台灣自來水公司
TAIWAN WATER CORPORATION

2025 Sustainability Report

Contents

About the report

Taiwan Water Corporation (TWC) is committed to its core business operations and to providing customers with high-quality products and services. At the same time, the Company aspires to uphold the spirit of corporate citizenship and fulfill its social responsibilities. This is the 16th Sustainability Report published by TWC, structured around five main themes: Who We Are, Accountable Governance, Transition for Sustainability, Environment Performance, and Relationship Enhancement. The report discloses TWC's efforts and performance in 2024 across areas such as corporate social responsibility, corporate governance, operational performance, customer service, environmental sustainability, employee care, and community engagement, with detailed data and explanations.

Through the publication of this report, TWC aims to communicate its ongoing commitment to corporate citizenship and sustainable development to the public and all stakeholders, while sharing the outcomes of its sustainability initiatives. Compared to the "2024 Taiwan Water Corporation Sustainability Report," this report includes some adjustments in information presentation, scope, topic boundaries, and chapter arrangement. However, these changes do not affect the comparability of information across reporting years. Any restatements of historical data are explained within the report. All monetary values are presented in New Taiwan Dollars (NTD), and any abbreviations or technical terms are defined on the same page where they appear.

Report Writing Guidelines and Principles

Aligned with international practices, this report is structured with reference to the GRI Sustainability Reporting Standards (GRI Standards) issued by the Global Sustainability Standards Board, specifically following the GRI 2021 guidelines. It adheres to the eight reporting principles outlined in the 2021 version: accuracy, balance, clarity, comparability, completeness, sustainability context, timeliness, and verifiability. The report is also prepared in accordance with the Water Utilities & Services industry standards under the Sustainability Accounting Standards Board (SASB) framework. In addition, it responds to the United Nations Sustainable Development Goals (SDGs) and the climate-related disclosure requirements for listed companies. The report aims to cover material topics of concern to stakeholders as comprehensively as possible, demonstrating the Company's sustainable practices in business operations.

Reporting Scope and Calculation Basis

This report covers the period from January 1 to December 31, 2024, and includes TWC's operations and activities in Taiwan, encompassing the Head Office, regional branches, and engineering offices. Some content also references events prior to or following 2024. Statistical data are based on TWC's internal statistics and surveys, presented using internationally recognized indicators. Where estimates are used, they are noted in the relevant sections. Financial data are sourced from publicly disclosed information verified by certified public accountants, with some figures obtained from government websites. All financial information is presented using commonly accepted numerical formats and prepared in accordance with the International Financial Reporting Standards (IFRS), with figures denominated in New Taiwan Dollars (NTD).

Report Editing and Review

In 2014, TWC established its Corporate Social Responsibility (CSR) Best Practice Principles. The compilation of this report was carried out by an editorial team formed by representatives from various departments. Each member was responsible for reviewing and revising relevant content and data. After verification by the heads of the respective responsible departments, the Department of Planning oversaw the overall planning, communication and integration, data compilation, and editorial revisions. The finalized content was verified by an independent third-party organization and approved for publication by the Chairperson.

External Assurance of the Report

To enhance alignment with the GRI Standards and the AA1000 AS v3 assurance framework, this report was externally assured by AFNOR Asia Ltd., an independent and reputable certification body. The assurance was conducted in accordance with the principles of a Type 1 Moderate Level Assurance under the AA1000 standard (refer to the assurance statement in the appendix). Financial information was verified and audited by KPMG Taiwan and reported to the Audit Division.

Report Publication Date

TWC publishes its Sustainability Report annually and discloses relevant information in the Sustainability section of the company's official website.

- Previous edition: Published in July 2024
- Current edition: Scheduled for publication in August 2025

Contact Information

Taiwan Water Corporation

Contact Person: Mei-Ling Yen

Address: No. 2-1, Section 2, Shuangshi Road, North District, Taichung City, Taiwan

TEL: (04) 2224-4191 (Ext. 264)

FAX: (04) 2224-4201

Email: spot0316@mail.water.gov.tw

Company Website: ： https：//www.water.gov.tw/

Sustainability Section

Taiwan Water Corporation

Message from the Chairperson

Last year marked the 50th anniversary of TWC since its founding in 1974. Over the past five decades, TWC has remained committed to its mission of delivering "Sufficient Supply, Superior Quality" tap water, guided by the principles of "Quality, Innovation, Trust, and Professionalism" in advancing water resource management and sustainable development. Quietly but steadily, TWC has played a vital role in supporting Taiwan's livelihood and economic growth.

Throughout this 50-year journey, the legacy, transformation, and dedication of TWC employees have been deeply ingrained in our collective memory. Thanks to the tireless efforts of our predecessors, TWC has witnessed a more than tenfold increase in customer connections, with pipelines extending to every corner of Taiwan in need of water. The water supply coverage rate has risen from under 50% to over 95% during this period. What TWC delivers to each household is not just tap water—it is a reflection of Taiwan's progress in public welfare and economic development, and a testament to our employees' unwavering commitment and sense of social responsibility.

Today, we face a wide range of challenges, including global political and trade instability, the impacts of climate change, natural disasters such as earthquakes, financial resilience, and evolving expectations from domestic and international stakeholders regarding sustainable governance and disclosure. These challenges continuously drive TWC to enhance its sustainability efforts.

We actively monitor global and domestic sustainability trends and integrate them into our business strategies to shape TWC's sustainability framework. We aspire for our sustainability actions to converge into a powerful stream of influence which acts as a steady and enduring river of sustainability. Looking ahead, we will continue to accelerate our sustainability initiatives with forward-thinking strategies, strengthen our resilience against climate change and economic challenges, and move toward net zero emissions. Through innovative technologies, we aim to become a leading force in sustainable water resource management.

Actively Preparing for and Responding to Natural Disasters and Climate Change —A Reliable Pillar for the People of Taiwan

TWC's water supply resilience is synonymous with Taiwan's resilience in both livelihood and economy. In 2024, TWC's emergency response capabilities were rigorously tested by the Hualien earthquake and Typhoons Gaemi, Sanvu, and Koinu. The April 3 Hualien earthquake severely damaged multiple water supply facilities, affecting over 120,000 households. We immediately established a command center, activated our emergency response plan, and successfully restored full water supply within 86 hours—well ahead of schedule. In October, Typhoon Koinu caused water outages for more than 60,000 households and severely damaged water source facilities. Nearly 1,000 personnel and 265 vehicle and equipment deployments were mobilized to carry out emergency repairs under challenging conditions.

With foresight and preparedness, Taiwan has accumulated valuable experience in dealing with natural disasters. We never underestimate the risks posed by climate change. Through risk identification and control mechanisms, and in close collaboration with the Water Resources Agency of the Ministry of Economic Affairs, we continue to assess and build capacity, upgrade water supply infrastructure, enhance cross-regional pipeline dispatch capabilities, modernize water treatment plants, leverage information technology to reduce the water leakage rate, and review water supply dispatch management. These proactive measures enable TWC to continuously strengthen its ability to withstand climate impacts.

In terms of carbon reduction, TWC—through the leadership of the Chief Sustainability Officer and the Sustainability Development Committee—has implemented a range of initiatives, from carbon reduction

management to the development of renewable energy such as small hydropower and Solar PV equipment. These efforts represent our steady progress toward net zero.

These experiences, plans, and actions not only demonstrate TWC's long-term strategy and emergency response capabilities in the face of extreme climate events but also reinforce our commitment to enhancing the resilience of our water supply system. Our goal is to ensure stable water supply amid climate change, serve as a strong pillar of disaster response, and contribute to Taiwan's net-zero economy while maintaining sustainable operations—working hand in hand with the public and businesses on the path to net zero.

Five Strategic Pillars Leading TWC's Sustainability Actions

Sustainable transition is a shared endeavor among the government, businesses, and the public. In response to various sustainability challenges and developments, we analyze both internal and external factors to formulate five core strategic pillars: Sufficient Supply, Superior Quality, Service Enhancement, Organizational Optimization, Net Zero Emissions, and Financial Resilience. These strategies are aligned with actions across environmental sustainability, social inclusion, and economic development. Through proactive measures, we aim to strengthen infrastructure resilience, advance toward net zero, drive technological innovation, and enhance sustainable operational performance—laying a solid foundation for Taiwan's sustainable development.

Environmental Sustainability: Aiming for Net Zero Emissions

Achieving Net Zero Emissions is one of TWC's core goals. We are committed to reducing our carbon footprint by improving energy efficiency, developing renewable energy, promoting green offices and services, and enhancing green production and resource utilization. Building on the establishment of the Net Zero Transition Task Force in 2022, TWC launched an organizational reform in 2025, appointing the Chief Sustainability Officer as the convener to further strengthen our net-zero strategies and execution capabilities—demonstrating our firm commitment to environmental sustainability.

We will continue to expand and deepen TWC's climate governance capacity by identifying risks, formulating strategies, and implementing effective monitoring and evaluation. We actively engage with stakeholders in accordance with domestic and international climate disclosure standards. Looking ahead, we will continue to inventory our carbon reduction actions and achievements, reduce the carbon footprint of water supply, build resilient water infrastructure, and leverage TWC's resources to promote the development of renewable energy—advancing toward a net-zero water supply business.

Social Inclusion: Service Enhancement as Our Mission

Under the "Service Enhancement" strategy, we continue to optimize customer service processes and expand the Water Supply Coverage Rate, ensuring that residents in remote areas have equal access to high-quality water services, with the goal of building an inclusive society. We not only prioritize service quality and employee well-being but also actively respond to social needs, embedding the spirit of sustainability into every aspect of our operations.

To improve the water supply coverage in Pingtung County, TWC has invested approximately NTD7.149 billion since 2017. Through close collaboration with various stakeholders, we mobilized significant manpower and resources to construct nine water treatment plants and drill 24 groundwater wells in the region, increasing daily water supply capacity by 95,000 tons. In 2024, we achieved a major milestone by surpassing a 70% coverage rate, marking a new stage of development for Pingtung County's water supply.

We continue to address water supply challenges in aging hillside communities. For example, through the "Improvement Project for Pressurized Water Receiving Equipment in Aging Hillside Communities," users have

reported lower water bills, fewer service interruptions, and more stable water supply after the upgrades—clear recognition of our deep-rooted commitment to community service.

In addition, creating a friendly workplace and caring for employees' physical and mental well-being have been core values throughout TWC's 50-year journey. In 2024, TWC's Headquarters was honored with the "Gender-Friendly Health Award" by the Ministry of Health and Welfare, demonstrating our strong commitment to workplace inclusiveness and employee care. In an era of diversity and change, TWC takes pride in its technical expertise, and our dedication to the well-being of "TWC people" forms the foundation for delivering better services and introducing innovative technologies and infrastructure.

"Sustainable Governance": Built on "Sufficient Supply and Superior Quality", Striving for "Organizational Optimization" and "Financial Resilience"

"Sufficient Supply, Superior Quality" is the foundation of TWC's sustainable operations. We actively promote the diversification of water sources, continuously reduce the Water Leakage Rate, and enhance the construction of Backup Transmission Pipelines. At the same time, we are accelerating the modernization of water treatment plants, strengthening emergency response mechanisms, and implementing End-to-End Water Safety monitoring to ensure that every drop of water is safe and reliable. As of 2024, we have successfully completed eight backup pipelines, significantly improving the resilience of regional water supply allocation and effectively responding to increasingly frequent changes in water conditions. Regarding the modernization of treatment plants, six facilities had been upgraded by 2024, addressing aging infrastructure and improving water supply quality.

To enhance operational performance, we are driving corporate innovation and transformation under the dual strategic pillars of "Organizational Optimization" and "Financial Resilience", aiming to improve overall operational efficiency and create momentum for long-term, stable growth.

Beginning in 2024, we fully implemented administrative transparency measures with the support of the Board of Directors, establishing region- and group-based execution strategies. We launched three major transparency initiatives: "Major Projects", "Water Treatment Chemical Procurement", and "Improving Water Supply Coverage Rate". Each initiative formed an Administrative Transparency Task Force, led by regional office heads or deputy heads, with the Department of Civil Service Ethics serving as the secretariat. Following the principles of information disclosure and transparency, these efforts aim to enhance corporate governance and improve information openness.

To strengthen water quality monitoring, TWC launched the Water Supply Monitoring Platform System Integration in 2024, leveraging digital technologies to upgrade monitoring capabilities, reduce failure rates and maintenance costs, and optimize management decisions and emergency response efficiency. In the same year, all regional laboratories obtained extended ISO/IEC 17025 certification, establishing a comprehensive quality assurance and control system aligned with international standards and enhancing customer confidence in our testing data. In 2024, we conducted 1,194 tests for emerging pollutants—including organic compounds, disinfection by-products, and pesticides—achieving a 108.5% completion rate. Starting in 2025, we will strengthen our testing capabilities for Perfluorinated Compounds (PFCs) and further enhance water quality safety management.

We also focus on technological innovation. In terms of information and AI applications, we introduced advanced

technologies and developed the "AI-enabled Smart Aqua Leak Finder", addressing the challenge of passing on professional leak detection skills across generations. This system won the Project Innovation Award (PIA) from the International Water Association (IWA) in 2024, marking a new milestone in TWC's application of water technology. It improves the efficiency and accuracy of Leak Detection and effectively addresses the issue of technical knowledge transfer.

To support livelihoods and economic development, water tariffs have remained unchanged for 30 years. To strengthen our financial structure, TWC regularly holds Operational Revenue and Expenditure Control Meetings to manage controllable budget items. In 2024, we further enhanced cost-saving and revenue-generating measures by establishing a dedicated plan, with monthly tracking and reviews, aiming to accumulate incremental gains and reinforce financial resilience.

Looking ahead, we will continue to take steady and pragmatic steps, working hand in hand with stakeholders to safeguard water resources and provide high-quality water supply. We are committed to sustainable operations, embedding ESG principles into corporate governance and daily operations, and continuously creating shared and sustainable value for society.

Sincerely,

李嘉榮

Jia-Rong Lee

Chairperson

Sustainability Performance and Awards in 2024

Environmental

95.04%
Water Supply Coverage Rate
The water supply coverage rate has continued to increase steadily, reaching 94.55% in 2022, 94.91% in 2023, and further rising to 95.04% in 2024.

11.99%
Water Leakage Rate
In 2024, the water leakage rate was reduced to 11.99%, falling below the annual target of 12.00% and successfullymeeting the performance goal set by TWC.

99.94%
Water Quality Compliance Rate
The water quality compliance rate remained at a high standard of 99.94%.

104,580
metric tons of
CO_2 Equivalent

1,194 Tests for
Emerging Contaminants
A total of 1,194 tests for emerging contaminants were completed in 2024, achieving 108.5% of the annual target—93 tests more than originally planned.

100% Compliance with
Effluent Discharge Standards
All treated water discharged from our water treatment plants fully complied with the effluent discharge standards announced by the Ministry of Environment.

80.5%
Effluent Discharge Standards

6,518,600
Electronic Bills Delivered
resulting in a reduction of approximately 68.72 metric tons of CO_2 equivalent.

Social

89,197 Hours Total
Annual Employee Training Hours

Over 100 Hours
Employee Health and Well-being Seminar Programs

15,157 Attendances
Annual Participation in Environmental Education Sessions

71.65% Pingtung County's Water Supply Coverage Rate
The water supply coverage rate in Pingtung County increased from 50.83% in 2017 to 71.65% as of December 2024

15.3 Billion
Annual Budget for Pipeline Extension Projects in Areas Without Tap Water
As of March 20, 2025, a total of 128 projects had been approved, benefiting approximately 5,929 households.

