (100 percent). 2) Conducted Environmental, Social, and Governance (ESG) audits for 15 out of 61 suppliers (25 percent) to assess business sustainability.	1) Acknowledged and agreed to adhere to the trade ethics of all 61 critical suppliers (100 percent). 2) Conducted Environmental, Social, and Governance (ESG) audits for 9 out of 61 suppliers (15 percent) to assess business sustainability.
Critical Non-Tier 1 Suppliers	In the future, if there are Critical Non-Tier 1 Suppliers, the company will proceed according to the following plan : 1) Acknowledge and agree to adhere to the trade ethics of the company's critical suppliers or relevant direct trading partners, 100 percent. 2) Conduct Environmental, Social, and Governance (ESG) audits through relevant direct trading partners, 25 percent.	In the year 2024, the company had no Critical Non-Tier 1 Suppliers.





2.ESG Risk Assessment Plan with Suppliers in 2024

Type of Critical Suppliers	Supplier	Percent	Revised and Amended
Total Suppliers	1,456	100	
1. Critical Direct Trading Partners (Direct trading partners with high/urgent ESG risks)			
Economic Aspect	9	0.62	9 Person, 100%
Social Aspect	9	0.62	9 Person, 100%
Environmental Aspect	9	0.62	9 Person, 100%
2. Critical Non-Tier 1 Suppliers (Non-tier 1 suppliers with high/urgent ESG risks)			
Economic Aspect	0	0	-
Social Aspect	0	0	-
Environmental Aspect	0	0	-

On-site Visit to Suppliers

In 2024, a total of 9 Critical Tier 1 Suppliers underwent on-site ESG audits at their operational facilities. The audit results covered all three dimensions Economic/Corporate Governance, Social, and Environmental aspects as summarized below:

List of Critical Tier 1 Suppliers	Nature of Business	On-site ESG Audit Results
Supplier No. 1	Water quality analysis services	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 2	Laboratory chemical supplier	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental

List of Critical Tier 1 Suppliers	Nature of Business	On-site ESG Audit Results
Supplier No. 3	Supplier of 8% Alum	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 4	Supplier of Flygt / Dorot valves and sluice gates	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 5	Supplier of Prominent pumps	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 6	Supplier of SCI valves	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 7	Supplier of polymer (CAT, AN)	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 8	Supplier of Schneider electric equipment	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental
Supplier No. 9	Chemical supplier	✓ Economic/Corporate Governance
		✓ Social
		✓ Environmental



Monitoring of ESG Risk Assessments for Critical Suppliers in 2024

The Company conducted on-site ESG risk assessments of 9 suppliers in 2024. All 9 suppliers passed the ESG risk assessment criteria (with a score of not less than 70%). The Company followed up on the performance improvement of the suppliers, with the 3 lowest-scoring suppliers summarized in the table below.

Supplier	Issues Identified	Recommendations from TTW	Follow-Up Summary
Supplier No. 1	<ul style="list-style-type: none"> Hazardous waste was disposed of together with general waste. No measures in place to prevent or mitigate pollution and GHG emissions. 	<ul style="list-style-type: none"> Hazardous waste should be properly separated and disposed of to prevent environmental issues. Pollution mitigation measures should be implemented, and the organization should prepare a carbon footprint report. 	<ul style="list-style-type: none"> In the process of setting up designated areas and containers for waste segregation. Currently studying pollution mitigation measures and legal compliance. TUV NORD has been engaged to assess risks and opportunities and study applicable regulations.
Supplier No. 2	<ul style="list-style-type: none"> No ESG Code of Conduct or related policy documents. ESG principles are not used in supplier selection. No pollution or GHG mitigation measures. 	<ul style="list-style-type: none"> A formal ESG business operation policy should be established. ESG criteria should be integrated into supplier selection. Pollution mitigation measures and a carbon footprint report should be developed. 	<ul style="list-style-type: none"> Managing environmental policies in accordance with Company Announcement No. Bor.02-2021 on Environmental Policy. Drafting a formal ESG management policy. Initiating the implementation of an environmental policy based on Company Announcement No. Bor.02-2021.
Supplier No. 3	<ul style="list-style-type: none"> No pollution or greenhouse gas mitigation measures 	<ul style="list-style-type: none"> Pollution mitigation measures should be implemented, and the organization should prepare a carbon footprint report. 	<ul style="list-style-type: none"> Currently planning and formulating relevant strategies.



Capacity Building and Training Promotion

The Company organizes activities with the suppliers to foster participation and continuously develop knowledge and skills on a regular annual basis. These include training and drills on chlorine leak response using KIT-B equipment, maintenance of the chlorine system, and the use of Self Contained Breathing Apparatus (SCBA). The objective is to ensure that employees, suppliers/deliverers/contractors have the knowledge and understanding of laws, standards, and regulations related to chlorine gas, the safe use of liquid chlorine from storage containers, and prevention and response pro-cedures in case of emergencies (in the event of a chlorine leak).





PRODUCT AND SERVICE RESPONSIBILITY

Goals



Long-Term Goals

Customer satisfaction with the Company's services is no less than **95%**

No customer complaints that cannot be managed

No leakage of customers' personal information, data theft, or loss of data

No disclosure or loss of customer data to external parties

No complaints received on the violation of customer personal data



Goal for 2024

Customer satisfaction with the Company's services is no less than **91%**

Volume of water distributed by TTW Public Company Limited is **no less than 143.15 Mm³**

The volume of water distributed by Pathum Thani Water Company Limited is **no less than 146.69 Mm³**

No customer complaints that cannot be managed

No leakage of customers' personal information, data theft, or loss of data

No disclosure or loss of customer data to external parties

No complaints received on the violation of customer personal data

Performance in 2024

Achieved

96.50% of customer satisfaction with the Company's services (TTW: 97%, PTW: 96%)

Total water distribution by TTW Public Company Limited was

144.15 Mm³

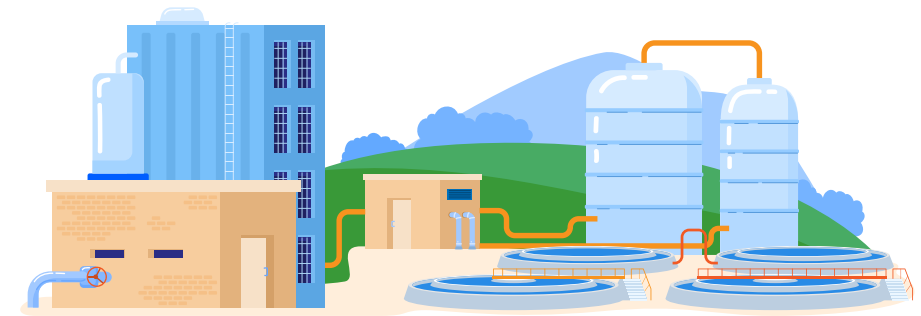
Total water distribution by Pathum Thani Water Co., Ltd. was
156.85 Mm³

No customer complaints that the Company was unable to manage

No incidents of leakage, theft, or loss of customers' personal data

No customer data leaked to external parties or lost

No complaints related to the violation of customers' personal data





Operational Approach

The Company is committed to producing tap water responsibly from the initial process to delivery, ensuring quality, sufficiency, and continuity for customers and consumers. By details of product responsibility as published on the website.



Click
Products and Services Responsibility

Customer Data Protection

The Company recognizes the importance of safeguarding customer data and has established access levels based on data sensitivity to prevent unauthorized disclosure. This requirement is included in the Company's Business Code of Conduct, which all executives and employees must acknowledge and adhere to, avoiding improper conduct and refraining from disclosing confidential information for personal gain. Additionally, the Company has developed a personal data protection policy and information security practices in line with the guidelines for listed companies announced by the Stock Exchange of Thailand. The Company promotes the use of information technology with systematic risk management and monitoring processes, cybersecurity measures, and IT security protocols to ensure comprehensive operations and IT risk management.

The Company places great importance on data access, confidentiality, internal data use, and the security of information and IT systems. Policies and procedures are established in the personal data protection policy to ensure cybersecurity for complainants and customers. Over the past year, there have been no reported incidents of data breaches or misuse of customer data for other purposes.

Customer Relations Activities





INNOVATION AND TECHNOLOGY

Goal for 2024

There is the number of employee contributions through the Kaizen project **must not be less than the previous year.**



Operational Approach

The Company promotes innovation in workflow processes and disseminates organizational innovations, by details of innovation and technology are available on the Company's website.



Click
Innovation and Technology

Employee Achievements through Kaizen Projects



Kaizen Project Results



2020	2021	2022	2023	2024
363	368	534	510	570
cases	cases	cases	cases	cases

Innovation Costs

Unit: Baht

	2020	2021	2022	2023	2024
1. Expenses for research aimed at societal well-being from sludge management	60,000	81,000	26,000	1,000	30,000
2.Costs for developing and improving work through kaizen projects	-	130,535	140,883	145,674	137,944
Total	60,000	211,535	166,883	146,674	167,944

Activities of Employees Participating in the Kaizen Project





QUALITY OF LIFE



TTW Public Company Limited





EMPLOYEE STEWARDSHIP AND DEVELOPMENT

Operational Approach

Employees are considered internal stakeholders who are important to the company's growth and sustainability. This reason, taking care of employees is the main mission of the company that must be taken seriously and continuously on the basis of ethical principles good corporate governance and respect for human rights. The company adheres to the principles of fair treatment of labor. Including labor standards that are provisions of domestic labor laws. Which refers to the labor standards of the International Labor Organization by covers principles regarding labor management, and working conditions or labor. For employees can work happily, have morale, and encouragement, and ready to work to the utmost ability to deliver quality products and services to customers. It also increases the competitiveness of the company to have economic stability, and employees have stability in their work careers and social stability as well.

Goals



Long-Term Goals

Employment fulfillment rate according to plan **not less than 80%**

Average recruitment period of **90 days / person / position**

Employee turnover rate not exceeding **4% of the total number of employees**

Employee satisfaction rate **not less than 70%**

100% implementation of the Company's safety training plan



Goal for 2024

Employment fulfillment rate according to plan **not less than 80%**

Average recruitment period of **90 days / person / position**

Employee turnover rate not exceeding **4% of the total number of employees**

Employee satisfaction rate **not less than 70%**

- **100%** implementation of the Company's safety training plan
- Average training hours per employee **not less than 15 hours/person**

Performance in 2024

Achieved

employment fulfillment rate according to plan at **100%**

Achieved

employee turnover rate at **3.60%**

Achieved

average recruitment period of **47** days/ person/position

Achieved

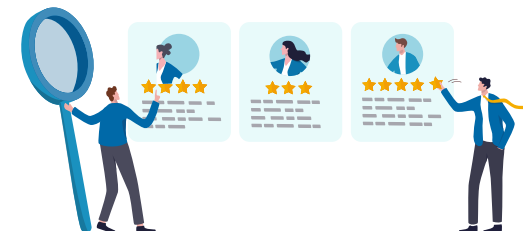
employee satisfaction rate at **77.25%**

Achieved

implementation of the Company's safety training plan at **100%**

Achieved

average employee training hours at **20.27** hours/ person



Employees by Nationality

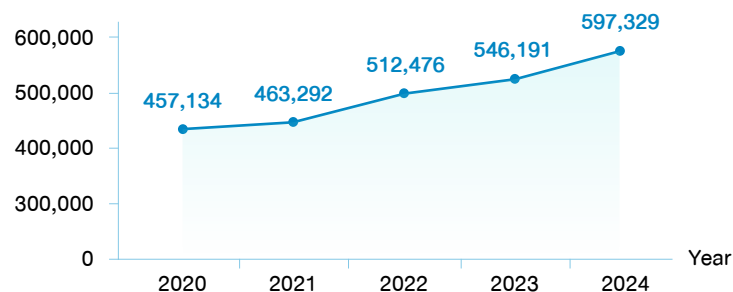
In 2024, the Company had a total of 321 employees, all of whom were Thai nationals and of Thai ethnicity, accounting for 100%. The Company does not discriminate against applicants of any nationality or ethnicity. The absence of foreign employees results primarily from the Company's operations being solely based in Thailand, as well as the sufficient supply of graduates in relevant professional fields from local educational institutions to meet the Company's workforce requirements. Therefore, while the Company does not re-strict applications from foreign nationals or those of different ethnic backgrounds, no such applications have been received.

Nationality	Gender	2020	2021	2022	2023	2024
Nationality/ Ethnicity (Thai)	Male	270	270	265	266	265
	Female	58	58	58	56	56
	Total	328	328	323	322	321
	Percent	100	100	100	100	100
Nationality/ Ethnicity (Other)	Male	0	0	0	0	0
	Female	0	0	0	0	0
	Total	0	0	0	0	0
	Percent	0	0	0	0	0

Compensation

Average employee investment value

Unit: Baht/Person/Year



Employee Compensation (by Gender)

Unit: Baht/Month

Position	Compensation Type	2023		2024	
		Female	Male	Female	Male
1. Executives (Department Manager Division Director)	Average Salary	74,096	84,683	106,639	111,357
	Average Salary + Other Compensation	100,998	112,979	165,757	148,309
2. Employees (Below Department Manager)	Average Salary	29,417	22,890	30,401	23,478
	Average Salary + Other Compensation	39,008	34,488	42,190	36,672

Remarks:

- In 2024, the average salary of female executives was 95.76% of that of male executives, or a ratio of 0.95:1
- In 2024, the average salary of female employees was 129% of that of male employees, or a ratio of 1.29:1

Local Community Employment in 2024

[illegible]



Employment of Persons with Disabilities or Other Underprivileged Groups

The Company has collaborated with the Nakhon Pathom provincial labor to provide sub-contracted employment to caregivers of persons with disabilities. This initiative aims to promote job opportunities for these caregivers while also supporting the Ministry of Social Development and Human Security's program, which allows employers or business owners to subcontract work to persons with disabilities or their caregivers under Section 35 of the Persons with Disabilities Empowerment Act B.E. 2550. In 2024, the Company employed persons with disabilities or other underprivileged groups under this program.

Employment Type	2021	2022	2023	2024
1. Employment of persons with disabilities	1	1	1	1
2. Employment of other underprivileged groups	0	0	0	0
Total	1	1	1	1

Non-Employee Workforce in 2024

Position	Unit	2023	2024
Housekeepers	Person	10	10
Gardeners	Person	24	23
Security Personnel	Person	52	42
Drinking Water Production Staff	Person	1	1
Total	Person	87	76

Employee Code of Conduct Evaluation

The Company is committed to fostering awareness of the importance of ethical conduct in the workplace. To this end, a business ethics module has been incorporated into the orientation program for all new employees. In addition, the Company provides ongoing

training and communication related to ethical practices. An annual assessment is also conducted to evaluate employees' understanding and compliance with the Company's Code of Conduct.

The Employee Code of Conduct applies to all employees across all levels within the Company Group. It is designed to ensure that every employee conduct business ethically, respects human rights, and acts responsibly toward stakeholders. The Code also supports the improvement of work practices and the reduction of environmental impact. All employees are united under a shared set of values, namely integrity and honesty. In 2024, the Company achieved a compliance rate of 98.70% in employee conduct evaluations, covering 100% of the workforce.

Long-Term Incentive Program

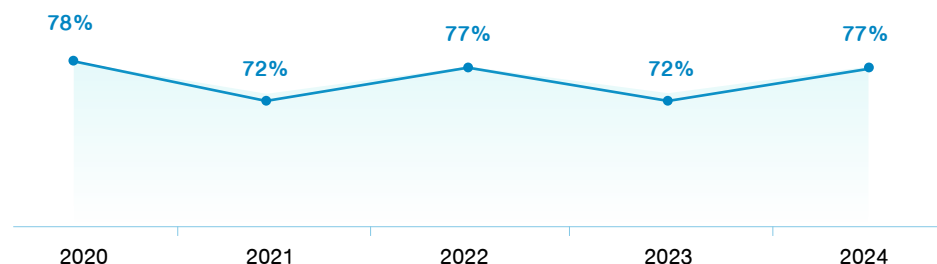
The Company recognizes the importance of motivating and retaining high-performing employees. To this end, it has implemented a long-term incentive program linked to performance appraisals. In addition to salary adjustments or bonus considerations, the program includes opportunities such as promotions or job rotations. When employees demonstrate high potential, the Company may assign them to new positions that better match their capabilities or provide new challenges.

Training Programs that Enhance Employee Competencies in 2024

Training Course	Participants (Person)	Percentage of Total Employees (%)
1. KPI & Action Plan Technique	29	9.03
2. Retirement Planning for Effective Transition	50	15.58
3. Design Thinking for Innovation at Work	45	14.02
4. Effective Job Description Writing	41	12.77
5. Energy Management in Water Supply Systems	28	8.72
6. 3Q for Self-Development	76	23.68
7. Coaching and Mentoring Techniques for Team Leaders	36	11.21



Employee Satisfaction Survey



Employee Satisfaction Survey

Survey Aspect	Average Score (out of 10)
Relationship with colleagues	8.29
Job responsibilities	8.25
Overall job satisfaction	8.10
Work environment	8.00
Overall happiness at work	8.00
Relationship with supervisors	7.68
Compensation and welfare	7.53
Employee development / career advancement	7.40
Performance evaluation	7.19
Overall stress level at work	6.81

Workplace Stress Relief Activities

The Company recognizes and emphasizes the importance of employee care and development, regarding employees as one of its most valuable resources. It aims to provide opportunities for employees to express their opinions and actively participate in fostering unity among staff, as well as to build strong bonds between employees and management.

The Company places importance on promoting positive relationships and creating a good working atmosphere for its employees. According to the employee satisfaction survey conducted in 2024, the satisfaction level regarding overall work-related stress scored a minimum of 6.81 out of 10, or 68 percent. In response, the Company has implemented various creative activities aimed at relieving work-related stress among employees. Examples of such activities are as follows:

1. Outing Activity

Executives and employees participated in an off-site activity held in Nakhon Nayok Province. Both executives and employees from all business areas joined the activity at a 100% participation rate.



2. Off-site Study Visit Activity

Executives and employees had the opportunity to visit and observe external organizations in order to gain additional knowledge and skills that could be further applied to the business and enhance work performance. It also allowed employees to relax from work, gain new perspectives, and increase inspiration in work, service delivery, and safety through exemplary practices. The purpose was to promote knowledge and continuous learning (Knowledge Management & Learning Organization).





3. BMI My Challenger Activity

In 2024, the Company supported physical exercise activities to promote good health among employees by subsidizing exercise-related expenses such as running hours tracking, badminton practice, football competitions, and other types of sports. In 2025, the Company further supported additional activities, including the “BMI My Challenger” program, which was a competition measuring Body Mass Index (BMI) to track changes in BMI continuously. This aimed to encourage employees to maintain physical fitness and improve their health. The Company also arranged training sessions to provide participants with accurate knowledge on how to reduce BMI, conducted by Phyathai 3 Hospital.



4. Office Equipment and Facility Improvements

The Company places importance on basic infrastructure, environment, and various facilities that support efficient operations. It has continuously promoted and allocated budgets to ensure the Company’s personnel are fully equipped in all aspects, which reflects in both work productivity and quality of life, and ultimately contributes to employee performance. As the current office building has been in use for over 10

years, the Company undertook improvements to its headquarters in 2024, including upgrades to the lighting system, internet technology by installing Wi-Fi access points, and additional CCTV cameras. The Company also procured ergonomic furniture such as work desks and chairs to enhance work efficiency and help reduce physical strain, thereby supporting employees’ posture and well-being.



The company has prepared information of employee stewardship and development and disclosed on the organization’s website as follows:



Click
Employee Stewardship and Development



Click
Summary of Social Performance Result
(All Employee)



Click
Summary of Social Performance Result
(Personnel Development)



Click
Summary of Social Performance Result
(Employee Satisfaction Survey)



OCCUPATIONAL HEALTH AND SAFETY

Operational Approach

The Company recognizes that ineffective safety and occupational health management may not only directly affect the health and well-being of workers and their families, but also negatively impact the image of the organization. Therefore, the Company is committed to managing safety and occupational health effectively, covering all employees, contractors, and related personnel, to ensure that everyone working for the Company operates in an environment that is hygienic and meets the highest safety standards.

Goals



Long-Term Goals

Zero Occupational Illness Frequency Rate (OIFR) among all workers

Zero Lost Time Injury Frequency Rate (LTIFR)

Zero Fatality Rate from work-related incidents

No significant chemical spills into the environment

100% establishment of a safety and occupational health culture throughout the organization and its subsidiaries



Goal for 2024

Zero Occupational Illness Frequency Rate (OIFR) among all workers

Zero Lost Time Injury Frequency Rate (LTIFR)

Zero Fatality Rate from work-related incidents

No significant chemical spills into the environment

Performance in 2024

Zero

Occupational Illness Frequency Rate (OIFR) among all workers

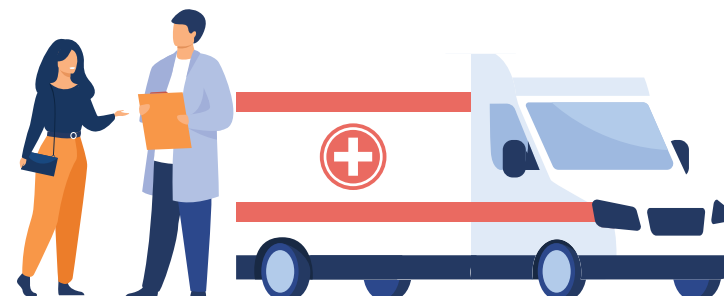
Zero

Lost Time Injury Frequency Rate (LTIFR)

Zero

Fatality Rate from work-related incidents

No significant chemical
spills into the environment





Prevention and Mitigation of Occupational Health and Safety Impacts from Business Operations

The Company has established a clear policy and management structure for safety, occupational health, and working environment that aligns with the standards set forth in the Occupational Safety, Health, and Environment Act B.E. 2545 and other related workplace safety regulations. These are applied as the Company's basic operational practices under ISO 9001, ISO 14001, and occupational safety management systems, emphasizing employee participation. Additionally, the Company has implemented safety regulations and established a Safety, Occupational Health, and Working Environment Committee responsible for reviewing policies, operational plans, and safety training programs.

To ensure effective oversight and compliance with safety standards and to prevent accidents that may result in bodily harm or property damage, the Company has prescribed the following safety rules:

1. Wear properly fitted and appropriate clothing for safe work operations.
2. Wear personal protective equipment (PPE) as required for designated areas or specific tasks at all times.
3. The use of drugs, alcohol, or any intoxicants is strictly prohibited in the factory area. Entry is not allowed under the influence.
4. Smoking is prohibited in the factory area except in designated smoking zones.
5. Do not create sparks or open flames in the factory without prior approval from authorized personnel.
6. Unauthorized persons are not allowed to operate machines, tools, or equipment without permission from responsible personnel.
7. Always stop machinery and hang a "Danger – Do Not Operate" sign when inspecting, repairing, or cleaning machines.
8. Do not hang onto, ride on, or use forklifts for transport purposes unless authorized and designed for such use.
9. Horseplay or actions that may endanger oneself, others, or company property are strictly prohibited.