Implementation of WSP at
6 Water Treatment Plants
Implementation of WSP at 26 Water Treatment Plants

Governance

35% Proportion of Female Board Members
(5 board directors and 2 supervisors)

0 Cases
From 2022 to 2024, the number of customer privacy violation complaints and cases from regulatory authorities were both 0

100% Annual Integrity Risk Assessment Completion Rate

19,312 Attendances
Annual Participation in Anti-Corruption Awareness Sessions and Community Engagement Activities

193 Integrity Perception Surveys
In 2024, a total of 193 outsourced integrity perception surveys were completed, covering new installations, replacements, and repairs of tap water pipelines, as well as occupational safety-related projects. The survey results serve as a reference for the company's integrity governance practices.

17 Sessions
2024 Annual Integrity Committee Meetings
A total of 40 project reports on anti-corruption measures were proposed, 50 proposals were discussed, and 6 motions were raised under miscellaneous business.

Awards

2024 the Ministry of Economic Affairs
Public Construction Quality Award
- Construction of the Caotun Water Treatment Plant
- Backup Pipeline Project for the Yunlin to Chiayi Water Transmission System -Yunlin-Chiayi Twin Pipeline Bridge

2024 the Ministry of Economic Affairs fot
Excellence in Occupational Safety
- Fifth District Management Office: First Place, Group C – Outstanding Unit Award
- Eighth District Management Office: Second Place, Group C – Outstanding Unit Award

2024
Taiwan Innotech Expo
- The Seismic Expansion Joint Tie Rod for Water Pool - Gold Medal for Invention
- The Pressure-Resistant Water Meter Box - Silver Medal for Invention

2024
AI-Acoustic Underground Water Leak Detection System
- Wins IWA Project Innovation Award

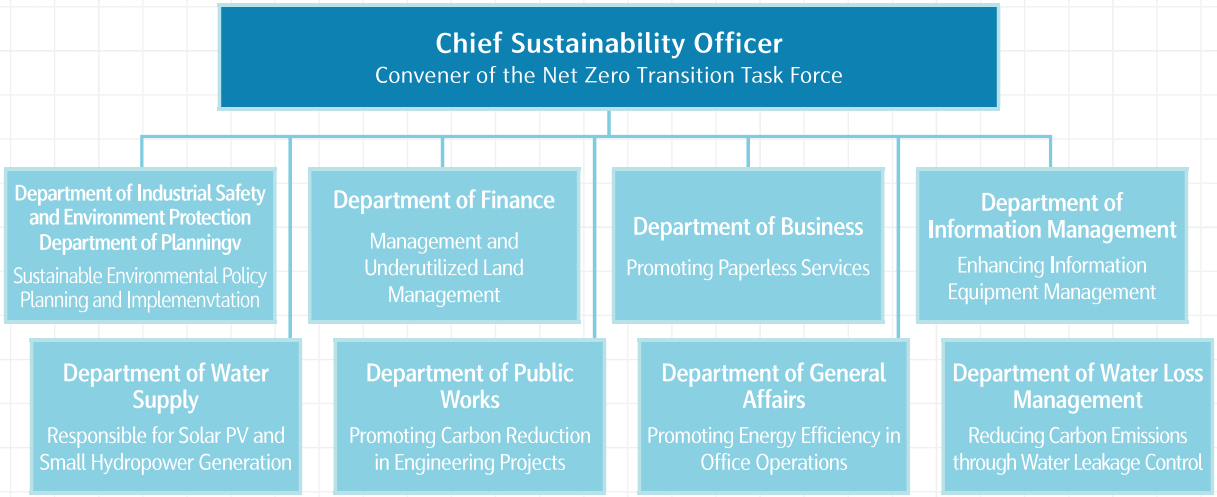
The 2024 Gender Health-Friendly Award
was received from the Ministry of Health and Welfare

2024 Highlight – Innovation and Action in Net Zero Emissions

Net Zero Emissions Strategy and Targets

Organizational Chart of the Net Zero Transition Task Force

In response to the government policies, including the "Taiwan 2050 Net Zero Emissions Roadmap and Strategy Overview" and the "12 Key Strategic Action Plans," the Company established the Net Zero Transition Task Force in 2022. In 2025, the Chief Sustainability Officer will serve as the convener, integrating efforts across all relevant TWC departments to jointly promote carbon reduction initiatives.



Three-Stage Targets [1]

2025：Reduce GHG emissions by 10% compared to 2005 (53,000 metric tons CO2 equivalent)

2030：Reduce GHG emissions by 28±2% compared to 2005 (159,000 metric tons CO2 equivalent)

2050：Continue rolling reviews and advance toward Net Zero Emissions targets

Five Strategies

1.Develop Green Energy ：Solar PV equipment, Small Hydropower Generation, Green Electricity Self-Consumption Infrastructure

2.Enhance Energy Efficiency：Replace old pumps with high-efficiency models, install frequency converters at facilities, energy-saving green buildings

3.Promote Green Office：Office energy conservation, adopt low-carbon transportation, strengthen information equipment management

4.Provide Green Services：Electronic water bill services, paperless counter services, charging station installation

5.Strengthen Green Production and Efficient Resource Utilization：Reduce water leakage, Sludge Resource Recovery and Reuse, Tree Planting for Carbon Sequestration, AI-enabled Precision Chemical Dosing

[1] TWC uses 2005 as its carbon management base year. Emissions from electricity and fuel are calculated using official emission factors. A more comprehensive carbon inventory will be developed over time.

Effectiveness of Net Zero Measures

The company has actively implemented various carbon reduction measures and successfully achieved its 2025 reduction target ahead of schedule.

82,800 metric tons of CO_2e Carbon reduction achieved in 2023	**104,000** metric tons of CO_2e Carbon reduction achieved in 2024	**53,000** metric tons of CO_2e Carbon Reduction Goal in 2025

Green Energy Development

Solar PV Equipment

Solar energy is currently the most widely used renewable energy source by the company, with solar PV systems installed across various sites and facilities.

130 solar PV installations completed as of 2024	Total Installed Capacity: **79,556**KW Cumulative Solar Power Generation Capacity	2024 Solar Generation: **9,238.4** **million kWh**	Total CO_2e Reduction in 2024: **43,790** **metric tons**[2]

Green Energy Development

Small Hydropower Generation

Completed Projects	2025 Plan	2026 Plan	2027 Plan
● Small Hydropower Generation at Taitung Lijia Water Treatment Plant (130KW) ● Estimated carbon reduction: approximately 308 metric tons of CO_2e[3]	● Small Hydropower Generation at Nanhua Reservoir (1,440KW) ● Small Hydropower Generation at Hushan Water Treatment Plant in Yunlin (1,500KW)	● Shen-Gou Water Treatment Plant in Yilan (125 kW)(125KW) ● Tai-Tian Distribution Reservoir Small Hydropower Generation in Miaoli (86 kW)	● Hou-Yi Water Treatment Plant (570 kW) ● Niao-Zui-Tan Water Treatment Plant (824 kW)

Green Energy Development

Installation of On-site Renewable Energy Generation System

Due to the lack of suitable space for installing solar PV systems at the Gaoping River water intake station of the Kaohsiung water supply plant, the system was instead installed on the clear water reservoir at the Fengshan water treatment plant. The renewable energy generated is procured through a power transfer mechanism. As of 2024, the project has achieved a carbon reduction volume of approximately 656.7 metric tons of CO_2e[4]

[2] Carbon Reduction Volume = Total Solar PV Power Generation × Emission Factor = 92.384 million kWh × 0.474 = 43,790 metric tons of CO_2e

[3] Carbon Reduction Calculation Method: Total Small Hydropower Generation = Installed Capacity (kW) × Annual Operating Hours (8,760 hr); considering downtime for maintenance or underperformance of installed capacity, the operating hours are estimated at 5,000 hr. Carbon Reduction Volume = Total Small Hydropower Generation × Emission Factor = 130 × 5,000 × 0.474 = 308 metric tons of CO_2e.

[4] Carbon Reduction Volume (Sold to Taipower) = Power Generation × Emission Factor = 2,375,000 × 0.474 / 12 months × 7 months = 656.7 metric tons of CO_2e.

Enhancing Energy Efficiency

Key Measures, Targets, and Expected Outcomes

- Replacing outdated pumps with high-efficiency models
- Installing variable frequency drives (VFDs) at facilities
- Completing performance management for 38 high-voltage stations from 2022 to 2024
- Reducing electricity consumption per unit by 0.5% annually
- By 2029, achieving a 4% reduction in electricity use per cubic meter compared to 2005, reaching 0.2959 kWh/m^3

ESCO (Energy Service Company) energy-saving improvements

- In August 2024, the Executive Yuan approved the Deep Energy Saving Program. The Ministry of Economic Affairs plans to lead the implementation of ESCO energy-saving improvements through state-owned enterprises.
- TWC aims to complete ESCO energy-saving improvements at 43 high-energy-consuming sites by the end of 2025.

Energy-Efficient Green Building

- TWC is advancing sustainable infrastructure by targeting Green Building Label certification for the Shimei and Jibei Seawater Desalination Plant Management Centers, with completion expected by 2025.

Promote Green Office Space

Office Energy Saving

Through thermal source analysis, the selection of equipment with high CSPF energy efficiency ratings, and the management of 692 air conditioning units, TWC achieved an estimated carbon reduction of approximately 303.08 metric tons of CO_2e in 2024[5].

Adopting Low-Carbon Transportation

As of 2024, TWC has replaced a total of 124 cars and 128 motorcycles with low-carbon alternatives, achieving an estimated carbon reduction of approximately 206.65 metric tons of CO_2e[6].

Strengthening IT Equipment Management

Through the adoption of virtual meetings[7], the replacement of virtual hosts[8], and the phasing out of outdated equipment[9], TWC achieved an estimated carbon reduction of approximately 837.48 metric tons of CO_2e.

Provide Green Service

68.72 metric tons of CO_2e

Carbon Reduction from e-Bill Services [10]

1.167 metric tons of CO_2e

Carbon Reduction through Paperless Counter Services[11]

18 EV Charging Stations Installed

Total Number of EV Charging Stations Installed by the End of 2024

These stations are available for public use and support the broader adoption of electric vehicles.

---

[5] Carbon Reduction Calculation (Replacement with Variable Frequency Drive Air Conditioners):Each conventional fixed-speed unit consumes 3 kW, operating 7 hours per day, 22 days per month, and 6 months per year, resulting in an annual electricity consumption of approximately 2,772 kWh. In contrast, each VFD unit consumes around 2 kW, with an estimated annual consumption of 1,848 kWh. This results in an annual savings of 924 kWh per unit. Carbon reduction volume = 924*692*0.474=303.08 metric tons of CO_2 equivalent

[6] Carbon Reduction Calculation (Replacement of Fuel Vehicles and Motorcycles): For gasoline-powered vehicles, the carbon emission factor is 2.2631 kg CO_2e per liter of gasoline. Each vehicle consumes an average of 755 liters of gasoline per year. Based on an average fuel efficiency of 5.3 km/L before replacement and 7.8 km/L after replacement, with an annual driving distance of 12,500 km, each vehicle can save approximately 755 liters of fuel per year. For electric motorcycle replacement, each motorcycle consumes an average of 87.79 liters of gasoline per year. Carbon reduction volume = 2.2631 × (755 ÷ 12 × (75×12 + 7×11 + 7×10 + 1×9 + 10×8 + 20×6 + 10×5) + 87.79 ÷ 12 × (73×12 + 1×11 + 13×9 + 10×8 + 23×6 + 14×2)) = 206.65 metric tons of CO_2e

[7] Carbon reduction volume = Number of video conferences × 2 participants × 2 (round trips avoided) × 5.5 kg CO_2e = 1,150 × 2 × 2 × 5.5 = approximately 25.3 metric tons of CO_2e

[8] Carbon reduction volume = (Number of virtual machines × 650W - Number of physical servers × 1,500W) × (24 hours/day × 365 days × Emission Factor ÷ 1,000) = approximately 574.88 metric tons of CO_2e

[9] Carbon reduction volume = (Number of physical machines × 300W + Number of personal computers × 50W) × 24 hours × 365 days × Emission Factor ÷ 1,000 = approximately 237.3 metric tons of CO_2e

[10] Paper reduction = Number of applications × 2 sheets/application = 76,840 × 2 = 153,680 sheets. Carbon reduction volume = Number of sheets reduced × 7.6g CO_2e ÷ 1,000 = 153,680 × 7.6 ÷ 1,000 = approximately 1.167 metric tons of CO_2e

[11] Total number of applications: 1,506,930 × 6 periods × 7.6g/1000 = 68.72 metric tons of CO_2 equivalent.

Strengthening Green Production and Efficient Resource Utilization

55,688 Metric Tons of CO_2e Carbon Reduction Achieved through the AI-Enabled Acoustic Underground Leak Detection System as of 2024 [12]	**57.6 Metric Tons of CO_2e** Estimated Total Carbon Reduction from Sludge Resource Recovery and Reuse (2025–2030)[13]	**2,714.2 Metric Tons of CO_2e** Total Carbon Reduction from Tree Planting for Carbon Sequestration in 2024(Total Tree Planting Area Reached 279.29 Hectares as of 2024 [14]).	**2.745 Metric Tons of CO_2e** Total Carbon Reduction Achieved through the Implementation of AI-Enabled Precision Chemical Dosing[15]

Analysis of the Company's Carbon Reduction in 2024 Indicates the Following Primary Sources:

53.25% — Leakage Reduction (Water Conservation) Accounted for the Largest Share of Total Carbon Reduction	**41.87%**— Solar PV (Energy Generation) Is Currently the Most Widely Utilized Renewable Energy Source by the Company

Future Outlook

2030 Carbon Emissions Reduction Target and Forecast Analysis

TWC currently estimates a carbon reduction volume of approximately 124,000 metric tons of CO_2e by 2030. To meet the target of a 30% reduction in carbon emissions compared to 2005 levels, the company has established the Solar PV 2.0 Task Force to accelerate the deployment of solar panels and strengthen its green energy development strategy. As of April, an additional 44 sites have been identified for solar PV installation, with an estimated carbon reduction of 1,535 metric tons of CO_2e. ◦

To realize its sustainability vision, TWC will continue implementing the following strategies:

Low-Carbon Engineering: TWC aims to achieve a 6% reduction in total carbon emissions from engineering projects through the use of environmentally friendly materials and construction methods, with the target set for the end of 2025.

Smart Operations: TWC will continue to enhance water treatment and supply dispatch operations by adopting AI-enabled precision chemical dosing and integrating ESCO energy-saving programs to improve operational efficiency.

On-site Renewable Energy Generation: As part of its development strategy, TWC plans to complete the installation of an on-site renewable energy generation system at its Professional Training Center by 2026.