10. Do not use compressed air from machinery or tools to blow on the body, clothing, or personal belongings.
11. Unauthorized personnel must not enter areas marked "Authorized Personnel Only."
12. All high-risk work must be preceded by a Work Permit issued in accordance with company policy.
13. Do not perform jobs designated for multiple workers alone, or conduct high-risk tasks without a partner.
14. Do not trigger fire alarms without a legitimate reason.
15. Immediately report any accidents, fire incidents, or near-miss events to the responsible supervisor.

Employees and individuals involved in the operations of the group of companies must strictly comply with the regulations. In the event that a violation is found, disciplinary actions shall be taken in accordance with the rules and regulations on personnel management and/or the safety work regulations manual.

The Company has appointed a Safety, Occupational Health, and Working Environment Committee to consider policies, operational plans, and training plans related to workplace safety.

This is to prevent and reduce accidents, hazards, illnesses, or incidents causing nuisance arising from work or unsafe working conditions, and to report and propose measures or corrective guidelines in accordance with laws related to workplace safety and safety standards to the management, to ensure the safety of employees, contractors, and external persons performing work or using the services in the Company. This also includes conducting surveys on occupational safety practices, checking accident statistics, and establishing a reporting system for unsafe working conditions, which must be performed by all employees at all levels. The Safety, Occupational Health, and Working Environment Committee includes one chairperson and four committee members.



Safety, Occupational Health, and Working Environment Committee

Names – Surnames	Level / Position	Position in Committee
1. Mr. Prem Liamsakul	Employer Representative at Executive Level	Chairman of the Committee
2. Ms. Benjawan Rattanathareangsak	Employer Representative at Supervisory Level	Director
3. Mr. Thanet Srisunthonthai	Employee Representative at Operational Level	Director
4. Mr. Wasin Buraman	Employee Representative at Operational Level	Director
5. Mr. Noppadol Tangsuwan	Employer Representative at Supervisory Level	Director and Secretary to the Committee

In 2024, the Company organized activities to promote safety, occupational health, and working environment as follows:

- Election activities for the Safety, Occupational Health, and Working Environment Committee



- Firefighting and fire evacuation drills



- Training related to safety, occupational health and working environment





Occupational Safety and Health Statistics

Data Type	Unit	2020	2021	2022	2023	2024
1. Number of work-related injuries resulting in work stoppage						
Employee	Case	0	1	0	0	0
Contractor/ Supplier	Case	0	0	0	0	0
2. Rate of work-related injuries resulting in work stoppage						
Employee	Case/1,000,000 hours	0	5.42	0	0	0
Contractor/ Supplier	Case/1,000,000 hours	0	0	0	0	0
3. Number of fatalities from work-related illnesses						
Employee	Case	0	1	0	0	0
Contractor/ Supplier	Case	0	0	0	0	0
4. Number of recorded work-related illnesses						
Employee	Case	0	0	0	0	0
Contractor/ Supplier	Case	0	0	0	0	0

The company has prepared information of Occupational Safety and Health and disclosed on the website as follows:



Click
Occupational Safety and Health



Click
Summary of Social Performance Results
(Occupational Safety and Health)





SOCIAL AND COMMUNITY STEWARDSHIP

Operational Approach

The Company recognizes the importance of conducting business with social responsibility and participating in community and social development. It continuously supports social contribution activities and the improvement of quality of life in communities alongside its business operations. The Company integrates its business processes to support communities and society as follows:

Goals



Long-Term Goals

Average community satisfaction score on participation in the Company's activities/projects shall **not less than 85%**

Average community satisfaction score on the impact of the Company's business operations shall **not less than 85%**

No unresolved community complaints



Goal for 2024

Average community satisfaction score on participation in the Company's activities/projects shall **not less than 80%**

Average community satisfaction score on the impact of the Company's business operations shall **not less than 80%**

No unresolved community complaints

Performance in 2024

Achieved

an average community satisfaction score on participation in the Company's activities/projects at **95.85%**

Achieved

an average community satisfaction score on the impact of the Company's business operations at **92%**

No

unresolved community complaints

Community and Social Engagement Program

Locality Impact Assessment

In 2024, the Company, in collaboration with local government agencies, conducted an assessment of the business operations' impact on the local community in terms of sustainability (Environmental, Social, and Governance: ESG). The objective was to evaluate sustainability issues that are material to the organization, covering environmental, social, and governance dimensions. This also included assessing community satisfaction and gathering local community opinions regarding the Company's business operations, in order to develop appropriate social projects or activities tailored to each community. These efforts aim to mitigate existing or potential problems or complaints, reduce the risk of business disruption, and prevent conflicts with surrounding communities.

Channels for communicating with the local community

TTW Public Company Limited

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

Sustainability Development Division Telephone numbers: 02-019-9490-3, extension number 3224 Fax number: 02-420-6064

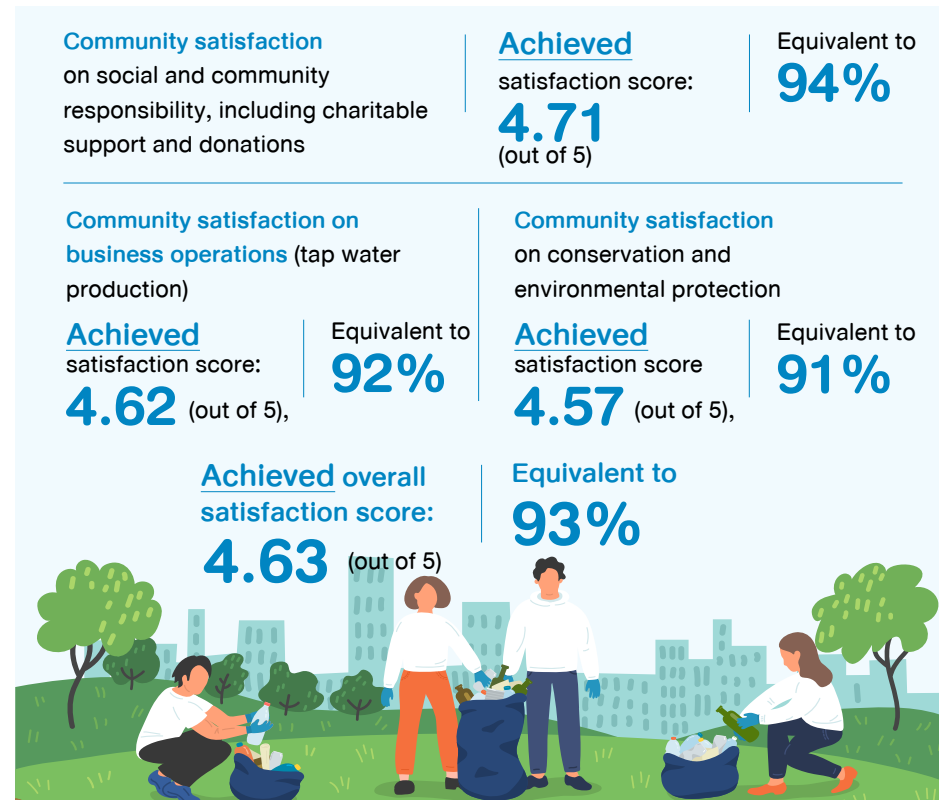
Email Address SD@ttwplc.com
Or suparat@ttwplc.com





Locality Satisfaction and Feedback Survey

In 2024, the Company conducted an assessment of the impact of its business operations on the local community, as well as its participation in and support for community activities in the service areas. The objective was to foster relationships and build trust in the Company's operations. The Company carried out an on-site survey to assess the satisfaction of the Bang Rakam Subdistrict community in Bang Len District, Nakhon Pathom Province. The survey took place at the Administrative Organization meeting room, with 45 respondents participating. These included representatives from the Bang Rakam Subdistrict Administrative Organization, community leaders and representatives from Bang Rakam Subdistrict, as well as principals and teachers from Wat Sukwattanaram School, Thairath Wittaya 4 School, Ban Nong Prong School, Wat Rum Phraya School, and Wat Weluwanaram School. The summary of the survey results is as follows:



Locality Problem Solving Meetings

The Company places great importance on participating in community and social development alongside its business growth. This includes enhancing economic potential and improving living conditions to promote a better quality of life for local communities on an ongoing basis.



In the past, the Company has collaborated with the “We Love Tha Chin River Club” in Nakhon Pathom, government agencies, and local community leaders to organize monthly mobile meetings. These meetings aim to listen to local issues and collaboratively resolve social and community related problems.





Monitoring of Locality Complaints

In 2024, there were no complaints from the community that were affected by the Company's business operations and could not be resolved. However, the Company has used the results of the satisfaction survey and opinions of the community in Bang Rakam Subdistrict, Bang Len District, Nakhon Pathom Province, in reviewing the planning of social projects or activities in order to reduce problems and respond to the expectations of the community in the business operating area. An example of the community's opinions in Bang Rakam Subdistrict, Bang Len District, Nakhon Pathom Province, regarding social and environmental issues in the area, prioritized as follows:

Dimension	Community Feedback Issues	Solutions
Social 	1) Poverty 2) Narcotics 3) Education 4) Public health and health 5) Unemployment	<ul style="list-style-type: none"> Provide support for education to schools in underserved areas, such as improving school buildings and landscaping to make them more attractive, including awarding scholarships to well-performing and well-behaved students from low-income families. Prioritize hiring local residents for available positions. Collaborate with government agencies and community leaders to combat drug issues.
Environmental 	1) Drought / Flooding 2) Dust particles 3) Wastewater 4) Garbage and waste 5) Noise and nuisance	<ul style="list-style-type: none"> Implement ISO 14001 environmental management. Optimize water usage with a zero-discharge approach. Promote environmental awareness with the "We Love Tha Chin River" Club Launch the "Compost for Soil and Environment" project for schools near the Bang Len Water Treatment Plant. Enhance school landscapes under the compost project, including Wat Sukwattanaram School, Thairath Wittaya 4 School, and Wat Weluwanaram School in Bang Rakam Subdistrict, Bang Len District, Nakhon Pathom Province.

Locality Engagement Programs

In the past, the Company has implemented the aforementioned locality engagement programs with localities surrounding the water treatment plant, raw water pumping stations, and water distribution stations in the service areas of three provinces: Nakhon Pathom, Samut Sakhon, and Pathum Thani, as well as in other business operation areas. These efforts aim to help reduce problems and respond to the suggestions or expectations of the localities in which the Company operates, based on suitability and the urgency of each situation, on a consistent basis.

Pictures of Visiting the Bang Rakam Subdistrict Community Area



CSR in Process: Integrating Business Operations to Support Community/Society

The Company conducts its business alongside active participation in the development and support of surrounding communities, creating engagement with stakeholders in the local area. With expertise in comprehensive water business operations including the production of tap water and wastewater treatment the Company applies this knowledge to implement social support initiatives. These include supporting its customers (such as the Provincial Waterworks Authority) by increasing water pressure to resolve low-pressure issues, taking over local administrative organizations' water supply operations to reduce reliance on groundwater sources, as well as addressing wastewater issues in local communities.





1. Efficiency Enhancement Pipeline Project for the Rai Khing Subdistrict Community

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
Enhancing the quality of life and living conditions for the Rai Khing Subdistrict Community of Moo 2, Moo 5, Moo 9, and Moo 10 (some areas) from using groundwater to using tap water	Groundwater does not meet international standards by groundwater is contaminated with sediment on sanitary ware and it has a negative effect on health in the long term.	<ul style="list-style-type: none"> The quality of water used for community consumption has improved, complaints decreased and quality of life improves. Reduce groundwater use by more than 500 cubic meters/day, which is the cause of the problem of land subsidence, it can close 4 artesian wells. Reduce health problems from water consumption that is not standard. 	<ul style="list-style-type: none"> The number of tap water users 878 individuals (2023 year: 864 individuals). The volume of tap water distribution 670 cubic meters per day (2023 year: 537 cubic meters per day).

2. Pressure Enhancement Pipeline of Highway 3242 Project

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
To increase water pressure for users along at kilometer 6+310 (Ekkachai Road).	Low tap water pressure is insufficient to the needs of users in the area of responsibility the Provincial Waterworks Authority, Samut Sakhon Branch.	<ul style="list-style-type: none"> The tap water pressure has increased not less than 3 meters. The users are satisfied in the sufficient and continuous use of tap water. 	<ul style="list-style-type: none"> Reduce complaints and there was no problem of low tap water pressure from users to the Provincial Waterworks Authority (customers). Supports the adjustment of the service area of Provincial Waterworks Authority, Samut Sakhon branch (customers) in changing the water supply stations from 2 stations to 4 stations in July 2024.

3. Efficiency Enhancement Pipeline Project for the Community in Salaya Subdistrict Area

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
To enhance the quality of life and living conditions of the community in the area of Salaya Subdistrict from the continuous use of quality tap water.	Low pressure tap water affecting daily life and expenses incurred in increasing the water pressure of community water users and entrepreneurs.	<ul style="list-style-type: none"> The tap water pressure has increased not less than 3 meters. The users are satisfied in the sufficient and continuous use of tap water. 	<ul style="list-style-type: none"> Water supply volume increased by 760 cubic meters/day. Reduce complaints and there was no problem of low tap water pressure from users to the Provincial Waterworks Authority (customers). Supports the adjustment of the service area of Provincial Waterworks Authority, Samut Sakhon branch (customers) in changing the water supply stations from 2 stations to 4 stations in July 2024.

4. Pressure Enhancement Pipeline of Suan Luang Subdistrict Area Project

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
To increase the water pressure for users in the Suan Luang Subdistrict area.	Low tap water pressure is insufficient to the needs of users in the area of responsibility the Provincial Waterworks Authority, Om Noi Branch.	<ul style="list-style-type: none"> The tap water pressure has increased not less than 3 meters. The users are satisfied in the sufficient and continuous use of tap water. 	<ul style="list-style-type: none"> There were no complaints about low tap water flow problems to the Provincial Waterworks Authority (customers). Supports the adjustment of the service area of Provincial Waterworks Authority, Om Noi branch (customers) in changing the water supply stations from 2 stations to 4 stations in July 2024.



5. Efficiency Enhancement Pipeline Project for the Krathum Baen District Area

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
To increase the water pressure for users in the Krathum Baen District area.	<ul style="list-style-type: none"> Low tap water pressure is insufficient to the needs of users in the area of responsibility the Provincial Waterworks Authority, Samut Sakhon Branch (customers). Some users still use inferior groundwater. 	<ul style="list-style-type: none"> The tap water pressure has increased 4 meters to 7 meters. The users are satisfied in the sufficient and continuous use of tap water. Groundwater users of the Local Government Organizations have the option to change their behavior to use higher quality tap water. 	<ul style="list-style-type: none"> Water supply volume increased by 1,300 cubic meters/day. There were no complaints about low tap water flow problems to the Provincial Waterworks Authority (customers). Supports the adjustment of the service area of Provincial Waterworks Authority, Samut Sakhon branch (customers) in changing the water supply stations from 2 stations to 4 stations in July 2024.

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

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
To improve the quality of life in the community and restore water quality in Bang Sue Canal, Soi Rai Khing 32, Village No. 10, Rai Khing Subdistrict, Sam Phran District, Nakhon Pathom Province.	<ul style="list-style-type: none"> The water quality in Bang Sue Canal is inadequate for consumption of Rai Khing community 32, Village No. 10, Rai Khing Subdistrict, Sam Phran District, Nakhon Pathom Province. The water emits a foul, musty odor and appears somewhat dark in color. Additionally, 	<ul style="list-style-type: none"> The Rai Khing 32 Community, Moo 10, has been acknowledged and commended by government agencies and local communities as a model community in improving the quality of canal water, there was a work visit from the Environment and Pollution Control Office No. 5. 	<ul style="list-style-type: none"> The dissolved oxygen (DO) level in the water of Bang Sue Canal before pumping into the Rai Khing 32 Raw Water Pumping Station, Moo. 10 to 2.52 milligrams per liter (2023 year: 1.96 milligrams per liter) The number of tap water users 878 individuals (2023 year: 864 individuals).

Objectives	Current Issues	Benefits Obtained	
		Community/Social	TTW
	the dissolved oxygen (DO) level in the water is less than 2 milligrams per liter, adversely affecting aquatic life and good quality of life of the Rai Khing community 32.	<ul style="list-style-type: none"> The community's economy has improved, as evidenced by the increase in the number of entrepreneurs 1,313 persons (2023 year: 679 persons). 	<ul style="list-style-type: none"> Water supply volume 670 cubic meters per day (2023 year: 537 cubic meters per day). The sludge volume rate per product unit is 0.11 kilograms per cubic meter (2023 year: 0.12 kilograms per cubic meter).

The company has prepared information of social and community stewardship and disclosed on the website as follows:



Click
Social and Community Stewardship

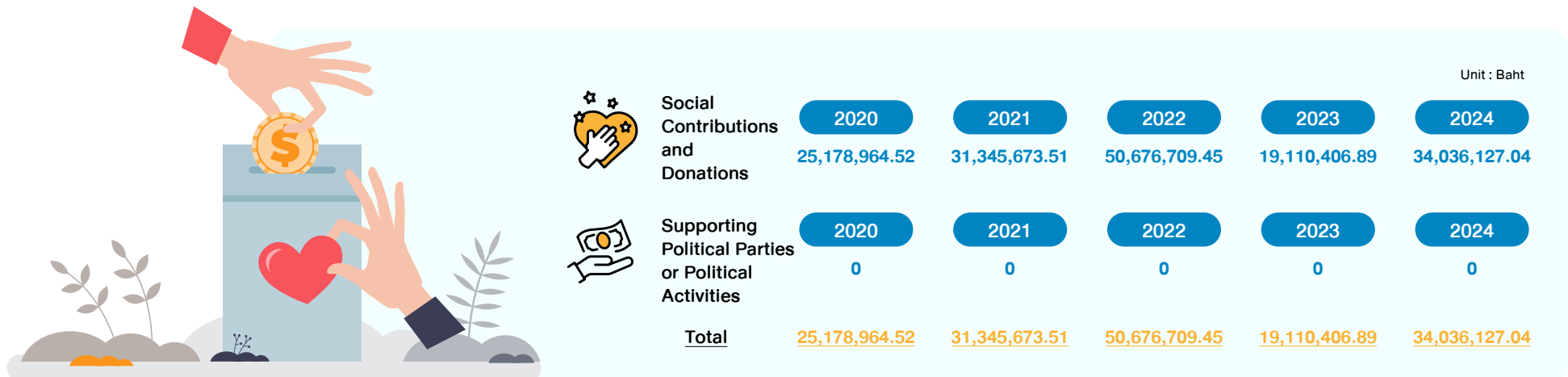




SOCIAL CONTRIBUTION AND DONATIONS

Operational Approach

The Company supports budgets and necessary items for social activities and environmental care for both in the service area and outside the service area. In the year 2024, the Company provided financial support to external organizations totaling 34,036,127.04 Baht. It's important to note that the Company does not provide financial support or items for political party support or political activities.



The company supports of social contribution and donations as published on the website as follows:



Click
Social Contribution and Donations





BUSINESS



AND HUMAN RIGHTS

TTW Public Company Limited



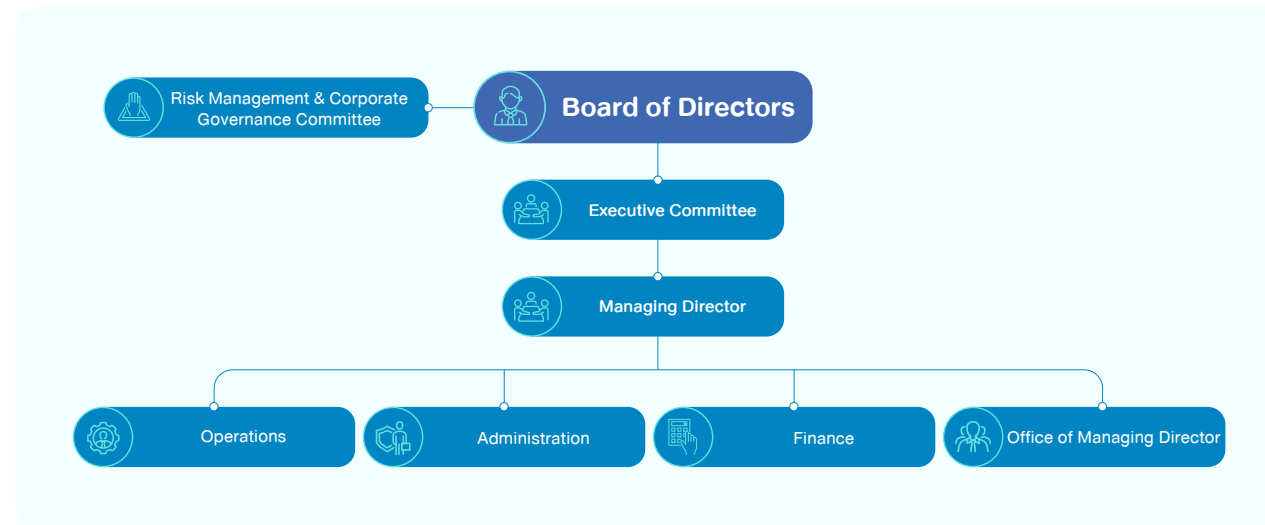


ROLE AND RESPONSIBILITIES OF THE COMMITTEES AND EXECUTIVES IN HUMAN RIGHTS

Operational Approach

The company has guidelines for human rights management throughout the value chain. By following the United Nations Guiding Principles on Business and Human Rights (UNGP) to prevent and avoid violations of human rights of employees in the company group, suppliers/delivers/contractors, customers and communities. There is the Risk Management and Corporate Governance Committee to supervise respect for human rights.

Structure





RESPECT FOR HUMAN RIGHTS

Goals



Long-Term Goals

100% of employees receive training and communication on human rights awareness

Achieve human rights risk assessment

Achieve comprehensive human rights due diligence, with mitigation and remediation measures

No human rights violations throughout the value chain

No unresolved complaints related to human rights violations



Goal for 2024

80% of employees receive training and communication on human rights awareness

Achieve human rights risk assessment

Achieve comprehensive human rights due diligence, with mitigation and remediation measures

No human rights violations throughout the value chain

No unresolved complaints related to human rights violations



Performance in 2024

Achieved 100%

of employees trained and informed on human rights awareness

Achieved

Human rights risk assessment conducted

Achieved

Comprehensive human rights due diligence implemented, with mitigation and remediation measures

No

human rights violations throughout the value chain

No

unresolved complaints related to human rights violations

Human Rights Management Process

The Company aims to ensure effective management and prevention of human rights violations within the organization by establishing a human rights policy and a non-discrimination policy; defining the roles and responsibilities of the human rights committee and executives; employment practices and respect for human rights; comprehensive human rights due diligence (Human Rights Due Diligence: HRDD); human rights risk assessments; management of complaints and remedy mechanisms; collaboration with business partners on human rights issues; and communication and training on human rights as disclosed on the website.