[12] Carbon emissions per cubic meter of water = Unit electricity consumption (kWh/m^3) × Emission Factor. Carbon reduction volume = Cumulative reduction in water supply × Carbon emissions per cubic meter of water = 377,037,531 m^3 (cumulative reduction as of December 2024) × 0.1477 kg CO_2e/m^3 = approximately 55,688 metric tons of CO_2e

[13] Carbon reduction volume = Annual reduction in landfill waste × Carbon footprint per kilogram = 32,000 kg × 0.3 kg CO_2e/kg = approximately 9.6 metric tons of CO_2e per year

[14] Carbon reduction volume = Afforested area × Carbon absorption per hectare = 279.29 hectares × 9.7185 metric tons CO_2e/hectare = approximately 2,714.2 metric tons of CO_2e

[15] Carbon Reduction Calculation (Qingzhou Water Treatment Plant Energy Savings): Carbon reduction volume = Annual electricity savings × Emission Factor = (8,046.1 + 8,168.7 - 5,172.5 - 5,251.3) × 0.474 = approximately 2.745 metric tons of CO_2e

Materiality Analysis

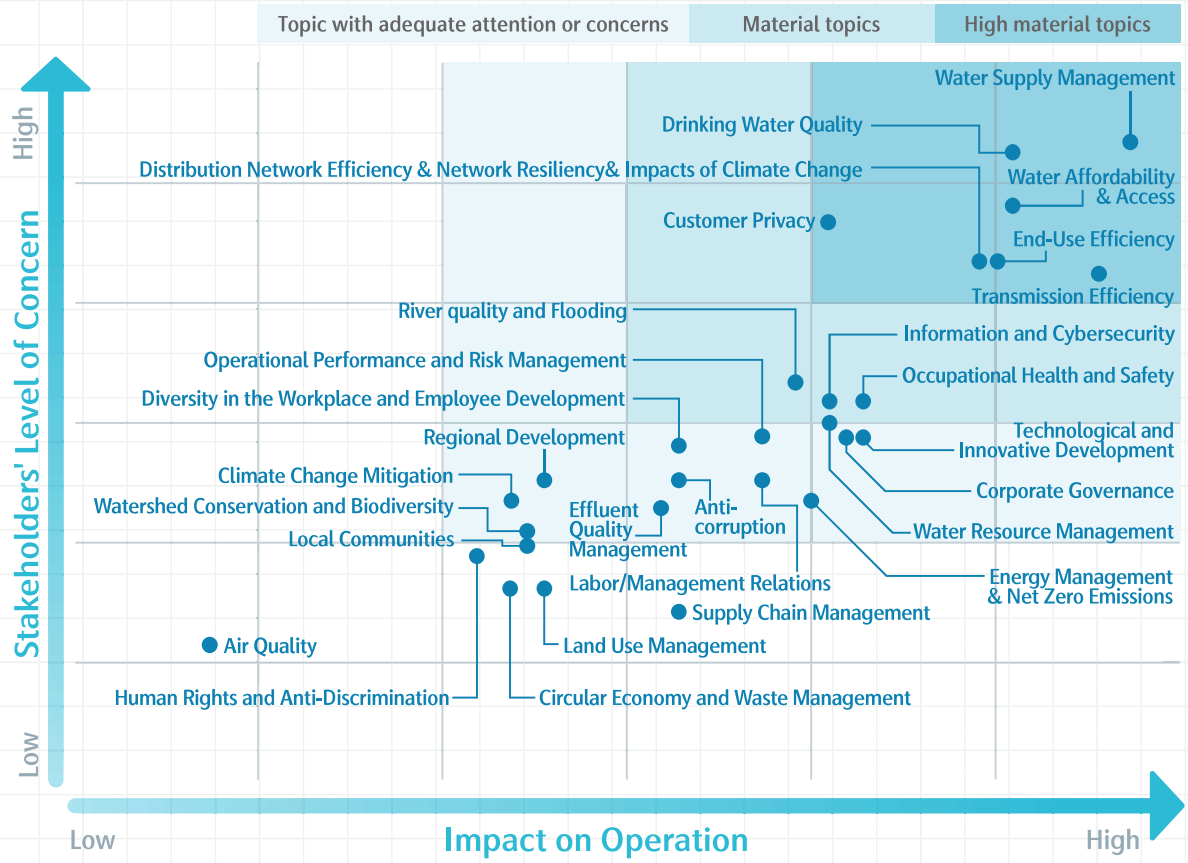
TWC identified key topics by referencing the GRI Universal Standards 2021, SASB Standards, and the recommendations of the Taiwan Stock Exchange. This analysis aimed to determine the most significant Environmental, Social, and Governance (ESG) topics that impact TWC's sustainable operations and are of greatest concern to stakeholders. Throughout the assessment process, TWC actively engaged with stakeholders to gather feedback and gain a deeper understanding of their concerns. TWC is committed to conducting this materiality assessment annually to ensure that the content of its sustainability report remains relevant to sustainable management and transparently discloses the topics that matter most to stakeholders.

Material Topic Identification and Impact Assessment Process

Step 1 Identification of Material Topics	Step 2 Material Topics Analysis	Step 3 Confirmation of Material Topics
TWC identified the topics of concern for nine major stakeholders. This process involved analyzing the material topics disclosed in TWC's past sustainability reports, reviewing relevant domestic and international events and issues, referencing the disclosure topics recommended by the SASB Water Utilities & Services Standard, and benchmarking against leading international water utilities. As a result, TWC compiled and identified 28 key topics, which were included in the material topics list.	An internal survey was conducted on the 28 identified topics. TWC used a materiality analysis framework where the X-axis represented the level of im-pact each topic has on operations, and the Y-axis represented the level of stakeholder concern. By consolidating the results of the internal survey and incorporating recommendations from external experts, each topic was scored accordingly. Following the materiality assessment and discussions based on TWC's current operational context, the 28 topics were refined and consolidated into 24 material topics.	Based on the results of the materiality analysis, TWC evaluated the significance of various sustainability topics to the company. Each topic was prioritized according to its value and impact, while also taking into account the disclosure topics required by the SASB Water Utilities & Services Standard. After communicating with stakeholders and confirming with management, 16 material topics were identified. TWC has developed corresponding strategies for each of these topics and continues to collect stakeholder feedback to further enhance its sustainability management processes.

A total of 28 material topics are distributed in this matrix from the upper right corner (most important) to the lower left corner (less important), with the horizontal axis representing the degree of impact on operations and the vertical axis representing stakeholder concern levels. TWC uses different colors to mark these topics, corresponding to the three major dimensions of environmental, social, and governance.

TWC Materiality Matrix



Color Reference	Environmental	Social	Governance

Material Topics List Ranking	
1. Water Supply Management	13. Energy Management & Net Zero Emissions
2. Drinking Water Quality	14. Diversity in the Workplace and Employee Development
3. Water Affordability & Access	15. Anti-corruption
4. Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change	16. Effluent Quality Management
5. End-Use Efficiency	17. Regional Development
6. Customer Privacy	18. Supply Chain Management
7. Occupational Health and Safety	19. Watershed Conservation and Biodiversity
8. Information and Cybersecurity	20. Local Communities
9. Technological and Innovative Development	21. Land Use Management
10. Corporate Governance	22. Human Rights and Anti-Discrimination
11. Labor/Management Relations	23. Circular Economy and Waste Management
12. Operational Performance and Risk Management	24. Air Quality

Note: The matrix includes 28 topics for questionnaire assessment, which were then consolidated into a list of 24 major topics through stakeholder discussions. After internal discussions and expert recommendation, 16 major themes were identified (next page).

TWC comprehensively evaluates the value and impact of various sustainability topics on the company and conducts ranking analysis with reference to SASB materiality. Additionally, TWC actively communicates with stakeholders and successfully identifies 16 material sustainability topics.

TWC's 16 Material Topics and Impact Scope Identified in 2024

Dimensions	Material Topics	Impact Scope			
		TWC	Customer	Business Partners	Other / Social
Environmental	Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change	+	+	△	+
	Energy Management & Net Zero Emissions	+		△	+
	Effluent Quality Management	+			△
	Circular Economy and Waste Management	+	△	△	
Social	Drinking Water Quality	+	+		△
	Water Affordability & Access	+	+	△	△
	End-Use Efficiency	+	+		
Governance	Water Supply Management	+	+		
	Occupational Health and Safety	+		+	
	Information and Cybersecurity	+			△
	Labor/Management Relations	+		△	
	Customer Privacy	+	+		
	Technological and Innovative Development	+	+	△	△
	Corporate Governance	+	+	+	△
	Operational Performance and Risk Management	+		△	△
	Anti-corruption	+		+	△

This topic has the following relevance across the value chain: + : Direct influence/impact △ : Indirect influence

In the 2024 materiality assessment, TWC refined and consolidated certain topics to enhance the structure and systematic presentation of its material issues. Specifically, "Energy Management" and "Climate Change Mitigation" were integrated into "Energy Management & Net Zero Emissions" to more comprehensively reflect the company's actions along its net zero transition pathway. Additionally, topics such as "Water Source Management" and "River Water Quality and Flooding" were incorporated under the broader category of "Water Supply Management" to provide a more integrated view of water resource management.

Compared to 2023, three new material topics were added in 2024: Water Affordability & Access, Technological and Innovative Development, and Operational Performance and Risk Management. These topics were included following the materiality assessment process, which considered both stakeholder concerns and the degree of operational impact. The topic of Watershed Conservation and Biodiversity was removed, as it was positioned at the periphery of the materiality matrix in this year's evaluation.

The top five material topics from 2023—Water Supply Management, End-Use Efficiency, Distribution Network Efficiency, Network Resiliency & Impacts of Climate Change, and Energy Management & Net Zero Emissions—remained highly relevant in 2024, aligning closely with TWC's core operations.

Through these adjustments and redefinitions, the 2024 materiality matrix more accurately reflects the key issues under the current operating environment and provides a clear direction for the company's sustainability management strategy.

Stakeholder Engagement

TWC actively engages with stakeholders through diverse communication channels, attentively listens to their key concerns, and fulfills its commitment to respond through these platforms.

Stakeholder Engagement Strategy and Objectives

Identification of Major Stakeholders	Transparency and Openness	Customized Communication Mechanisms	Systematic Documentation and Tracking
Develop tailored engagement strategies for different stakeholders	Build trust between TWC and diverse stakeholders based on the principle of transparency and openness	Design appropriate communication channels and methods for different stakeholders	Accurately document all communication content and processes, establish a feedback mechanism, and track the fulfillment of commitments made to stakeholders.

Nine Major Stakeholders		
Shareholders	Government Agencies	Elected Representatives
General Water Customers	Industrial and Commercial Water Customers	Employees
Suppliers and Business Partners	Community Residents	Media

TWC engages with stakeholders through diverse communication channels to listen to and understand their needs and expectations, which serve as key references for formulating sustainability strategies and plans. The table below outlines the communication methods and frequencies for each stakeholder group. For detailed responses to each material topic, please refer to the relevant chapters.

Color-coded Reference Guide: Mapping of material topics of concern to corresponding response chapters

Chapter 1: Who We Are

Chapter 2: Accountable Governance

Chapter 3: Transition for Sustainability

Chapter 4: Environment Performance

Chapter 5: Relationship Enhancement

Shareholders | Shareholders have consistently demonstrated long-term support and attention to TWC's operational strategies, business performance, and sustainable development			
Communication channels and frequency		Material Topics of Concern	Response Chapter
Regularly	Real-Time		
→ Board Meetings: Held at least 12 times per year → Shareholders' Meeting: Held once per year	→ The website features "Corporate Governance," "Sustainability Development," and "Board Access" sections for directors and supervisors to access real-time company information.	→ Water Supply Management → Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Information and Cybersecurity → Operational Performance and Risk Management → Corporate Governance → Technological and Innovative Development	→ Chapter 1: Who are we → Chapter 2: Accountable governance

Government Agencies | As a state-owned enterprise, TWC is guided by government regulations, performance expectations in sustainable development, and ESG-related initiatives, all of which play a critical role in driving the company's growth				
Communication channels and frequency			Material Topics of Concern	Response Chapter
Regularly	Occasional	Real-Time		
→ Ministry of Economic Affairs Safety & Disaster Reduction Task Force Meeting: Annually → Interagency Workplace Disaster Reduction Platform Meeting: Annually	→ Meetings with Supervisory Authorities → General Official Correspondence	→ Global website real-time information	→ Water Supply Management → Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Corporate Governance → Energy Management & Net Zero Emissions → Effluent Quality Management	→ Chapter 1: Who are we → Chapter 2: Accountable governance → Chapter 3: Transition for Sustainability → Chapter 4: Environment performance

Elected Representatives | For TWC, elected representatives serve as vital voices of the people. Each valuable opinion they offer reflects the concerns of local communities and serves as a cornerstone for TWC's continued advancement

Communication channels and frequency	Material Topics of Concern	Response Chapter
Occasional		
→ Global Information Website Communication Mailbox → Meetings and Coordination Sessions with Elected Representatives → In-person Communication or Official Written Responses	→ Water Supply Management → Drinking Water Quality → Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Water Affordability & Access → Operational Performance and Risk Management → Occupational Health and Safety	→ Chapter 1: Who are we → Chapter 2: Accountable governance → Chapter 5: Relationship enhancement

General Water Customers | As Taiwan's primary water supply company, TWC listens to public needs and provides healthy, clean, and stable quality water sources, which is both TWC's original business purpose and mission.

Communication channels and frequency		Material Topics of Concern	Response Chapter
Regularly	Real-Time		
→ Customer Satisfaction Survey: Conducted at least once per year → Information Promotion on User Bills: Issued every two months	→ Real-time Information via Global Information Website → 24/7 Customer Service Center → Water Outage Notification Inquiry System	→ Water Supply Management → Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Drinking Water Quality → Customer Privacy → End-Use Efficiency → Water Affordability & Access	→ Chapter 1: Who are we → Chapter 2: Accountable governance

Industrial and Commercial Water Customers | Through stable and healthy water supply, TWC ensures that industries developed by various customers can operate with confidence, promoting the development of circular economy				
Communication channels and frequency			Material Topics of Concern	Response Chapter
Regularly	Occasional	Real-Time		
→ Customer Satisfaction Survey: Conducted at least once per year → Information Promotion on User Bills: Issued every two months	→ Survey on Public Awareness of Water Resource Value in Taiwan	→ Real-time Information via Global Information Website → 24/7 Customer Service Center → Water Outage Notification Inquiry System	→ Water Supply Management → Network Resiliency & Impacts of Climate Change → Drinking Water Quality → Customer Privacy → Water Affordability & Access → Circular Economy and Waste Management	→ Chapter 1: Who are we → Chapter 2: Accountable governance → Chapter 4: Environ-ment performance

Employees | TWC's corporate growth is inseparable from its employees. The company is responsible for providing meaningful work, a safe and comfortable working environment, competitive compensation and benefits, and opportunities for learning and development for every employee.			
Communication channels and frequency		Material Topics of Concern	Response Chapter
Regularly	Real-Time		
→ Three Labor Representatives on the Board of Directors → Labor-Management Meetings: Held quarterly → Occupational Safety and Health Committee → Employee Satisfaction Survey	→ Chairperson's Mailbox and President's Mailbox → Union Communication	→ Water Supply Management → Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Information and Cybersecurity → Operational Performance and Risk Management → Corporate Governance → Technological and Innovative Development → Labor/Management Relations → Occupational Health and Safety	→ Chapter 1: Who are we → Chapter 2: Accountable governance → Chapter 5: Relationship enhancement

Suppliers and Business Partners | TWC values stable relationship with our partners and implements clean and reliable procurement to ensure a stable water supply, promote green procurement, and achieve long-term trusted cooperation.