Click
Human Rights and
Non-Discrimination policy



Click
Respect for Human Rights

The Company has a human rights management process consisting of five steps as follows:

1. Establishment of a human rights policy.
2. Comprehensive human rights due diligence (Human Rights Due Diligence – HRDD).
3. Human rights risk assessment and determination of prevention and mitigation measures, including remedies in the event of human rights violations.
4. Monitoring and reporting of human rights performance.
5. Raising awareness among stakeholders to prevent potential human rights violations.



Comprehensive Human Rights Due Diligence (HRDD)

The Company has implemented a comprehensive human rights due diligence process as follows:

1. Defining the scope of the due diligence.
2. Identifying relevant human rights issues.
3. Analyzing the severity of impacts and the likelihood of their occurrence.
4. Determining measures to mitigate the impacts.
5. Monitoring and reviewing human rights performance.

These steps are used to prioritize human rights risk issues within the organization, including prevention, remediation, and compensation measures appropriate to the level of potential risk. A follow-up and corrective action plan are also developed to ensure that the Company's operations do not lead to human rights violations throughout the value chain.





Human Rights Violations / Disputes / Complaints

In 2024, the Company and its subsidiaries had no disputes, lawsuits, or complaints between the Company and employees or relevant stakeholders related to human rights violations, legal issues, or breaches of the Company's code of conduct. This reflects the importance that the business sector must place on such matters, including the establishment of operational guidelines that align with comprehensive human rights protection principles in accordance with international standards and national laws.

Violations of the Human Rights

Unit: Case

	Employees	Shareholders	Customers	Suppliers / Deliverers / Contractors	Communities / indigenous community	Environment / Environmental Agency
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

Disputes / Complaints of the Human Rights

Unit: Case

	Employees	Shareholders	Customers	Suppliers / Deliverers / Contractors	Communities / indigenous community	Environment / Environmental Agency
2020	0	0	0	0	0	0
2021	0	0	0	0	0	0
2022	0	0	0	0	0	0
2023	0	0	0	0	0	0
2024	0	0	0	0	0	0

TTW

is committed to effective human rights management and prevention within the organization through the establishment of a human rights policy and a non-discriminatory approach





ENVIRONMENTAL

SUSTAINABILITY MANAGEMENT



TTW Public Company Limited





Operational Approach

The Company operates its business in accordance with the principles of sustainable development, identifying and assessing key Environmental, Social, and Governance (ESG) issues that may impact the Company's operations as well as its stakeholders. This is carried out by analyzing both positive and negative impacts on all stakeholder groups throughout the value chain of every business line within the organization. For example, the leakage of chemicals or sludge into external communities may result in both positive and negative impacts on the environment, as well as the well-being and quality of life of the local communities.

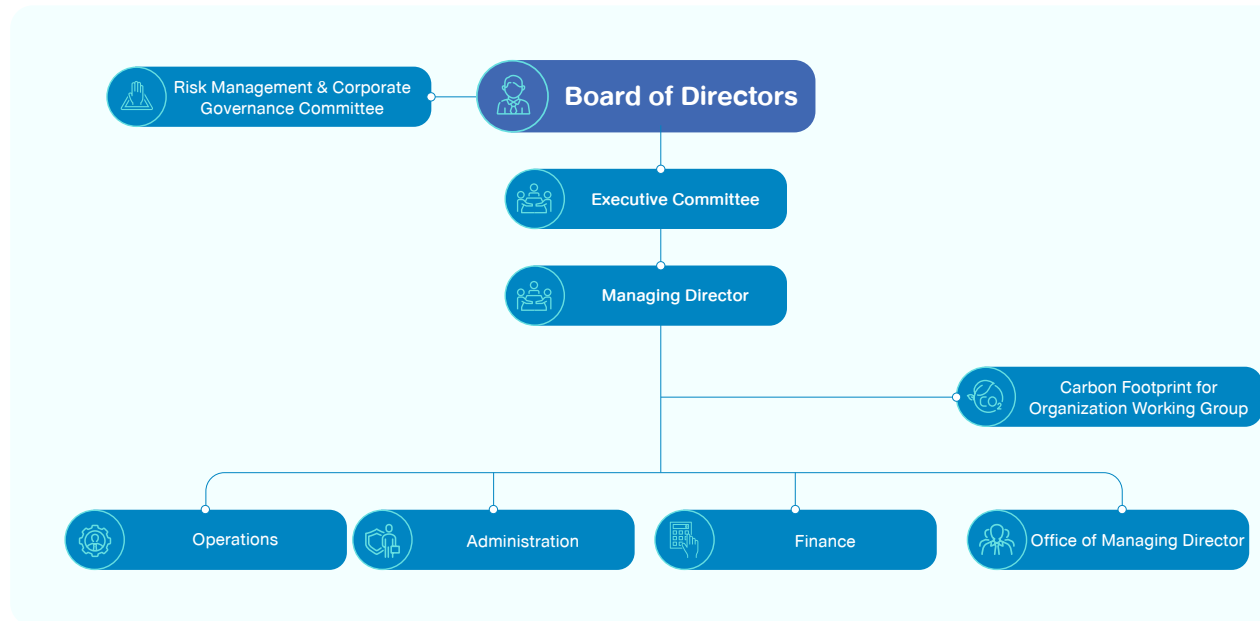
The Company recognizes and values the importance of sustainable environmental management. This includes environmentally friendly production and service processes, water management, waste and material management, climate change adaptation, energy conservation, biodiversity, environmental collaboration between organizations, and strict compliance with environmental laws.

In adapting to climate change, the Company aims to elevate its sustainable environmental practices by implementing clean energy projects such as Rooftop Solar Cells and Floating Solar Cells. These initiatives help reduce reliance on external electricity sources and lower greenhouse gas emissions from business operations. Information regarding the Company's environmental operations is disclosed on the website: <https://www.ttwplc.com/en/sd/sustainability-execution> and environmental performance results are available at: <https://www.ttwplc.com/en/sd/sustainable-development-results/environment>

The Risk Management and Corporate Governance Committee is responsible for overseeing environmental matters, such as climate change risk management, GHG emissions management from business operations, and the organizational carbon footprint, among others.



Structure





Goals



Long-Term Goals

Achieve carbon neutrality
by 2050

Achieve net zero GHG emissions
by 2065



Goal for 2024

No violations of environmental laws
or regulations

Raw water consumption ratio per unit
of product shall not exceed **1.04 m³/m³**
(distributed tap water)

Reused water ratio shall
not less than **2%**

Water leakage in the production
process shall not exceed **4%**

100% of discharged water quality
shall comply with legal standards

Electricity consumption shall not
exceed **0.74 kWh/m³** (distributed tap
water)

Net GHG emissions per product unit
(Scope 1, 2, and 3) shall decrease not
less than **0.03%** from the previous year

Non-hazardous waste control ratio shall
not exceed **0.12 kg/m³** (distributed tap
water)

Hazardous waste control ratio shall not
exceed **0.00002 kg/m³** (distributed tap
water)

No unresolved complaints on violations
of environmental laws or regulations

Performance in 2024

No

violations of
environmental laws
or regulations

Achieved

raw water consumption
ratio per product unit was
1.03 m³/m³
(Tap Water Supplied)

Achieved

reused water ratio was
2.22%

Achieved

water leakage in the
production process was
2.60%

Achieved

100% of
discharged water quality
complied with legal
standards

Achieved

electricity consumption was
0.584 kWh/m³
(Tap Water Supplied)

Net GHG emissions (Scope 1, 2, and 3) totaled 101,602 tons CO₂
equivalent, or **0.00033** tons CO₂ equivalent/m³
(Tap Water Supplied)

**compared to the previous year, net GHG emissions per product
unit decreased by **2.94%**

No

unresolved complaints
on violations of
environmental laws or
regulations

Achieved non-hazardous

waste control ratio was **0.11** kg/m³
(Tap Water Supplied)

Achieved hazardous waste

control ratio was **0.00001** kg/m³
(Tap Water Supplied)



Significant Changes and Developments

The Company has revised the quality and environmental policy of TTW Public Company Limited by adding a policy on the procurement of environmentally friendly products and services. This was presented to the Management Representative of the ISO 9001 Quality Management System and the ISO 14001 Environmental Management System and was officially announced on August 23, 2024.



Water Management

Water is a vital resource for our operations and for the world. However, this essential resource has become increasingly scarce, leading to mounting pressure for collaborative action, including participation from the private sector to enhance and improve the efficiency of water management.

The Company is committed to reducing water usage, including minimizing both direct and indirect impacts on water resources, such as avoiding operations in water-stressed areas and reducing pollution discharged into water sources. In addition, the Company promotes water resource management in compliance with relevant regulatory requirements and fosters trust among stakeholders in the communities that rely on water resources.

In 2024, the Company reviewed its environmental targets and added new objectives related to the control of water loss in the production process under the ISO 14001 Environmental Management System, to serve as the Company's water management goal.

Water Usage Targets for 2024



Raw water usage rate per unit of product shall not exceed **1.04 m³/m³** (tap water supplied)

• Proportion of water reused shall not less than **2%**

• Proportion of water loss in the production process shall not less than **4%**

Sustainable Water Management Strategy

The Company emphasizes responsible water usage through its sustainability policy and strategy, as well as its corporate-level water use strategy, by stipulating continuous improvement in water management and the adoption of new technologies and processes to enhance water use efficiency across all organizational processes.

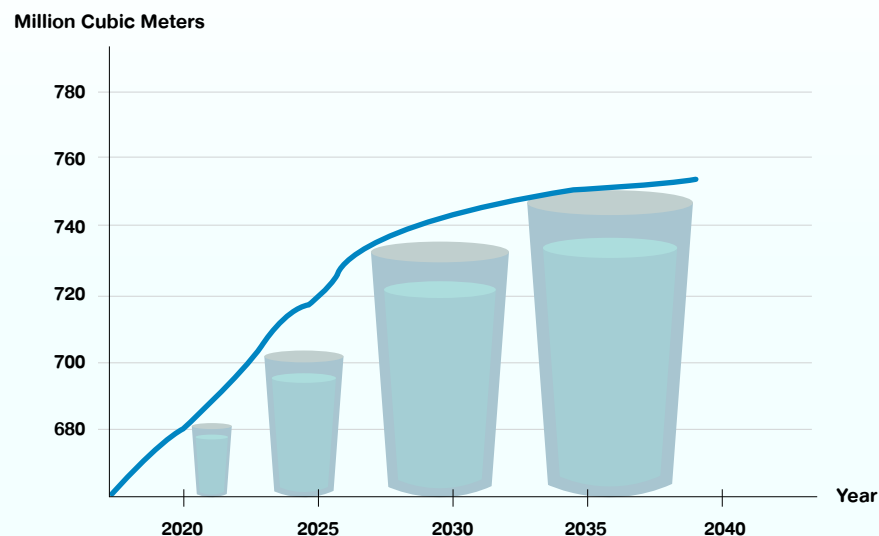
The Company complies with environmental laws and relevant standards to demonstrate its expertise as a fully integrated water business, including responsible water usage. Water management is considered a corporate responsibility toward the environment, efficient use of natural resources, and continuous process improvement. The Company is committed to reducing water consumption and mitigating water-related risks through the Company's risk management framework and collaboration with all stakeholders through the Company's projects and activities.

The Company operates its business on a foundation aimed at achieving the Zero Discharge target in all production areas by applying the 3Rs principle (Reduce, Reuse, Recycle) and establishing wastewater treatment systems to increase water reuse and recycling, along with reducing the intake of raw water in the Company's operations.



Approach to Analyzing Water Demand to Assess Future Water Consumption Needs

Household Water Demand During 2018–2038



Based on the research titled “Population Trends and Water Demand Project in Bangkok and the Metropolitan Region,” conducted by the Office of the National Higher Education Science Research and Innovation Policy Council (NXPO), the researchers analyzed and forecasted the water demand in Bangkok and the metropolitan area for the period between 2018 and 2038, or over the next 20 years. The study aimed to determine the projected water demand for residents in Bangkok and its surrounding provinces. The research gathered data from relevant agencies and created simulations of future water demand scenarios based on projected population changes. The simulation results revealed that water demand will increase rapidly from 674 million cubic meters in 2018 to 692 million cubic meters in 2020. After that, the demand will continue to rise, albeit at a slower pace. It is projected that household water demand will reach 723 million cubic meters in 2025, 742 million cubic meters in 2030, and 754 million cubic meters in 2038.

The findings and recommendations from this study are considered highly beneficial to the relevant agencies, as they serve as an alternative approach for implementation. This is because defining water management strategies requires highly accurate and realistic data to ensure that policy formulation aligns with actual demand and to prevent future water shortages in Bangkok and the metropolitan area. In addition, mechanisms may be introduced to raise public awareness regarding the use of water resources through various measures, such as water-saving campaigns and pricing strategies to incentivize water conservation.



Water Leakage Rate

Item	Unit	2020	2021	2022	2023	2024	Goal In 2024
Water Leak in the production	Percent	7.65	3.98	2.57	2.78	2.60	Not more than 4.00%
Data Cover	Percent	100	100	100	100	100	

Using Water from Natural Sources

Natural Water Sources	Unit	2020	2021	2022	2023	2024	Results compared to 2023 (Percent %)
Tha Chin River	Million Cubic Meters	179.75	158.34	149.19	144.17	149.87	Increased 3.95
Chao Phraya River	Million Cubic Meters	161.00	146.95	136.05	140.18	159.00	Increased 13.43
Total	Million Cubic Meters	340.75	305.29	285.24	284.35	308.87	Increased 8.62

The quantity of recycled water

Water Treatment Plants	Unit	2020	2021	2022	2023	2024	Results compared to 2023 (Percent %)
Bang Len Water Treatment Plant	Million Cubic Meters	3,676,991	3,642,514	2,723,443	3,935,636	3,434,880	Decreased 12.72
Pathum Thani Water Treatment Plant	Million Cubic Meters	3,673,090	4,501,962	3,940,016	3,520,981	3,431,805	Decreased 2.53
Total	Million Cubic Meters	7,350,081	8,144,476	6,663,459	7,456,617	6,866,685	Decreased 7.91

The amount of wastewater that does not pass the legal standards

Water Treatment Plants	Unit	2020	2021	2022	2023	2024
Bang Len Water Treatment Plant	Million Cubic Meters	0	0	0	0	0
Pathum Thani Water Treatment Plant	Million Cubic Meters	0	0	0	0	0
Total	Million Cubic Meters	0	0	0	0	0

Controls and examines the quality of wastewater

Water Treatment Plants	2020	2021	2022	2023	2024
Bang Len Water Treatment Plant	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards
Pathum Thani Water Treatment Plant	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards	✓ Pass the legal standards

Efficient Water Management Project

Water Usage Management	Implementation Details
<ul style="list-style-type: none">Assessment of water usage to improve water efficiencyReduction of water usageRecycled water usage	<p>The Company has designed its tap water production system to enable the reuse of water in the production process with maximum efficiency, adhering to the principle of Water Discharge Minimization and controlling production loss. No water is discharged as waste, whether it is separated from the sludge removal system or from the backwashing of sand filters. The system is designed to collect sludge generated from the water production process, separate the water from the sludge, and return it to the water production system.</p>
<ul style="list-style-type: none">Establishment of water reduction targets	<p>The Company has reviewed its environmental targets and added goals to control water loss in the production process under ISO 14001 environmental objectives, to serve as the organization's water management target.</p> <ul style="list-style-type: none">Raw water consumption rate per product unit: Not exceeding 1.04 m³/ m³ (distributed tap water)Proportion of water reused: Not less than 2%Proportion of water leakage in the production process: Not exceeding 4%



Water Usage Management	Implementation Details
<ul style="list-style-type: none"> Employee training on efficient water use 	<p>The Company not only implements water management projects based on the principle of efficiency, but also focuses on raising awareness among employees and stakeholders.</p> <ul style="list-style-type: none"> The Company communicates and promotes awareness regarding water resource management to encourage efficient water use in all operational processes, which enhances skills and knowledge among employees and encourages them to initiate projects on sustainable water resource management. The Company, in collaboration with the “We Love Tha Chin River Club” in Nakhon Pathom, has provided training and disseminated knowledge on water conservation and environmental care to employees and stakeholders through the “Rak Nam”. This fosters good relations with local environmental agencies in Nakhon Pathom and shares knowledge on “water and environmental conservation” with employees and stakeholders in the area of business operations.
<ul style="list-style-type: none"> Improvement of wastewater quality 	<p>The Company recognizes its responsibility to society and the environment that may be impacted by business operations and implements measures for wastewater discharge and quality improvement for the community.</p> <ul style="list-style-type: none"> Establish measures for discharging wastewater into public water sources or the external environment in compliance with legal standards. All Company tap water production plants pass the standard analysis criteria in accordance with the Announcement of the Ministry of Industry on Standards for the Control of Wastewater Discharges from Factories, pursuant to Clause 14 of Ministerial Regulation No. 2 (B.E. 2535) under the Factory Act B.E. 2535, published in the Government Gazette, Volume 134, Special Part 153 (D), dated June 7, 2017. Follow-up on the Bang Sue Canal Water Quality Restoration Project to conserve the Tha Chin River in collaboration with Rai Khing Municipality, the Office of Environmental and Pollution Control Region 5, and the Phasi Charoen Irrigation and Maintenance Project. The Company cooperates with the community and government sectors to restore water quality in Bang Sue Canal at the Rai Khing raw water pumping station by installing equipment to improve water quality before releasing it into the Tha Chin River.



Waste and Unused Materials Management

The Company is cognizant of the environmental contamination and safety implications for stakeholders stemming from waste generation within its business operations, spanning the entirety of the supply chain, encompassing activities such as raw material transportation, production, and delivery of goods and services. By prioritizing compliance with regulatory standards and adhering to recommendations set forth by licensing agencies, the Company consistently endeavors to mitigate environmental impacts associated with waste disposal. This commitment extends to minimizing the volume of waste destined for disposal, actively seeking avenues for waste reuse in alignment with Circular Economy principles.

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.



Waste/By-product Disposal

Waste Disposal Method	Unit	2020	2021	2022	2023	2024
Total waste/by-products recycled/reused	Metric tons	-	3.18	7.02	8.37	7.49
Total waste/by-products disposed	Metric tons	-	31,270.95	38,787.69	34,350.28	33,707
Total waste/by-products sent to landfill	Metric tons	-	31,270.95	38,787.69	34,350.28	33,699
Data coverage (%)	Metric tons	-	100	100	100	100

Hazardous Waste / Hazardous By-product Disposal Methods

Hazardous Waste / By-product Disposal Methods	Unit	2020	2021	2022	2023	2024
Total hazardous waste / by-products disposed	Metric tons	-	1.58	4.58	7.78	3,353
Disposal by other methods / transferred to licensed third parties	Metric tons	-	1.58	0.42	2.23	3,353
Disposal by unknown methods	Metric tons	-	0	4.16	5.55	0
Data coverage (%)	Metric tons	-	100	100	100	100



Hazardous Waste / By-product Reduction Projects

The Company promotes the segregation of hazardous waste/by-products within the organization to support employee health and well-being and reduce the volume of hazardous waste/by-products sent for disposal. The initiative encourages a systematic waste management approach, covering segregation, storage, transportation, and disposal, in order to minimize environmental impact.

1. Zero Hazardous Waste Project

The Company implemented the “Zero Hazardous Waste Project” with the objective of eliminating hazardous waste/by-products in the workplace. Internal activities were organized to foster employee participation at all levels, including:

- Separating hazardous waste/by-products from general waste in a strict and disciplined manner
- Providing designated waste bins specifically for hazardous waste/by-products
- Conducting employee training on hazardous waste/by-product management
- Coordinating with licensed hazardous waste disposal providers to ensure legal and environmentally compliant disposal

2. Go Paperless Project

The Company launched the “Go Paperless Project” with the objective of reducing paper usage, and thereby reducing ink and chemical waste from printed materials. The initiative promotes the use of electronic document systems (E-Saraban) instead of paper and encourages the use of online meeting software to replace printed meeting materials.

The amount of sludge arising from the tap water production process

Sludge Quantity	Unit	2020	2021	2022	2023	2024	Results compared to 2023 (Percent %)
Bang Len Water Treatment Plant	metric tons	18,677	21,986	18,765	15,746	15,323	Decreased 2.69
Pathum Thani Water Treatment Plant	metric tons	9,909	9,280	20,016	18,602	18,376	Decreased 1.21
Total	metric tons	28,586	31,266	38,781	34,348	33,699	Decreased 1.89



Ratio Sludge per unit of product

Sludge Quantity	Unit	2020	2021	2022	2023	2024	Results compared to 2023 (Percent %)
Ratio Sludge per unit of product	Kg/m ³	0.09	0.11	0.14	0.12	0.11	Decreased 8.33

Sludge spills into nearby communities

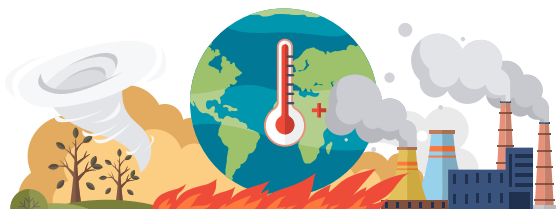
Item	Unit	2020	2021	2022	2023	2024
Number of Sludge spills into nearby communities	Case	0	0	0	0	0
Number of Complaints from Sludge spills into nearby communities	Case	0	0	0	0	0

Chemical or lubricant spills into nearby communities

Item	Unit	2020	2021	2022	2023	2024
Number of Chemical or lubricant spills into nearby communities	Case	0	0	0	0	0
Number of Complaints from Chemical or lubricant spills into nearby communities	Case	0	0	0	0	0

Climate Change and Energy Conservation

The 2018 United Nations report stated that thousands of scientists agreed that limiting global temperature rise to no more than 1.5 degrees Celsius would help prevent the most severe climate impacts and preserve a livable climate. However, the current national climate plans indicate that global warming is on track to reach 2.7 degrees Celsius by the end of this century.



The Company recognizes the importance of being part of the global community's efforts to reduce GHG emissions and to limit the rise in average global temperature to no more than 1.5 degrees Celsius. This includes supporting the national target under the Nationally Determined Contribution (NDC) to reduce GHG emissions and address climate change. Therefore, to support this goal, the Company has established policies and strategies on energy management and climate change, which cover all organizational operations and align with international standards. The Company has also set up a corporate carbon footprint working group and implemented operational guidelines to manage GHG emissions from business processes, aiming to become a Net Zero GHG Emissions organization by 2065.