Communication channels and frequency			Material Topics of Concern	Response Chapter
Regularly	Occasional	Real-Time		
→ Anti-Corruption Training Activities: Held at least twice per year	→ Supplier or Contractor Meetings: Held as needed → Procurement Announcements on the Procurement Website	→ Phone Calls and Official Letters → E-mail	→ Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Water Supply Management → Customer Privacy → Operational Performance and Risk Management → Corporate Governance → Technological and Innovative Development	→ Chapter 1: Who are we → Chapter 2: Accountable governance

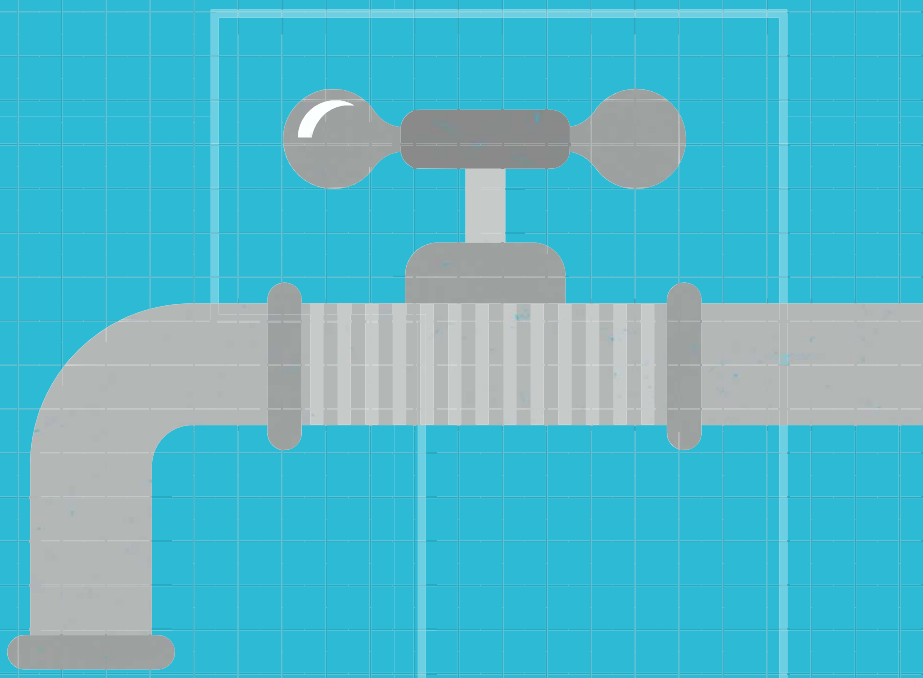
Community Residents | Taiwan Water Corporation is committed to fostering strong community relations and promoting social care initiatives, allowing its sustainability values to take root in every corner of society

Communication channels and frequency	Material Topics of Concern	Response Chapter
Occasional		
→ Organizing Community Engagement Activities	→ Water Supply Management → Customer Privacy Information and Cybersecurity → End-Use Efficiency → Effluent Quality Management	→ Chapter 1: Who are we → Chapter 4: Environment performance

Media | As a state-owned enterprise, TWC is duty-bound to serve as a model for other companies. It maintains positive interactions with the media, upholds a strong public image, and stays connected with the broader society.

Communication channels and frequency		Material Topics of Concern	Response Chapter
Occasional	Real-Time		
→ Press Conferences → Press Release Issuance	→ Information on the Global Information Website Bulletin Board	→ Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change → Water Supply Management → Customer Privacy → Water Affordability & Access → Corporate Governance → Operational Performance and Risk Management → Anti-corruption	→ Chapter 1: Who are we → Chapter 2: Accountable governance

1



Who Are We

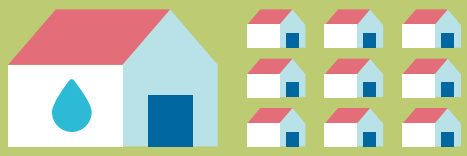
01 Who Are We

This chapter presents an overview of TWC's organizational structure, management philosophy, and comprehensive water resource management system.

Performance Highlights

In 2024, TWC achieved a water supply coverage rate of **95.04%**

serving over **7.86** million customer accounts



Delivering a total of **3,230,827,173** m^3 of water throughout the year

The **water quality** compliance rate remained at an exceptional **99.94%** ensuring the continued safety of drinking water

TWC also made significant progress in **reducing water loss** lowering the leakage rate to **11.99%** surpassing the annual target of **12%** meeting the company's performance goals

Challenges and Response Measures in Water Resource Management

Backup Transmission Pipeline Projects

In response to climate change and extreme weather events, TWC has advanced 17 backup transmission pipeline projects. As of the end of 2024, 8 pipelines have been completed, enhancing system resilience.

International Recognition for Drinking Water Safety

In 2024, TWC's laboratory successfully renewed its ISO/IEC 17025 accreditation, reinforcing the credibility of its water quality testing.

Digital Upgrade of Water Supply Monitoring

In October 2024, TWC launched the full-scale integration of its Water Supply Monitoring Platform, improving the stability of data transmission while reducing mechanical failures and maintenance costs.

Emerging Contaminants Testing Completion Rate

A total of 1,194 tests for emerging contaminants were conducted in 2024, achieving a completion rate of 108.5%. Starting in 2025, TWC will enhance its testing capabilities for perfluorinated compounds (PFCs), further strengthening water quality management.

Modernization of Water Treatment Plants

TWC is implementing a modernization program across 21 water treatment plants to enhance the capacity for treating high-turbidity raw water and ensure stable output. By the end of 2024, 6 plants had completed equipment upgrades, with 7 more scheduled for improvement by 2028 and another 8 after 2028.

Smart Leak Detection

By integrating the Water Advanced Data Analysis (WADA) system and the Supervisory Control and Data Acquisition (SCADA) system, along with AI-powered cloud-based leak detection technology developed in collaboration with the Industrial Technology Research Institute (ITRI), TWC has improved the accuracy of leak identification and the efficiency of repair operations.

Future Strategic Direction

TWC has established clear business strategies and targets, with a focus on diversified water source development, accelerated leakage reduction, construction of backup transmission pipelines, modernization of water treatment plants, strengthening emergency response capabilities, and promoting end-to-end water safety. By 2031, the company aims to raise its water sales rate to 81.93% and achieve a water supply coverage rate of 96.41%, advancing toward its vision of actively strengthening corporate governance and fulfilling corporate social responsibility to enhance competitiveness and become a world-class water utility.

1.1 Our value and mission

TWC established in 1974, is a state-owned enterprise under the Ministry of Economic Affairs. It is responsible for the operation of tap water and water-related services and works closely with the Water Resources Agency to manage and supply water resources across Taiwan. In its early years, TWC was tasked with the critical mission of rapidly increasing the water supply coverage rate across the island. To achieve this, the company invested substantial human and material resources in constructing water infrastructure and distribution networks, laying a solid foundation for both public welfare and industrial development. At the time, the company's primary focus was on meeting the quantitative demand for water.

As society, the economy, and information technology have advanced rapidly, TWC has continuously adjusted its operations, planning, and organizational structure to align with evolving business needs. The company has gradually transformed to meet new societal expectations for a water supply that is not only sufficient in quantity but also superior in quality and supported by excellent service. These efforts are aimed at achieving overall operational excellence and sustainable development.

Taiwan Water Corporation

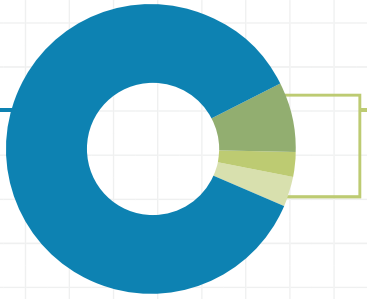
water.gov.tw

Official Website of TWC

Shareholding Structure / Market Category	State-Owned Enterprises under the Ministry of Economic Affairs
Industry Classification	Public Water Utility
Core Services	water supply, water resource development, and water infrastructure construction
Date of Establishment	January 1, 1974
Paid-in Capital	NTD157.5 billion
Chairman	Chia-Jung Lee
President	Ting-Lai Lee
Number of Employees	5,801
Headquarters	No. 2-1, Section 2, Shuangshi Road, North District, Taichung City, Taiwan

Shareholding Structure

Central Government
(Ministry of Economic Affairs)
86.28%



Local governmaent 13.72%
- Direct-administered Cities 7.74%
- County / City Governments 2.81%
- Township / District Offices 3.17%

1.1.1 Our Core Values and Beliefs

Our Vision

Actively strengthening corporate governance and fulfilling corporate social responsibility to enhance competitiveness and realize the vision of becoming a world-class water utility.

Mission

Delivering a sufficient supply of superior-quality tap water through integrity-driven management to fulfill corporate social responsibility, ensure sustainable operations, and contribute to economic development.

Business Philosophy

Efficiency and Prompt Service QuICK Values

Quality

We are committed to continuous improvement to ensure excellence in design and construction quality, water supply quality, and customer-centric service quality.

Innovation

We pursue sustainable development through innovation in technology, management, and service delivery.

Credibility

By putting ourselves in our customers' shoes, we strive to understand their expectations. We are dedicated to developing water sources, enhancing water treatment capacity, and strengthening supply coordination to ensure high-quality water and services, thereby earning customer trust.

Knowledge

Rooted in core water utility expertise and guided by forward-looking management, we reinforce the foundation of professionalism through lifelong learning.

1.1.2 Our business strategy and target

TWC currently faces a range of internal and external challenges in its operating environment.

Externally, the impacts of extreme weather events are disrupting hydrological patterns and straining the water supply system, while the development of new water sources remains difficult. Internally, the company is dealing with increasing workforce demands, talent gaps, aging pipelines and infrastructure, and the need for substantial capital investment for improvements.

To overcome these challenges while ensuring policy continuity, TWC has conducted in-depth analysis and formulated 18 business strategies and 13 operational targets—comprising 8 quantitative and 5 qualitative goals. Through the implementation of a balanced scorecard framework, TWC effectively monitors, evaluates, and tracks the progress of key initiatives to ensure strong operational performance.

TWC Business Strategies

(Target Year: 2031)

Key Management Challenges	Qualitative Goals	Quantitative Goals	Business Strategies
Rising Risk of Water Supply Instability Increasing Service Expectations	Sufficient Supply, Superior Quality	Total Water Sales 2,696,980 thousand m^3 Water Leakage Rate 9.97% Revenue Water Percentage 81.93%	Diversified Water Source Development Continual Reduction of Water Loss Installation of Backup Transmission Pipelines Modernization of Water Treatment Plants Strengthening Emergency Response Capabilities Promoting End-to-End Water Safety
	Service Enhancement	Total Water Supply Volume 3,291,810 thousand m^3	Enhancing Customer-Friendly Services Improving Water Supply Coverage Rate
Growing Workforce Demands	Organizational Optimization	Water Supply Capacity 5,385,516 thousand m^3	Strengthening Workforce Allocation and Knowledge Transfer Driving Management Innovation Building Information and AI Capabilities
Deteriorating Financial Conditions	Financial Resilience	Water Quality Compliance Rate 99.95% Water Supply Coverage Rate 96.41%	Increasing Revenue Reducing Costs
Accelerating Net Zero Transition Trends	Net Zero Emissions	Carbon Reduction Volume 1,312.8 million kilograms CO_2e	Improving Energy Efficiency Developing Green Energy Promoting Green Office Practices Providing Green Services Enhancing Green Production and Efficient Resource Utilization

1.1.3 TWC's Business and Services

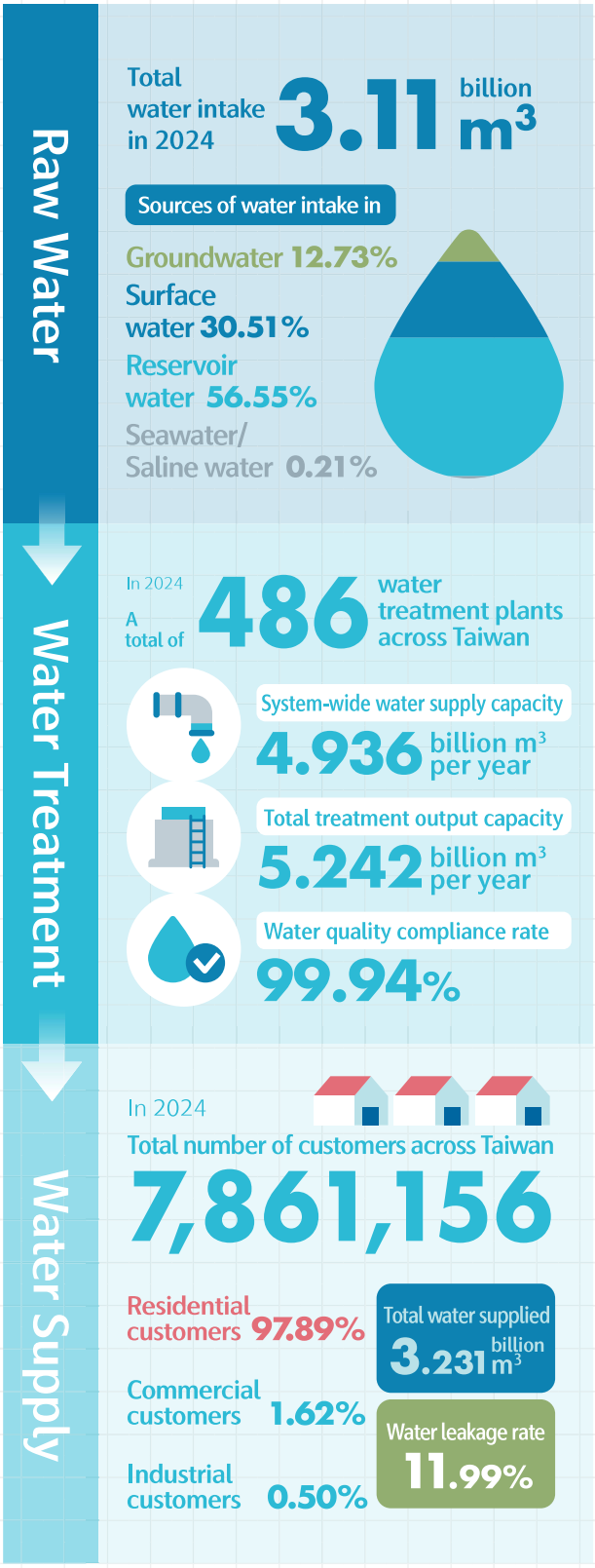
TWC operates an extensive water supply network and service infrastructure across Taiwan, serving as the primary provider of tap water nationwide. The only exceptions are Taipei City in its entirety, and specific districts in New Taipei City—namely Xindian and Yonghe (entire districts), most areas of Sanchong and Zhonghe, and parts of Xizhi—which are served by the Taipei Water Department.

Tap water is essential to modern life. It is produced by treating raw water through various processes at water treatment plants, followed by disinfection, and then delivered to individual users via pumps and pipelines. In alignment with government policies on water resource development, TWC actively participates in upstream water resource planning, effectively integrating and utilizing available sources. The company implements a range of water infrastructure projects and develops localized small-scale water sources—such as deep wells and bank filtration systems—based on regional demand. These efforts enable the coordinated use of surface water, groundwater, and reservoir storage.

In the Penghu region, TWC has constructed seawater desalination plants and established water dispensing stations. The company has also interconnected its distribution network with that of the Taipei Water Department in areas including Sanchong, Zhonghe, Banqiao, Luzhou, Tamsui, Guandu, and Xizhi. Additionally, a subsea pipeline project has been implemented to supply water to Xiaoliuqiu, ensuring sufficient water availability to support economic growth and improve quality of life.

TWC's core business operations include:

- Supplying public and industrial water across Taiwan.
- Developing water sources and constructing water supply facilities to promote the accessibility of tap water throughout Taiwan (excluding Kinmen and Matsu).
- Operating and investing in businesses related to tap water services.



Note: Total raw water intake, water sources, supply capacity, customer ratio, and total water supply have been rounded to the second decimal place.

TWC's Operational Scope and Sustainability Contributions (as of 2024)

TWC Operational Scope

Water Sources → Upstream: Water Purchase/Intake → Midstream: Water Treatment and Distribution → Downstream: Water Transmission and Supply/Sales → Customers

Water Source Management | Water Supply Management | Distribution Network Management | End-User Management

Operational Results and Performance

Water Source Management

- 141 water supply systems nationwide
- 21 reservoir sources nationwide

3.11 billion tons of water withdrawal in 2024

- Groundwater: 12.73%
- Surface water: 30.51%
- Reservoir water: 56.55%
- Seawater/Saline water: 0.21%

Water Treatment Capacity

- 486 water treatment plants nationwide
- Water treatment plant output capacity: 5.242 billion tons/year
- 2024 system water supply capacity target: 4.936 billion tons/year

2024 Water Quality Compliance Rate: 99.935%

Water Supply Coverage Rate: 95.04%

7,861,156 customers nationwide, customer composition:

- Residential customers: 97.89%
- Commercial customers: 1.62%
- Industrial customers: 0.50%

2024 Water Leakage Rate: 11.99%

2024 Total Water Supply: 3.231 billion tons

Input and Strategy

- Water source development and management in coordination with Water Resources Agency policy planning
- Strengthening cross-regional water source dispatching capabilities
- Maintaining upstream reservoirs and water intake facilities (weirs, pumping stations, etc.)
- Water source protection and ecological conservation
- Water source quality safety management and monitoring

- Water treatment plant upgrades and expansion
- Water treatment process management: sedimentation, filtration, chemical dosing, etc.
- Treated water and contaminant monitoring with compliance rate control
- Water dispatching pipeline planning and construction
- Smart water quality monitoring and chemical dosinc

- Water supply/sales management and business operations: meter reading, water bill collection, etc.
- Water pricing rationalization review and communication
- Customer relationship maintenance and feedback collection
- Information security management and system maintenance
- AI leak detection technology development

Sustainable Value Creation

- Economic Value: Water infrastructure development, water technology innovation and R&D, renewable energy generation benefits (financial and carbon reduction)
- Social Value: Water source stakeholder collaboration, cultural and recreational value of water source areas, employment opportunities
- Natural Value: Water source ecological diversity, ecosystem services, water source and groundwater protection

- Economic Value: Water treatment facility construction, water treatment technology innovation and R&D, circular economy of water treatment by-products, additional renewable energy benefits (financial and carbon reduction)
- Social Value: Water treatment infrastructure resilience, employment opportunities
- Natural Value: Reduced emissions and waste, downstream environmental protection

- Economic Value: Water sales revenue, residential and industrial water demand, leak detection technology innovation
- Social Value: Customer trust and collaboration, social water safety, reasonable water pricing and care for vulnerable groups, health and hygiene
- Natural Value: Avoiding improper water resource extraction

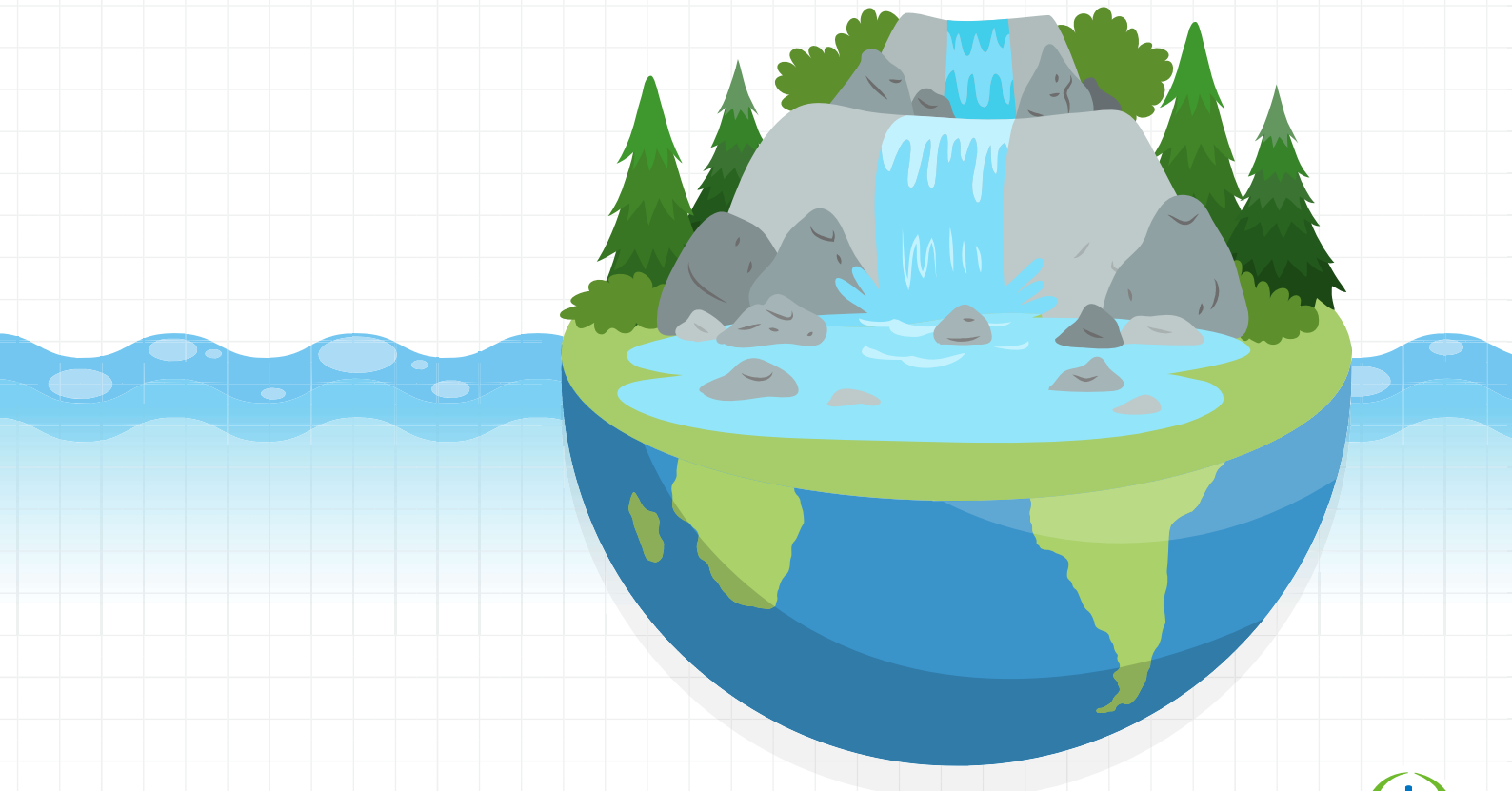
TWC's business model is structured around three core operational stages: water sourcing (purchasing and intake), water treatment (purification and allocation), and water supply services (distribution and sales). In the water sourcing stage, the breakdown of water resources acquired through water rights in 2024 is shown in the table below. The majority of TWC's water supply—approximately 54%—comes from purchased water provided by the Northern, Central, and Southern Water Resources Agencies under the Water Resources Agency. Self-owned water sources account for around 32.44%.

During the water treatment and supply service stages, TWC is responsible for the operational management and maintenance of facilities across its regional branches. The company also maintains ongoing communication with customers, incorporating their needs and feedback into operational decision-making. Regular reviews and adjustments are conducted to ensure alignment with customer expectations and to maximize overall efficiency, fostering shared growth and mutual benefit.

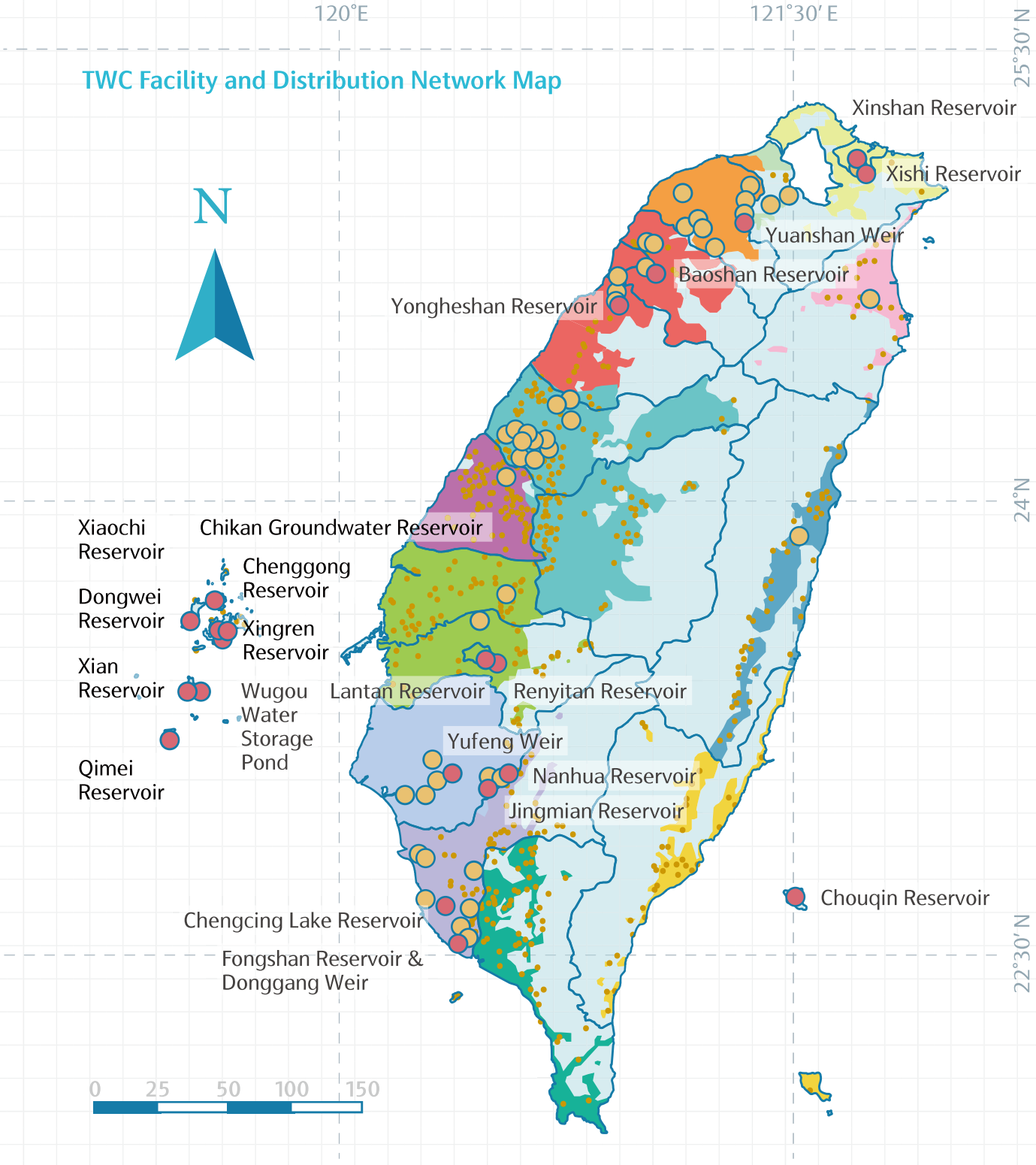
Statistical Summary of Water Source Withdrawal Volume for 2024

Year		2024	
Item		Water Intake (billion tons)	%
Purchased Clear Water		2.70	8.68%
Self-Owned Water Sources		10.09	32.44%
Purchased	Water Resources Agency, the Northern, Central, and Southern Regions of the Water Resources Branches	16.77	53.92%
	Irrigation Associations across Taiwan	1.45	4.66%
	Taiwan Sugar Corporation and Taiwan Power Company	0.09	0.29%
	Sum of purchased	18.31	58.87%
Raw Water		31.10	100%

TWC's primary operational sites and water supply service areas are shown in the figure in next page.



TWC Facility and Distribution Network Map



TAIWAN WATER CORPORATION
Facility and Distribution Network Map

*Taipei City is not under our service areas

Legend **Water Supply Service Area**

- First Branch
- Second Branch
- Third Branch
- Fourth Branch
- Fifth Branch
- Sixth Branch
- Seventh Branch
- Eighth Branch
- Ninth Branch
- Tenth Branch
- Eleventh Branch
- Twelfth Branch
- Pingtung Branch
- Reservoir
- Booster Station, Water Treatment Plant
- Water Intake Station, Well, Pumping Station

1.1.4 External Organizational Engagement

TWC actively participates in domestic industry associations, academic societies, and professional organizations to foster collaboration, stay informed on the latest developments, and strengthen alignment with the broader water sector. TWC plays an active role in shaping industry dialogue and continues to engage closely with its partners across the sector. The company focuses on topics closely related to its core business, including hydraulic engineering, civil engineering, hydropower, and water resources management.

In 2024, TWC was a member of 21 industry associations and societies. Notably, the company held leadership roles as Chairperson, Board Director, and Supervisor at the Taiwan Water Works Association, and served as a Board Director at the Chinese Taipei Society for Trenchless Technology. TWC also supported various events organized by these associations to promote knowledge exchange and industry advancement.

Participating External Organizations 2024

Members		
Chinese Taipei Water Works Association (CTWWA)	The Institute of Internal Auditors	Chinese Society of Mechanical Engineers
Chinese Institute of Civil and Hydraulic Engineering	Hengshantou Agricultural Leisure Area	Chinese Ocean & Underwater Technology Association
Yilan Museums Association	Chinese Taipei APEC Engineer	Local Weights and Measures Associations
Chinese Society of Structural Engineering	Tourism Association	Chinese Taipei Society for Trenchless Technology
Local Chambers of Commerce	Taiwan Museum Association	Shulin District Manufacturers Association
Chinese Environmental Analytical Society	Yilan Longde Manufacturers Development Association	Irrigation and Drainage Association
Local Nurses Associations in Various Counties and Cities	Taiwan Micro Hydropower Association	Chinese Water Resources Management Society

Sponsors	
Chinese Water Resources Management Society	Taiwan Agricultural Engineers Society
The Chinese Institute of Environmental Engineering	Taiwan SHP Industries Alliance
Chinese Taipei Society for Trenchless Technology	Chinese Environmental Analytical Society
Chinese Taipei Tunnelling Association	

1.2 TWC Water Resource Management

1.2.1 Water Source Management

Water source management is a core responsibility of TWC in ensuring a stable water supply. It encompasses the development, protection, allocation, and sustainable use of water resources. In response to extreme climate change and rising water demand, TWC has implemented a diversified water sourcing strategy that includes groundwater, surface water, reservoir water, as well as seawater and brackish water. The company also strengthens its allocation capacity through inter-system and inter-regional backup transmission pipelines,

enabling optimized resource distribution between wet and dry seasons. To ensure water quality and promote sustainable use, TWC enforces strict management and conducts regular inspections of water source protection areas. These efforts aim to safeguard public water security and support the long-term sustainability of water resources. In collaboration with the Water Resources Agency and the Irrigation Agency, TWC is building a comprehensive and resilient water supply network that underpins national economic development and enhances the quality of life for the public.