Electricity Consumption Target



- Control the ratio of electricity consumption per unit of product to not exceed **0.74** kilowatt-hours per cubic meter (kWh/m³)

Electricity Consumption

Electricity Consumption	Unit	2023	2024	Change Compared to 2023 (%)
Total Electricity Consumption	Gigawatt-hours (GWh)	168.36	175.89	Increased by 4.47%
Electricity Consumption per Unit of Product	Kilowatt-hours per cubic meter (kWh/m ³)	0.605	0.584	Decreased by 3.47%



GHG Emission Reduction Target



- GHG emissions ratio per unit of product (Scope 1, 2, and 3) shall decrease not less than **0.03%** compared to the previous year

1. Base Year (2023)

Scope	GHG Emissions
Scope 1 + 2	Total GHG emissions: 77,555 tons of carbon dioxide equivalent (ton/CO ₂ e), or 0.00028 tons of CO ₂ e per cubic meter of product (ton/CO ₂ e/m ³)
Scope 1 + 2 + 3	Total GHG emissions: 92,785 tons of carbon dioxide equivalent (ton/CO ₂ e), or 0.00034 tons of CO ₂ e per cubic meter of product (ton/CO ₂ e/m ³)

2. Target Year (2024)

Scope	GHG Emissions	Emission Reduction Target (Compared to Base Year)	Performance Results
Scope 1 + 2	GHG emissions: 84,916 tons of carbon dioxide equivalent (ton/CO ₂ e), or 0.00028 ton/CO ₂ e per cubic meter of product (ton/CO ₂ e/m ³)	0.03	Compared to the base year (2023), emissions increased by 7,361 ton/CO ₂ e (an increase of 9.49%), while emissions per unit of product remained unchanged (0% change).
Scope 1 + 2 + 3	GHG emissions: 101,602 tons of carbon dioxide equivalent (ton/CO ₂ e), or 0.00033 ton/CO ₂ e per cubic meter of product (ton/CO ₂ e/m ³)	0.03	Compared to the base year (2023), emissions increased by 8,817 ton/CO ₂ e (an increase of 9.50%), while emissions per unit of product decreased by 2.94%.

Greenhouse Gas Emission (GHG Emission)

1. The Amount of Greenhouse Gas Emissions

Unit: TonCO₂e_q

Scope of GHG Emissions	2022	2023	2024	Results compared to 2023 (Percent %)
Scope 1: Direct Emissions	419	420	406	Decreased 3.33
Scope 2: Indirect Emissions from Energy	69,010	77,135	84,510	Increased 9.56
Scope 3: Indirect Emissions	13,626	15,230	16,686	Increased 9.56
Other	174	180	79	Decreased 56.11
Total	83,229	92,965	101,681	Increased 9.38

Scope of Data :

- In 2023 the business operations water supply of 3 companies (TTW, PTW and TWO) including Company's Head Office, Water Treatment Plant, Water Distribution Station, Booster Station, and Raw water Intake Station (Data collection cycle for 12 months from 1 October in 2022 to 30 September in 2023)
- In 2024 the business operations water supply of 3 companies (TTW, PTW and TWO) including Company's Head Office, Water Treatment Plant, Water Distribution Station, Booster Station, Raw water Intake Station and Bang Pa-in Project (Data collection cycle for 12 months from 1 October in 2023 to 30 September in 2024)

2. GHG Emissions Rate per Product Unit

Unit: TonCO₂e_q/m³

Scope of GHG Emissions	2022	2023	2024	Results compared to 2023 (Percent %)
Scope 1 + Scope 2	0.00025	0.00028	0.00028	Same as before
Scope 1 + Scope 2 + Scope 3	0.00030	0.00034	0.00033	Decreased 2.94

Scope of Data :

- In 2023 the business operations water supply of 3 companies (TTW, PTW and TWO) including Company's Head Office, Water Treatment Plant, Water Distribution Station, Booster Station, and Raw water Intake Station (Data collection cycle for 12 months from 1 October in 2022 to 30 September in 2023)
- In 2024 the business operations water supply of 3 companies (TTW, PTW and TWO) including Company's Head Office, Water Treatment Plant, Water Distribution Station, Booster Station, Raw water Intake Station and Bang Pa-in Project (Data collection cycle for 12 months from 1 October in 2023 to 30 September in 2024)



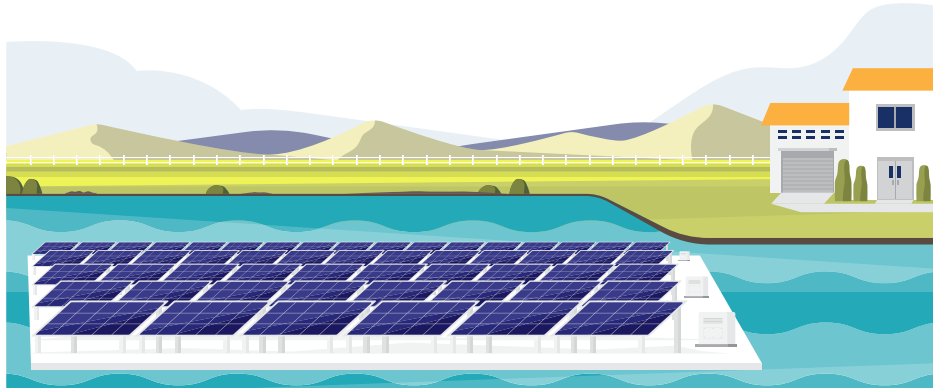
3. GHG Emissions – Scope 3

Category (Scope 3)	2022	2023	2024	Emission Calculation Method and Justification for Exclusion
1. Indirect GHG emissions from purchased raw goods and services	13,326.93	11,042.87	11,251.05	TGO methodology
2. Indirect GHG emissions from capital goods	235.47	483.18	239.31	TGO methodology
3. Other energy use activities, excluding indirect GHG emissions from energy use (Fuel and energy related activities)	13,664.51	15,268.00	16,729.31	TGO methodology
4. Indirect GHG emissions from upstream transportation and distribution	148.61	126.78	143.22	TGO methodology
5. Indirect GHG emissions from waste generated in operations	4,813.84	11,934.44	10,104.59	TGO methodology
6. Indirect GHG emissions from business travel	5.01	-	-	TGO methodology
7. Indirect GHG emissions from employee commuting	314.89	312.14	351.98	TGO methodology
8. Indirect GHG emissions from upstream leased assets	5.27	5.25	-	IPCC GWP
9. Indirect GHG emissions from downstream transportation and distribution	2.17	2.09	1.69	TGO methodology
10. Indirect GHG emissions from processing of sold products	N/A	N/A	N/A	-
11. Indirect GHG emissions from use of sold products	N/A	N/A	N/A	-
12. Indirect GHG emissions from end-of-life treatment of sold products	2.68	0.65	0.69	TGO methodology
13. Indirect GHG emissions from downstream leased assets	N/A	N/A	N/A	-
14. Indirect GHG emissions from franchises	N/A	N/A	N/A	-
15. Indirect GHG emissions from investments	N/A	N/A	N/A	-
Total	32,519.38	39,175.40	38,821.84	

The Amount of Solar Cell System

Item	Unit	2020	2021	2022	2023	2024	Results compared to 2023 (Percent %)
1. The Amount of Solar Cell System							
1.1 Rooftop solar cell system	KWh	4,367,503	4,235,331	4,387,643	4,592,180	4,391,945	Decreased 4.36
1.2 Floating solar cell system	KWh	-	-	-	46,398	151,129	Increased 225.72
Total	KWh	4,367,503	4,235,331	4,387,643	4,638,578	4,543,074	Decreased 2.06
2. Reduced Amount of Greenhouse Gas Emissions							
2.1 Rooftop solar cell system	TonCO ₂ eq	2,184	2,118	2,194	2,296	2,196	Decreased 4.36
2.2 Floating solar cell system	TonCO ₂ eq	-	-	-	24	76	Increased 216.67
Total	TonCO₂eq	2,184	2,118	2,194	2,320	2,272	Decreased 2.07





Financial Opportunities Arising from Climate Change

The Company has implemented a Solar Cell System with the objective of reducing electricity consumption and GHG emissions from business operations. Financial data includes investment costs, the amount of electricity generated from the Solar Cell System, the resulting financial savings, and the reduction of GHG emissions.

1. Floating Solar Cell Project

At the Bangpa-in Industrial Estate, the Company installed a floating solar power system on a wastewater retention pond. The Floating Solar Cell system has a capacity of 80 kilowatts (kW) and was installed to reduce electricity costs related to the wastewater treatment system. Preliminary assessments indicate that the system can reduce energy consumption by over 10%, equivalent to 115,200 kilowatt-hours per year (kWh/year), resulting in an annual financial saving of THB 587,520 (based on a rate of THB 5.10/kWh).

2. Rooftop Solar Cell Project

Also located at the Bangpa-in Industrial Estate, the Company installed a rooftop solar power system on the roof of a clear water storage tank. The Rooftop Solar Cell system has a capacity of 150 kilowatts (kW) and aims to reduce electricity costs associated with the water production system. According to the assessment, the system can reduce electricity consumption by an average of 12.70% per day, equivalent to 248,832 kilowatt-hours per year (kWh/year), resulting in an annual financial saving of 1,045,094 Baht (based on a rate of THB 4.20/kWh).

Air Pollution

Generator	Place	Standard criteria	ค่ามลพิษที่ตรวจสอบ		Results Inspection
			2023	2024	
Backup Generator (71GEN01) 	Banglen Water Treatment Plant	240 mg/cm ³	15.60	15.50	Passed the standard criteria • Volume of dust emissions (Particulate Matter : PM)
		200 ppm	21.00	24.30	• Nitrogen oxide gas (NOx)
		950 ppm	16.00	14.00	• Sulfur dioxide gas (SOx)
Backup Generator (71GEN02) 	Banglen Water Treatment Plant	240 mg/cm ³	12.10	17.50	Passed the standard criteria • Volume of dust emissions (Particulate Matter : PM)
		200 ppm	19.00	29.00	• Nitrogen oxide gas (NOx)
		950 ppm	18.00	13.60	• Sulfur dioxide gas (SOx)
Backup Generator (91GEN01) 	Phutthamonthon Water Distribution Station	240 mg/cm ³	14.90	18.50	Passed the standard criteria • Volume of dust emissions (Particulate Matter : PM)
		200 ppm	10.00	16.80	• Nitrogen oxide gas (NOx)
		950 ppm	3.00	3.90	• Sulfur dioxide gas (SOx)
Backup Generator (91GEN02) 	Phutthamonthon Water Distribution Station	240 mg/cm ³	13.30	19.70	Passed the standard criteria • Volume of dust emissions (Particulate Matter : PM)
		200 ppm	9.60	17.60	• Nitrogen oxide gas (NOx)
		950 ppm	4.00	4.10	• Sulfur dioxide gas (SOx)
Backup Generator (93GEN01) 	Mahachai Water Distribution Station	240 mg/cm ³	12.70	4.60	Passed the standard criteria • Volume of dust emissions (Particulate Matter : PM)
		200 ppm	10.20	17.50	• Nitrogen oxide gas (NOx)
		950 ppm	3.60	3.90	• Sulfur dioxide gas (SOx)





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TTW Public Company Limited

You can scan QR code or click link on phone / tablet / computer to access the form.