Water Resources Agency	Irrigation Agency, Ministry of Agriculture	Taiwan Sugar Corporation and Taiwan Power Company	Taipei Water Department
The Shimen Reservoir in the north, Liyutan Reservoir in the central region, and Zengwen Reservoir in the south are all managed by the Water Resources Agency and serve as key raw water sources for their respective areas. In recent years, the development of Hushan Reservoir and the Niaozuitan Artificial Lake has further expanded water resource capacity. TWC continues to collaborate with the Water Resources Agency under the Ministry of Economic Affairs to manage and coordinate downstream water supply and allocation operations.	The Irrigation Agency holds certain water rights, and TWC maintains close coordination with its regional branches to negotiate the reallocation of agricultural water for public use when necessary. Additionally, TWC utilizes agricultural irrigation channels to convey water, helping to reduce transmission losses and improve water intake efficiency.	As state-owned enterprises possess diverse water rights due to their existing assets and operational needs, entities such as Taiwan Power Company manage certain water resources through their hydropower facilities. Additionally, Taiwan Sugar Corporation owns groundwater wells, and to meet public water demand, TWC has negotiated access to these water sources.	The Taipei Water Department primarily supports TWC's operations in the Banxin area and New Taipei City's Xizhi, Wenshan, and Tamsui districts. In accordance with water conditions and the dispatch policies of the Water Resources Agency, TWC purchases between 500,000 and 800,000 cubic meters of treated water per day.

Effective water source management is not only essential for supply stability but also critical to social well-being and environmental sustainability. High-quality water source management enhances supply efficiency and capacity, enabling TWC to meet both residential and industrial water demands. At the same time, TWC carefully evaluates the potential impacts of water intake activities on local communities and ecosystems—particularly by maintaining ecological base flows in rivers to safeguard aquatic health.

From an operational perspective, improving water source management contributes to greater efficiency and influences the structure of supply costs and the rationale behind water pricing. TWC conducts thorough assessments when determining the types and volumes of purchased water, considering economic viability, environmental impact, and social equity to achieve an optimal balance among the three dimensions.

TWC actively supports the Water Resources Agency's water source development initiatives by: (1) participating in the joint dispatch and utilization of reservoirs, while emphasizing the need to strengthen inter-system and inter-regional backup transmission pipelines to enhance water allocation capacity and reduce pressure on new water source development; and (2) continuously securing its own water sources by upgrading weirs and intake facilities, and developing small-scale regional water sources to increase supply and backup capacity during high-turbidity and dry seasons. We remain committed to optimizing and stabilizing the water supply system to minimize environmental impacts and safeguard public water security.

Upholding its responsibility for sustainable water resource management in Taiwan, TWC complies with Article 11 of the Water Supply Act and Article 4 of the Regulations for the Use and Management of Reservoir Storage Areas. We proactively strengthen water source management, maintenance, and conservation efforts. Each

branch conducts regular inspections in accordance with the Water Source Patrol Guidelines to ensure no violations occur within designated water quality and quantity protection zones.

Management of Water Source Protection Zones and Handling of Violations

TWC's Supervision and Handling Mechanism for Violations in Water Source Protection Zones

- Each relevant branch compiles monthly patrol and reporting records, prepares a statistical summary of regulatory violations and corresponding actions, and logs the data into the "TWC Water Quality and Quantity Protection Zone Management and Water Source Patrol System."
- All cases are reported to the central competent authority for investigation. As of the end of March 2025, only two cases remained unresolved, with all others properly addressed.
- Unresolved cases remain under continuous monitoring until closure to ensure effective management of water source protection zones.

2024 Performance Highlights

- **A total of 186 regulatory violations were reported.**
- **Breakdown of violation types:**
  - Illegal disposal of waste (including soil, wastewater, and garbage): 170 cases
  - Land development and site grading: 15 cases
  - Poultry farming: 1 case

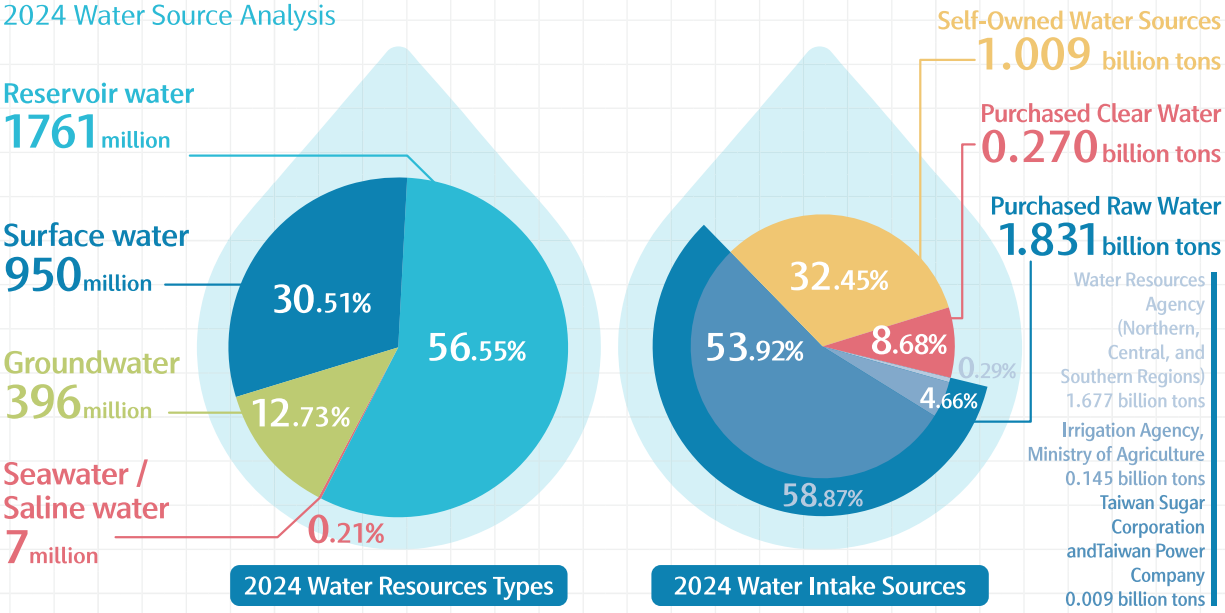
(1) Diversified Water Sources and Water Intake Overview

In alignment with the principles of responsible water source management, TWC currently operates 141 water supply systems, all sourcing raw water from Taiwan's main island and the Penghu area. To ensure supply stability, TWC draws from a diverse mix of water sources, including groundwater, surface water, reservoir water, and seawater/brackish water. The company also collaborates with the Water Resources Agency and the Irrigation Agency, Ministry of Agriculture, to procure raw water, jointly building a comprehensive and resilient water supply network.

According to the Aqueduct Water Risk Atlas (AWRA) developed by the World Resources Institute, no regions in Taiwan fall under high or extremely high baseline water stress categories.

Overview of TWC's Water Sources and Raw Water Intake

2024 Water Source Analysis



Note: Percentages of each water source have been rounded to the second decimal place.

The changes in raw water intake volumes from various sources over the past three years are summarized in the table below. These figures reflect TWC's ongoing efforts to optimize the allocation and utilization of water resources, while also demonstrating the effectiveness of its diversified water source strategy. The table presents intake volumes by source type, including groundwater, surface water, reservoir water, and seawater/saline water.

TWC Raw Water Intake Statistics by Source Type (2022–2024)

Year	2022	2023	2024
Item	Water Intake Volume (100 million tons)	Water Intake Volume (100 million tons)	Water Intake Volume (100 million tons)
Groundwater	4.18	3.95	3.96
Surface Water	11.10	10.62	9.50
Reservoir Water	16.94	17.42	17.61
Seawater / Saline Water	0.08	0.10	0.07
Total	32.30	32.09	31.14

The table below presents TWC's raw water intake distribution over the past three years (2022–2024), including volumes from purchased clear water, self-owned sources, and various categories of purchased raw water. This comprehensive overview illustrates the structure of TWC's water sourcing strategy.

TWC Detailed Water Source Classification Statistics (2022–2024)

Year		2022	2023	2024
Item		Water Intake Volume (100 million tons)	Water Intake Volume (100 million tons)	Water Intake Volume (100 million tons)
Purchased Clear Water		2.38	2.59	2.70
Self-owned Water Sources		14.46	13.69	10.09
Purchased Raw Water	Water Resources Agency (North, Central, South Regions)	16.52	16.86	16.77
	Irrigation Agency, Ministry of Agriculture	1.27	1.33	1.45
	Taiwan Sugar Corporation & Taiwan Power Company	0.05	0.20	0.09
	Subtotal – Purchased Raw Water	17.84	18.39	18.31
Total		34.68	34.67	31.10

Note: Self-owned water sources are estimated.
Calculation method: 2024 total water intake (31.10) – Purchased Clear Water (2.70) – Subtotal of Purchased Raw Water (18.31) = 10.09

(2) Challenges and Responses Related to River Water Quality and Flash Flooding

In recent years, shifts in natural conditions, such as climate change, combined with rapid economic development and rising public expectations for quality of life have created complex challenges for TWC in managing water sources. While strengthening water source diversification and dispatch resilience, TWC also closely monitors the impacts of climate change on supply stability and water quality.

Taiwan's raw water sources are characterized by high variability. Under extreme weather events such as typhoons and intense rainfall, river water turbidity can surge dramatically in a short period, disrupting water infrastructure operations and significantly increasing the difficulty and cost of water treatment. In response, TWC is actively advancing the modernization of its facilities to enhance the resilience and responsiveness of the overall water supply system.

To address the challenges posed by high-turbidity river water, TWC is implementing a phased modernization and equipment replacement program across its water treatment plants to improve output stability and treatment efficiency. Currently, TWC operates 486 water treatment plants. As some facilities have been in operation for many years, aging equipment has begun to affect performance. To maintain original design capacity, ensure proper operation, and meet drinking water quality standards, TWC is continuously upgrading or replacing treatment equipment.

Specifically, modernization efforts are being carried out in 21 selected plants through a phased approach. By the end of 2024, six plants had been upgraded, with a total of seven scheduled for completion by 2028. An additional eight plants are planned for improvement after 2028.

1.2.2 Water Supply Management

Water supply management is a core function of TWC, ensuring that people across Taiwan have access to stable and safe water. This responsibility encompasses three key areas: supply stability, system resilience, and water quality assurance. In response to diverse sustainability challenges—such as climate change and evolving customer expectations—TWC is actively advancing the integration of water monitoring systems, implementing backup transmission pipeline projects, and modernizing water treatment plants to strengthen inter-system coordination and operational flexibility.

The company has established clear short-, medium-, and long-term goals, using quantifiable indicators such as improvements in the water sales rate and water supply coverage rate to track performance. In terms of water quality, TWC upholds high compliance standards and has adopted international certifications and advanced monitoring technologies to ensure water safety.

TWC's approach to water supply management reflects not only its technical expertise but also its corporate mission and commitment to delivering water that is sufficient in quantity, superior in quality, and supported by excellent service.

To reinforce this commitment, TWC has developed a performance evaluation mechanism that includes regular reviews and indicator tracking, continuously enhancing supply stability and coverage to safeguard public access to clean water.

Short-term Goals

- Set the 2025 target for average water outage duration at 24 hours per household.
- Actively advance Phase IV of the Water Supply Improvement Program for Non-Piped Areas (2022–2025), aim to connect an additional 12,600 households through water pipeline extension projects (an average of approximately 4,200 households per year), while implementing an annual calibration system for water meters with a diameter of 350 mm or above.

Medium- and Long-Term Goals

- Commit to increasing the water supply coverage rate through a rolling annual review mechanism, while systematically establishing a diversified set of annual targets for water supply, water sales, production, and service performance to ensure the fulfilment of our core mission: deliver a stable and sufficient water supply.

Through the following measures, TWC aims to continuously enhance its water management capabilities and build comprehensive resilience to address emerging challenges.

Water Supply Monitoring System

- TWC is actively implementing a water supply monitoring system to enhance operational coordi-nation across supply systems, enforce water pressure management, reduce pipeline breakage rates, and improve emergency repair efficiency to strengthen stability of the water supply.

Maintaining Water Supply Equipment Functionality

- Efforts are focused on maintaining the functionality of water supply equipment, reducing supply costs, ensuring supply stability, and enhancing overall water supply performance.

Backup Transmission Pipeline Projects

- TWC is proactively constructing backup transmission pipelines across various regions in Tai-wan, including 17 pipelines in the northern, central, and southern areas, with a total investment of approximately NT$19.95 billion. Adding to the existing total pipeline length of 68,468 kilome-ters, these new backup pipelines will further enhance the resilience of the extensive distribution network, increase flexibility in water dispatching, improve supply stability, and reduce the risk of pipeline failures. Key projects include the Yongheshan Reservoir Backup Water Intake Facility and the dual-pipeline transmission project from Nanhua Plant to Fengde Distribution Reservoir, ensuring regional water supply reliability.

Implementation of the Water Supply Monitoring Platform

- To strengthen cybersecurity and system stability, TWC launched the integration of its regional Water Supply Monitoring Platforms in October 2024. This initiative aims to reduce infrastructure and cybersecurity costs. Upon completion, the integration will enhance the stability of data transmission from monitoring equipment, thereby improving the quality of water supply policy-making and emergency response capabilities.

Integration with the Central Emergency Operation Center (EMIC)

- In June 2020, TWC upgraded its Water Outage Notification System to enable real-time alerts via Line. In June 2024, the system was further integrated with the Central Emergency Operation Center (EMIC), significantly improving the efficiency of outage notifications. Additionally, a new “Customer Water Supply Status Reporting” feature was launched, allowing users to report their supply status directly through the system during emergencies—especially when the 1910 customer service hotline is overwhelmed—providing a self-reporting mechanism for the public during disaster events.

(1) Water Supply Stability

TWC has implemented a range of concrete measures to fulfill its commitment to water supply management and system resilience. These include the development of an integrated water supply monitoring platform, the establishment of a water outage notification system, and the implementation of a customer service feedback mechanism.

The company has also set clear short-, medium-, and long-term targets for water supply and sales over the next six years. Water sales volume is projected to grow steadily from 2,620,617 thousand cubic meters in 2026 to 2,709,591 thousand cubic meters by 2031, reflecting anticipated increases in water demand. Notably, the water sales rate is expected to rise from 80.71% in 2026 to 81.93% in 2031, demonstrating TWC's ongoing efforts to reduce water loss. In parallel, the water supply coverage rate is projected to increase from 95.51% in 2026 to 96.41% in 2031, indicating continued expansion of service coverage to ensure stable water access for more communities.

These targets not only reflect TWC's forward-looking planning in water resource management but also underscore its sustained commitment to improving supply efficiency and service quality.