Feedback from Reader

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GRI Content Index (GRI Standard 2021)

Statement of use	[Name of organization] has reported in accordance with the GRI Standards for the period [reporting period start and end dates].
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard(s)	[Titles of the applicable GRI Sector Standards]

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	

General disclosures

GRI 2: General Disclosures 2021	2-1 Organizational details	SR 17	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.			
	2-2 Entities included in the organization's sustainability reporting	SR 10				
	2-3 Reporting period, frequency and contact point	SR 10				
	2-4 Restatements of information	SR 10				
	2-5 External assurance	SR 10				
	2-6 Activities, value chain and other business relationships	SR 38-39				
	2-7 Employees	SR 60				
	2-8 Workers who are not employees	SR 61				
	2-9 Governance structure and composition	SR 23				
	2-10 Nomination and selection of the highest governance body	SR 23				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	2-11 Chair of the highest governance body	SR 23				
	2-12 Role of the highest governance body in overseeing the management of impacts	SR 21				
	2-13 Delegation of responsibility for managing impacts	SR 21, 39				
	2-14 Role of the highest governance body in sustainability reporting	SR 21				
	2-15 Conflicts of interest	OR 89				
	2-16 Communication of critical concerns	SR 40				
	2-17 Collective knowledge of the highest governance body	SR 21				
	2-18 Evaluation of the performance of the highest governance body	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf (Page no.)				
	2-19 Remuneration policies	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf (Page no.4)				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	2-20 Process to determine remuneration	OR 111				
	2-21 Annual total compensation ratio	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf (Page no.11)				
	2-22 Statement on sustainable development strategy	SR 8-9				
	2-23 Policy commitments	SR 19-20				
	2-24 Embedding policy commitments	SR 19-20				
	2-25 Processes to remediate negative impacts	SR 25, 28-35				
	2-26 Mechanisms for seeking advice and raising concerns	SR 10, 24-25, 40-41				
	2-27 Compliance with laws and regulations	SR 45-46				
	2-28 Membership associations	SR 16				
	2-29 Approach to stakeholder engagement	SR 24-25, 38-40				
	2-30 Collective bargaining agreements	SR 26-27, 40				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Material topics						
GRI 3: Material Topics 2021	3-1 Process to determine material topics	SR 24-25	A gray cell indicates that reasons for omission are not permitted for the disclosure or that a GRI Sector Standard reference number is not available.			
	3-2 List of material topics	SR 27				
Economic performance						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 26-27, 34-35				
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	SR 13, 44,55				
	201-2 Financial implications and other risks and opportunities due to climate change	SR 29,91				
	201-3 Defined benefit plan obligations and other retirement plans	OR 32-33				
	201-4 Financial assistance received from government	SR 44				
Market presence						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 62				
GRI 202: Market Presence 2016	202-1 Ratios of standard entry level wage by gender compared to local minimum wage	-	a,b,c,d	Information unavailable/ incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
	202-2 Proportion of senior management hired from the local community	SR 61				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Indirect economic impacts						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 26-27, 34-35				
GRI 203: Indirect Economic Impacts 2016	203-1 Infrastructure investments and services supported	SR 34-35				
	203-2 Significant indirect economic impacts	SR 13, 34-35				
Procurement practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 50				
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	SR 52				
Anti-corruption						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf (Page no.10)				
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	SR 46				
	205-2 Communication and training about anti-corruption policies and procedures	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-good-corporate-governance-en.pdf (Page no.11)				
	205-3 Confirmed incidents of corruption and actions taken	SR 46				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Anti-competitive behavior						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/about/policy/20220124-ttw-non-discrimination-policy-en.pdf				
GRI 206: Anti- competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	https://www.ttwplc.com/storage/cg/cg/files/20250507-ttw-business-ethics-en.pdf (Page no. 2-3, 7)				
Tax ภาษี						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/about/policy/policy-tax-en.pdf				
GRI 207: Tax 2019	207-1 Approach to tax	SR 44				
	207-2 Tax governance, control, and risk management	https://www.ttwplc.com/storage/about/policy/policy-tax-en.pdf				
	207-3 Stakeholder engagement and management of concerns related to tax	SR 44				
	207-4 Country-by- country reporting	OR 156, 183				
Materials						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 86				
GRI 301: Materials 2016	301-1 Materials used by weight or volume	SR 11,88				
	301-2 Recycled input materials used	SR 87,89				
	301-3 Reclaimed products and their packaging materials	SR 11, 85				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Energy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 88				
GRI 302: Energy 2016	302-1 Energy consumption within the organization	SR 90				
	302-2 Energy consumption outside of the organization	SR 88				
	302-3 Energy intensity	SR 11				
	302-4 Reduction of energy consumption	SR 11				
	302-5 Reductions in energy requirements of products and services	SR 11, 29				
Water and effluents						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 83				
GRI 303: Water and Effluents 2018	303-1 Interactions with water as a shared resource	SR 83-86				
	303-2 Management of water discharge- related impacts	SR 28, 85-86				
	303-3 Water withdrawal	SR 85				
	303-4 Water discharge	SR 85				
	303-5 Water consumption	SR 85				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Biodiversity						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/ storage/about/policy/ biodiversity-policy-en.pdf				
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SR 10, 17				
	304-2 Significant impacts of activities, products and services on biodiversity	SR 29				
	304-3 Habitats protected or restored	SR 10, 17				
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ environmental/20240412- ttw-biodiversity-en.pdf				
Emissions						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 88				
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	SR 89				
	305-2 Energy indirect (Scope 2) GHG emissions	SR 89				
	305-3 Other indirect (Scope 3) GHG emissions	SR 89-90				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	305-4 GHG emissions intensity	SR 89				
	305-5 Reduction of GHG emissions	SR 29, 91				
	305-6 Emissions of ozone-depleting substances (ODS)	SR 91				
	305-7 Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	SR 91				
Waste						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 86				
GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	SR 28, 87-88				
	306-2 Management of significant waste-related impacts	SR 28, 87				
	306-3 Waste generated	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-occupational-health-and-safety-en.pdf (Page no. 6)				
	306-4 Waste diverted from disposal	SR 87				
	306-5 Waste directed to disposal	SR 87				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Supplier environmental assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/about/policy/20240206-ttw-supplier-coc-en.pdf				
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	SR 51				
	308-2 Negative environmental impacts in the supply chain and actions taken	SR 35, 54				
Employment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 31, 59-61				
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	https://www.ttwplc.com/storage/sustainable/performance/social/20240412-ttw-employee-information-en.pdf (Page no. 3-4, 7)				
	401-2 Benefits provided to full- time employees that are not provided to temporary or part- time employees	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-employee-stewardship-and-evelopment-en.pdf (Page no. 5-6)				
	401-3 Parental leave	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-employee-stewardship-and-evelopment-en.pdf (Page no. 6)				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Labor/management relations						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ social/20240412-ttw- employee-stewardship- and-evelopment-en.pdf (Page no. 1-3)				
GRI 402: Labor/ Management Relations 2016	402-1 Minimum notice periods regarding operational changes	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ social/20240412-ttw- employee-stewardship- and-evelopment-en.pdf (Page no. 8)				
Occupational health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 64				
GRI 403: Occupational Health and Safety 2018	403-1 Occupational health and safety management system	SR 30,65-66				
	403-2 Hazard identification, risk assessment, and incident investigation	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ social/20240412-ttw- occupational-health-and- safety-en.pdf (Page no. 4-5)				
	403-3 Occupational health services	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ social/20240412-ttw- occupational-health-and- safety-en.pdf (Page no. 6)				
	403-4 Worker participation, consultation, and communication on occupational health and safety	SR 65-66				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	403-5 Worker training on occupational health and safety	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-occupational-health-and-safety-en.pdf (Page no. 6)				
	403-6 Promotion of worker health	SR 63,66				
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR 65				
	403-8 Workers covered by an occupational health and safety management system	SR 64				
	403-9 Work-related injuries	SR 67				
	403-10 Work-related ill health	SR 67				
Training and education						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-employee-stewardship-and-evelopment-en.pdf (Page no. 9-10)				
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	SR 59				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
	404-2 Programs for upgrading employee skills and transition assistance programs	SR 30, 61				
	404-3 Percentage of employees receiving regular performance and career development reviews	SR 62, 64				
Diversity and equal opportunity						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/sustainable/sustainability-execution/social/20240412-ttw-employee-stewardship-and-evelopment-en.pdf (Page no. 3-4)				
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	SR 21-22, 60				
	405-2 Ratio of basic salary and remuneration of women to men	SR 60				
Non-discrimination						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/about/policy/20220124-ttw-non-discrimination-policy-en.pdf				
GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	SR 12				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Freedom of association and collective bargaining						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ economic/20240412- ttw-supply-chain- management-en.pdf (Page no.9-10)				
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	SR 35, 40, 52-54				
Child labor						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc. com/storage/about/ policy/20240206-ttw- supplier-coc-en.pdf				
GRI 408: Child Labor 2016 การเฝ้าระวังงาน เด็ก	408-1 Operations and suppliers at significant risk for incidents of child labor	SR 35, 40, 52-54				
Forced or compulsory labor						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc. com/storage/about/ policy/20240206-ttw- supplier-coc-en.pdf				
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor	SR 35, 40, 52-54				



GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Security practices						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 64				
GRI 410: Security Practices 2016	410-1 Security personnel trained in human rights policies or procedures	-	a,b	Information unavailable/ incomplete	Improving the data collection process. The complete disclosure of information will report on the next reporting period.	
Rights of indigenous peoples						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 75				
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous peoples	SR 78				
Local communities						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 68				
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	SR 31				
	413-2 Operations with significant actual and potential negative impacts on local communities	SR 70-72				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Supplier social assessment						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 50				
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	SR 51				
	414-2 Negative social impacts in the supply chain and actions taken	SR 53				
Public policy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 73				
GRI 415: Public Policy 2016	415-1 Political contributions	SR 73				
Customer health and safety						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-products-and-services-responsibility-en.pdf (Page no.1)				
GRI 416: Customer Health and Safety 2016	416-1 Assessment of the health and safety impacts of product and service categories	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-products-and-services-responsibility-en.pdf (Page no.2,4)				
	416-2 Incidents of non-compliance concerning the health and safety impacts of products and services	https://www.ttwplc.com/storage/sustainable/sustainability-execution/economic/20240412-ttw-products-and-services-responsibility-en.pdf (Page no.5)				

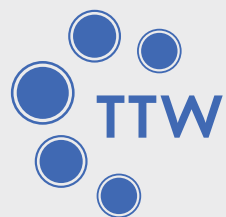


GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Marketing and labeling						
GRI 3: Material Topics 2021	3-3 Management of material topics	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ economic/20240412-ttw- products-and-services- responsibility-en.pdf (Page no.1)				
GRI 417: Marketing and Labeling 2016	417-1 Requirements for product and service information and labeling	https://www.ttwplc.com/ storage/sustainable/ sustainability-execution/ economic/20240412-ttw- products-and-services- responsibility-en.pdf (Page no.1)				
	417-2 Incidents of non-compliance concerning product and service information and labeling	SR 55				
	417-3 Incidents of non-compliance concerning marketing communications	SR 55				

GRI STANDARD/ OTHER SOURCE	DISCLOSURE	LOCATION	OMISSION			GRI SECTOR STANDARD REF. NO.
			REQUIREMENT(S) OMITTED	REASON	EXPLANATION	
Customer privacy						
GRI 3: Material Topics 2021	3-3 Management of material topics	SR 56				
GRI 418: Customer Privacy 2016	418-1 Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR 55				

Topics in the applicable GRI Sector Standards determined as not material

TOPIC	EXPLANATION
[Title of GRI Sector Standard]	
[Topic]	[Explanation]
[Topic]	[Explanation]



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