TWC Annual Projected Sales, Production, and Service Short, Medium, and Long-term Targets for Water Supply and Sales

Year / Item	Short-term Goals			Medium- and Long-Term Goals		
	2026	2027	2028	2029	2030	2031
Water Sales Volume (1,000 m^3)	2,613,607	2,630,073	2,646,642	2,663,316	2,680,095	2,696,980
Water Sales Rate (%)	80.71	81.04	81.30	81.53	81.73	81.93
Water Supply Volume (1,000 m^3)	3,238,269	3,245,401	3,255,402	3,266,670	3,279,206	3,291,810
Water Supply Capacity (1,000 m^3)	5,210,352	5,287,002	5,287,002	5,341,752	5,385,516	5,385,516
Water Supply Coverage Rate (%)	95.51	95.71	95.91	96.11	96.26	96.41

TWC has developed a comprehensive evaluation mechanism for water supply management, focusing on two key dimensions: water supply coverage and supply stability.

In terms of water supply coverage, TWC conducts monthly project review meetings led by the Deputy General Manager in charge of operations, in accordance with the Guidelines for the Application and Supervision of Pipeline Extension Projects under the Water Supply Improvement Plan for Non-Piped Areas. These meetings assess the implementation progress of forward-looking infrastructure projects. Additionally, TWC collaborates with the Water Resources Agency to hold alternating review meetings on pipeline extension progress, during which challenges are addressed in coordination with local governments. Each branch also holds monthly internal meetings to monitor project timelines and explore acceleration strategies.

For supply stability, TWC has established a performance indicator—"Water Supply Stability: Reduction of Service Interruption Time"—as part of both its internal accountability framework and the Ministry of Economic Affairs' performance evaluation system. Annual targets are set based on the average service interruption duration over the past three years. Furthermore, TWC reports to the Board of Directors on any service interruption events exceeding 12 hours and affecting more than 10,000 households on a monthly basis.

The total water supply volume for the past three years (2022–2024) is presented in the table below. While there was a decline in 2023, the supply volume showed a rebound in 2024.

To strengthen water supply resilience, the Taiwanese government has designated reclaimed water as a key focus of its water technology initiatives. Since 2013, the National Land Management Agency, Ministry of the Interior, has led the development of reclaimed water plants. These efforts are carried out in collaboration with the Water Resources Agency, competent authorities of designated industrial parks, and local governments in regions such as Taoyuan, Hsinchu, Taichung, Chiayi, Tainan, and Kaohsiung. By 2026, the nationwide supply capacity of reclaimed water is expected to reach 334,000 cubic meters per day.

Although TWC does not currently use or supply reclaimed water within its operational scope, the company actively supports the government's policy on diversified water resource development.

TWC Water Supply Volume and Coverage Rate Statistics (2022–2024)

	2022	2023	2024
Total Water Supplied (m^3)	3,246,505,642	3,179,746,300	3,230,827,173
Water Supply Coverage Rate (%)	94.55%	94.91%	95.04%
Volume of Reclaimed Water Supplied	TWC does not supply reclaimed water within its operational scope.		
Calculation Method for 2024 Water Supply Coverage Rate	→ Number of Households in Administrative Area (A): Sourced from household registration data → Population in Administrative Area (B): Sourced from household registration data → Number of Supplied Households (C): Sourced from the Operations Management System → Supplied Population (D): Calculated as Household Size (E) × Number of Supplied Households (C) → Household Size (E): Population in Administrative Area (B) ÷ Number of Households in Administrative Area (A) → Water Supply Coverage Rate: Supplied Population (D) ÷ Population in Administrative Area (B)		

(2) Drinking Water Quality and Safety

Beyond the construction and dispatch management of a stable water supply system, water quality safety is a critical component of TWC's water supply management. TWC recognizes that only by ensuring supply stability while continuously advancing water quality monitoring and management technologies can it truly fulfill its corporate mission of delivering "sufficient quantity, superior quality, and excellent service."

To realize this mission, TWC has established short-, medium-, and long-term goals, along with a performance evaluation mechanism to safeguard drinking water quality. The company is committed to enhancing testing capabilities, maintaining a dedicated customer service hotline for complaints and inquiries, and protecting public health and safety—ultimately generating positive social impact.

In line with its commitment to customer health and safety, TWC has implemented the following concrete actions.

ISO International Certification Ensures Water Quality Credibility

- In 2024, the laboratories of TWC's Districts 1 through 12 and the Pingtung District Office passed the ISO/IEC 17025 laboratory extension assessment. Additionally, the Chemistry Division of the Department of Water Quality passed the ISO/IEC 17025 surveillance assessment. These certifications enhance the credibility of TWC's water quality testing data and strengthen public confidence in water quality.

Advanced Testing Equipment for Accurate Water Quality Control

- TWC continues to enhance its water quality testing capabilities through the use of advanced laboratory instruments, including: Liquid Chromatography–Tandem Mass Spectrometry (LC-MS/MS), Gas Chromatography–Tandem Mass Spectrometry (GC-MS/MS), Gas Chromatography Analyzer, Atomic Absorption Spectrometer (AAS), Inductively Coupled Plasma–Atomic Emission Spectrometer (ICP-AES), Inductively Coupled Plasma–Mass Spectrometer (ICP-MS), and Ion Chromatograph.

Modern Monitoring Systems to Prevent Water Pollution

- TWC has installed a range of modern water quality monitoring instruments to strengthen surveillance efforts. In major river basins, automatic oil pollution monitoring devices and live fish bio-monitoring systems have been deployed to enhance early warning mechanisms for raw water contamination. These systems improve emergency response capabilities and ensure the safety of the water supply.

Emerging Contaminant Testing: 2024 Target Achieved

- In 2024, TWC conducted testing for priority-listed emerging contaminants, including organic compounds, disinfection by-products, and pesticides. A total of 1,194 tests were completed, achieving a quantitative target completion rate of 108.5%. Starting in 2025, TWC will further strengthen its in-house testing capabilities for per- and polyfluoroalkyl substances (PFAS). All district water treatment plants have completed testing schedules and procedures to ensure a more robust water quality management system.

TWC upholds its corporate mission of sustainable water supply and quality service by achieving a 99.94% overall water quality compliance rate and a 100% compliance rate for substances affecting human health. In addition to adhering to the drinking water quality standards announced by the Ministry of Environment, TWC has also established its own internal compliance targets.

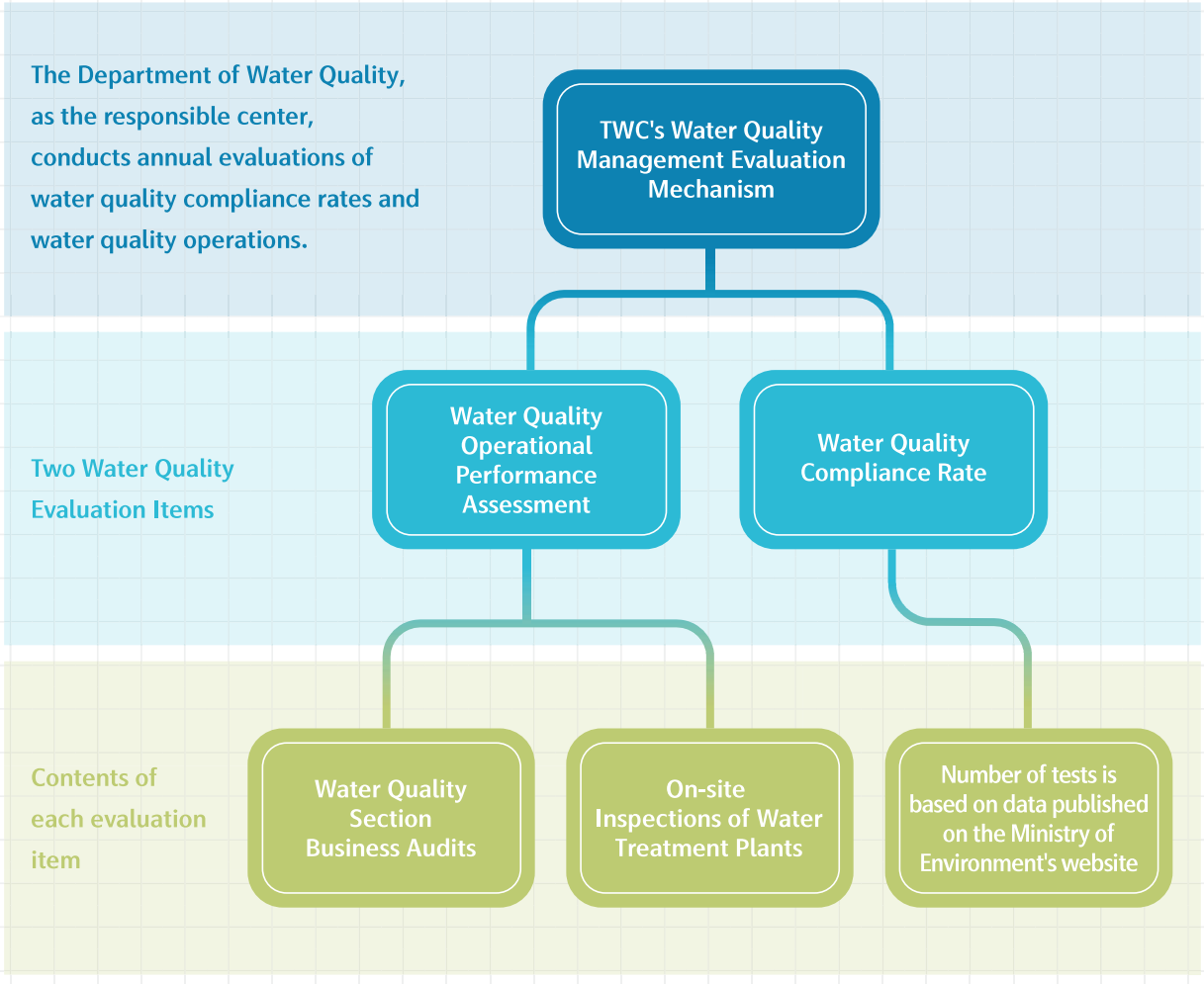
Recognizing its social responsibility to provide safe and reliable tap water, TWC has set a target of 100% compliance for substances that impact human health, based on the Ministry of Environment's sampling results.

TWC Short-, Medium-, and Long-term Targets for Water Quality Compliance Rate and Health-Related Contaminant Compliance Rate (2026-2031)

Target Item \ Year	2026	2027	2028	2029	2030	2031
Water Quality Compliance Rate	99.95%	99.95%	99.95%	99.95%	99.95%	99.95%
Health-Related Contaminant Compliance Rate	100%	100%	100%	100%	100%	100%

TWC ensures the delivery of safe and high-quality drinking water through a structured water quality management evaluation mechanism. The Department of Water Quality, as the responsible unit, conducts annual performance reviews on water quality compliance and related operations. This process reinforces the company's commitment to corporate responsibility and public health protection.

TWC's Water Quality Management Evaluation Mechanism



Four Key Performance Improvement Strategies for Enhancing Drinking Water Safety:

Enhancing Maintenance and Replacement of Water Quality Testing Instruments	Enhancing Water Quality Information Management
→ TWC conducts daily water quality testing in accordance with its internal water quality inspection standards to ensure tap water meets drinking water quality standards. → Environmental agencies also perform random sampling of tap water to verify compliance with drinking water standards. → Various modern water quality monitoring instruments have been installed to strengthen surveillance. → Automatic oil pollution monitoring devices and live fish bio-monitoring systems have been added to raw water sources.	→ Implementation of the Laboratory Information Management System (LIMS) project. → Development of the Advanced Detection and Tracking System (ADTS) for water quality early warning.
Improving Drinking Water Sources and Water Quality	**Strengthening Watershed Conservation, Management, and Pollution Prevention**
→ Promotion of the Water Safety Plan (WSP). → Strengthening water source quality management for drinking water.	→ Annual implementation of reservoir watershed conservation plans → Execution of conservation and management projects within reservoir catchment areas → Management of drinking water quality and quantity protection zones

1.2.3 Distribution Network

The distribution network plays a critical role in safely and efficiently transporting water from source to end users, it is one of TWC's core operational assets. In response to the challenges of climate change and growing water demand, TWC has adopted a multi-pronged strategy to improve transmission efficiency and enhance network resilience.

Through big data analytics, AI-driven innovations, and strategic collaboration with the ITRI, TWC has developed a comprehensive leak prevention and repair mechanism. The company is also actively planning and constructing a nationwide backup transmission pipeline network to mitigate supply risks associated with extreme weather events.

TWC remains committed to continuous investment in optimising its distribution infrastructure, from infrastructure, improving transmission efficiency and reducing leakage rates to strengthening backup supply capacity. These efforts ensure safe and stable water access for both the public and industry, advancing a more sustainable and resilient approach to water resource management.

To reinforce this commitment, TWC has established short-, medium-, and long-term goals aimed at continuously improving supply stability and coverage, demonstrating its dedication to public water security.

Short-term Goals

Pipeline Replacement

From 2025 to 2032, TWC plans to replace approximately 5,681 kilometers of pipelines to reduce the water leakage rate—roughly equivalent to traveling between Taipei and Kaohsiung round-trip about eight times. In parallel, 3,647 District Metered Areas (DMAs) will be established to enhance monitoring and management of the distribution network.

- A DMA divides the urban water distribution network into smaller zones, each equipped with flow meters to monitor parameters such as water flow and pressure. This setup enables the rapid detection of leaks or abnormal water usage, thereby improving the water sales rate and reducing water resource waste.

Reducing Water Resource Waste

- Upon completion of the project, an estimated 59.1 million cubic meters of water will be conserved annually—equivalent to approximately 1.17 times the effective storage capacity of the Hushan Reservoir.

Medium- and Long-Term Goals

- Enhance regional water supply stability by increasing backup dispatch capacity and overall water supply security, ensuring reliable service for both residential and industrial users.
- Provide optimal timing for the maintenance of aging pipelines while maintaining uninterrupted water supply during repair operations.
- Alleviate pressure on water resource development and support the government's goal of ensuring water availability. The water leakage rate is projected to decrease to 9.77% by 2032.

(1) Distribution Network Efficiency

Reducing the water leakage rate is a core policy and strategic objective of TWC. The company actively promotes related initiatives and rigorously implements mitigation strategies, accelerating the adoption of advanced international technologies to gradually enhance the performance of its distribution network. While infrastructure upgrades inevitably involve cost risks, extreme weather events may also damage pipelines and further impact distribution efficiency. In response to these challenges, TWC remains committed to allocating resources to optimize system operations, aiming to improve water transmission efficiency while minimizing environmental impact. Through a series of leak prevention and detection measures, the company not only streamlines water resource transmission but also strengthens the overall reliability and sustainability of its water supply network.

Specifically, TWC consistently carries out annual pipeline replacement projects to enhance the efficiency and resilience of its distribution system. The following table presents the results and replacement rates over the past three years:

Pipeline Replacement Length and Rate Over the Past Three Years

	2022	2023	2024
Replacement Length (km)	629	766	592
Replacement Rate (%)	0.95%	1.14%	0.86%

TWC 2024–2032 Short-, Medium-, and Long-Term Targets for Water Leakage Rate Reduction

Year	2024		Short-term				Mid-/Long Term			
	Target	Actual	2025	2026	2027	2028	2029	2030	2031	2032
Leakage Rate	12.00%	11.99%	11.55%	11.19%	10.86%	10.60%	10.37%	10.17%	9.97%	9.77%

To reduce the water leakage rate, TWC has adopted a multi-pronged approach. Following the effective implementation of its leakage reduction initiatives, the number of pipeline leakage incidents has shown a downward trend. From 2012 to 2024, the leakage density dropped significantly from 0.379 cases to 0.196 cases per kilometer, representing a 48.28% reduction.

Looking ahead, TWC has allocated NT$80.8 billion to implement the "Water Leakage Reduction Program" from 2025 to 2032. The company aims to further reduce the leakage rate from 12.00% at the end of 2024 to below 9.77% by the end of 2032.

Cross-Agency Collaboration

- TWC has established a dedicated monitoring integration project team to independently develop the WADA system, which is integrated with the Supervisory Control and Data Acquisition (SCADA) system. By leveraging time-series data and machine learning algorithms, WADA analyzes large volumes of SCADA data to identify anomalies. The system automatically sends email alerts to the personnel responsible in the affected areas, serving as a reference for regional inspection and repair. An incident database has also been established to support case tracking and management.

AI-Assisted Leakage Detection Technology

- In collaboration with the ITRI, TWC has developed a cloud-based AI-assisted leakage detection technology. This innovation enhances detection efficiency and enables early identification and timely repair of leaks

Regular Monitoring by Professional Teams

- Head Office: The Deputy Vice President in charge convenes monthly review meetings to assess the implementation of the leakage reduction program, tracking budget execution and improvement progress across regional branches.

TWC's Adjustment Plans

- Establishing a Comprehensive GIS System: TWC is developing a 3D geographic information system and continuously updating existing pipeline data.
- New Leakage Reduction Program: The 2025–2032 leakage reduction program has been launched to further improve water supply efficiency.
- Performance Tracking: By 2025, TWC plans to complete a tracking and performance evaluation mechanism for key water supply equipment improvements.

Cross-Agency Collaboration

- TWC collaborates with the National Development Council, Construction and Planning Agency, and local governments to update and verify existing and newly completed pipeline maps.
- The company also strengthens cooperation with other pipeline operators and road authorities to overlay maps and conduct on-site inspections before construction, reducing the risk of pipeline damage.
- In alignment with the Executive Yuan's "Expanded Investment Plan," TWC continues to enhance the quality of its water supply system.

(2) Distribution Network Resilience and Climate Change Impacts

In response to the challenges posed by climate change, TWC has incorporated the identification of critical pipeline infrastructure—those with high public safety and water supply impact—into its future business strategy. The company is actively implementing measures to enhance the resilience and disaster resistance of its distribution network.

As extreme weather events become more frequent, the risk of pipeline damage and water leakage increases, along with the threat of water shortages. In alignment with the Executive Yuan's four major water supply strategies" "sourcing," "conservation," "allocation," and "backup", TWC is proactively constructing transmission pipelines for water source allocation. These efforts aim to ensure system operability and rapid recovery during disasters. This not only stabilizes daily water supply but also strengthens emergency response capabilities,

supports growing industrial water demand, and minimizes environmental and public safety risks—ultimately contributing to both societal stability and economic development.

To address the risks associated with climate change, TWC has adopted the following measures and concrete actions:

Backup and Allocation Pipeline Projects

- In line with the "backup" and "allocation" strategies under the national water supply framework, TWC has implemented pipeline projects in high-priority areas facing water supply challenges. These include the Taoyuan–Hsinchu backup transmission pipeline, the downstream pipeline from the Niaozuitan artificial lake, the Liyutan pipeline to the Hsinchu Science Park Zhunan Base, the water transmission pipeline from the Tainan Shan Shang Water Treatment Plant, and the dual-line pipeline from the Nanhua Plant to the Fengde Distribution Reservoir.
- In accordance with the "Guidelines for Medium- and Long-Term Project Planning and Review for Government Agencies" issued by the Executive Yuan, TWC has proposed the "Backup Transmission Pipeline Projects" to facilitate project implementation.

Recent Achievements and Future Plans

- **2022 Completed Projects:** Baozhong Road backup pipeline in Xinpu Township, Second cross-harbor pipeline in Cijin District, Dual-line pipeline from Mudan Plant downstream to Shimen Battlefield and Guangfu Bridge.
- **2023 Completed Projects:** Hengxi–Jiaxing pipeline bridge in Sanxia, Raw water pipelines for Xipu and Daqian infiltration galleries, Dual-line pipeline from Mudan Plant downstream to Chongxi and Tongpu.
- **2024 Completed Projects:** Yunlin–Chiayi system backup dual-line pipeline, Diversion pipeline from Donggang River to the buffer pond of Fengshan Reservoir.
- **2025–2026 Planned Projects:** Nine additional backup and allocation pipelines are scheduled for completion.

Risk Identification and Safety Assessment Mechanisms

Addressing Climate-Related Risks

- Unplanned Risks: Natural disasters and other events may compromise the stability of the water supply system.
- Extreme Weather Events: May lead to pipeline damage and challenges in water resource allocation.

Safety Assessment Mechanisms

- In accordance with the "Regulations for the Inspection of Water Supply Equipment," TWC conducts safety assessments for critical water supply infrastructure that significantly impacts public safety and supply risk.
- The "Safety Assessment Plan" is reviewed every five years.
- An annual "Safety Assessment Report" is submitted to the competent authority for review and approval.

Future Plans for Enhancing Climate Resilience

- To effectively implement improvements for critical water supply infrastructure, TWC is currently developing a tracking mechanism for monitoring progress and a corresponding performance evaluation system. These mechanisms are expected to be finalized in 2025.

TWC has developed a comprehensive timeline of targets from short- to long-term, with a systematic approach aimed at strengthening the resilience of the distribution network and mitigating the impacts of climate change. These efforts are designed to ensure water security and supply stability for all. TWC will continue to evaluate and monitor the effectiveness of related measures through the following mechanisms:

Prioritization of Protective Measures and Risk Management

- Based on risk assessment results, TWC has established a prioritized sequence for implementing protective measures, including the formulation of disaster mitigation strategies and reinforcement projects.

Progress Tracking by Responsible Units and Expert Review

- Responsible departments monitor the progress of improvements to high-risk pipelines.
- Regular review meetings are held with external experts to ensure professional oversight.

Periodic Review of Safety Assessment Mechanisms	Monthly Key Project Review Meetings
→ The "Safety Assessment Plan" is reviewed every five years. → An annual "Safety Assessment Report" is submitted to the competent authority for review and approval.	→ For backup transmission pipeline projects, monthly milestone-based review meetings are held during the implementation phase to ensure timely completion.

1.2.4 End-Use Water Efficiency and Conservation Measures

End-use water efficiency—representing the "last mile" of water resource utilization—plays, playing a critical role in the sustainability of overall water use. As a state-owned water utility, TWC is committed to ensuring delivering a stable water supply and improving end-use efficiency. We manage these efforts through targeted initiatives and dedicated review mechanisms that uphold water quality and reduce potential social impacts. We manage related projects through dedicated initiatives and review meetings to maintain water quality and minimise potential negative social impacts. In response to increasing water scarcity, TWC plans to expand broaden the tiered water rate structure from the cur-rent four-tier system to a more granular multi-tier model. This aims to further enhance end-use efficiency by encouraging conservation.

TWC can make a significant meaningful impact on end-use water efficiency. From an economic perspective, improving efficiency helps customers reduce water bills and strengthens their water management capabilities. Tools such as smart meters and routine water usage notifications empower users to better understand and adjust their consumption patterns. From an environmental standpoint, enhanced end-use efficiency directly reduces water consumption and waste, thereby lowering the energy required for water extraction and treatment. This not only conserves water resources but also indirectly reduces carbon emissions, contributing to net-zero goals and supporting the ecological balance of water source areas.

TWC's policies, strategies, and commitments in this area include ongoing collaboration and close cooperation with the Bureau of Standards, Metrology and Inspection to conduct random inspections of water meters, maintaining a non-compliance rate below 4%. We also conduct annual replacement of ageing meters (excluding cases where replacement is not feasible due to user-related or unforeseen factors), with a target replacement rate of 99%.

To further advance end-use efficiency, TWC will expand its tiered pricing system to ensure that users with higher water consumption are subject to higher charges. To further promote end-use efficiency, TWC plans to expand the tiered pricing system to ensure that higher consumption results in higher charges. This pricing strategy is intended to raise awareness among general users and incentivize large consumers to invest in water-saving technologies. Revenue from water tariffs will be reinvested into improving service quality, supporting future operations, and enhancing disaster preparedness.

TWC will continue to strengthen end-use water management and conservation measures, aiming to foster a culture of water stewardship across society. Our goal is to ensure the sustainable use of water resources and contribute to Taiwan's water security and environmental sustainability.

1.3 Our operation and service

TWC is committed to establishing a comprehensive customer management system and a robust information security framework to ensure stable and safe water supply services for over 7.8 million households across Taiwan. As a key infrastructure provider supporting both public welfare and economic development, we prioritize the diverse needs of our customers—from residential users, who account for 97.89% of our customer base, to industrial and commercial clients that play a vital role in driving economic growth. In response to the challenges of the digital era, we have obtained ISO 27001 certification for our Information Security Management System, established a comprehensive cybersecurity governance framework, and implemented regular risk assessments and protective measures to safeguard customer data and privacy.

Upholding high standards in information security and customer rights protection, TWC not only complies with regulatory requirements but also fulfills its responsibility and mission as a public service provider. We continuously enhance service quality to create long-term sustainable value for society.

1.3.1 Customer Management

TWC's customer statistics for 2024 are summarized in the table below. Residential users remain our primary service group, accounting for 97.89% of total customers. Although commercial and industrial users represent a smaller proportion, they account for nearly 30% of total water consumption, highlighting TWC's critical role in both daily life and economic development.

TWC 2024 Customer Statistics

	Residential Customers	Commercial Customers	Industrial Customers	Total
Number of Customers (Households)	7,694,265	127,534	39,356	7,861,156
Percentage (%)	97.89%	1.62%	0.50%	100.00%

Note: Customer percentage figures have been rounded to the second decimal place.

TWC's 2024 water sales data presents the distribution of water consumption across different customer categories, offering insights into departmental water demand and the overall supply structure. Residential users remain the largest consumer group, accounting for 65.21% of total water supplied. Industrial users follow at 24.28%, while commercial and other users account for 5.31% and 5.20%, respectively. The total water supplied reached 2,581,868 thousand cubic meters.

TWC 2024 Water Sales Statistics

	Residential Customers	Commercial Customers	Industrial Customers	Other	Total
Water Sales (thousand m^3)	1,683,515	137,207	626,993	134,154	2,581,869
Percentage (%)	65.21%	5.31%	24.28%	5.20%	100.00%

Note: Percentages of water supplied by customer category have been rounded to the second decimal place.

TWC is committed to complying with government policies, regulations, and legal requirements to ensure that information assets are properly protected and that information security incidents do not compromise these assets. In accordance with ISO 27001 standards, we actively track improvements and preventive measures based on risk assessments to safeguard information assets and prevent potential harm to customer data.

To ensure the confidentiality, integrity, and availability of TWC's data, information, equipment, personnel, and networks, we have established the "TWC Information Security Policy." All information records, physical environments, equipment, software, hardware, personnel (including outsourced vendors), and procedures related to TWC's core operations must comply with this policy. Additionally, to enhance the handling of personal data through computers and related equipment, we have developed the "Standards for Handling Personal Data via Computers and Related Equipment," a formal ISMS documentation.

TWC implements its cybersecurity operations in accordance with the graded responsibility framework for information and communication security. All core information systems have adopted an Information Security Management System (ISMS) aligned with ISO/IEC 27001 standards. Since the Department of Information Management obtained third-party certification (Certificate No.: ISMS117) in 2007, TWC has passed annual audits to maintain the system's effectiveness and relevance.

We place a high priority on customer privacy protection, strictly adhering to the Personal Data Protection Act and related regulations and have established a comprehensive information security management mechanism. Our official website provides multiple channels for public feedback, including a 24-hour customer service hotline (1910) and a public opinion mailbox (available on the TWC homepage at http://www.water.gov.tw). In 2024, the 1910 Customer Service Center received a total of 1,077,857 calls.

Over the past three years (2022–2024), TWC has not received any complaints from customers or regulatory authorities regarding privacy violations, nor have there been any confirmed incidents of privacy breaches. Moving forward, we will continue to strengthen our personal data protection measures to ensure the security of customer information and uphold our high standards for privacy protection.

1.3.2 Information and Cybersecurity

TWC recognizes the critical role of information and cybersecurity in ensuring business continuity, maintaining operational stability, and enhancing service quality. Through a comprehensive information security governance framework, we safeguard the security and reliability of our systems and data. The following outlines TWC's core policies, commitments, and actions in the field of information and cybersecurity. These measures collectively form a robust defence network, creating a secure and trustworthy environment for the company and its stakeholders.

TWC manages its information and cybersecurity operations in accordance with the requirements for specific non-public agencies classified under Level A of the Cybersecurity Responsibility Grading System. We have established a sound cybersecurity management system and implemented a wide range of protective measures to ensure the security and stability of our operational systems, thereby preventing potential negative impacts on the economy, society, and the environment.

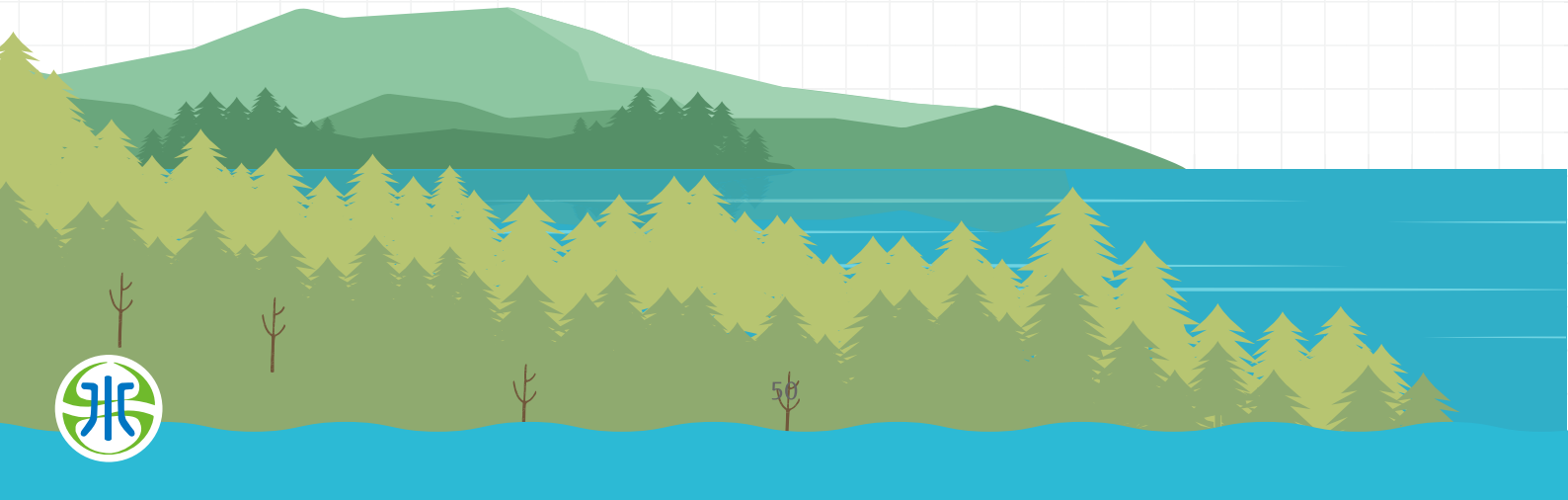
TWC has set a clear roadmap for information and cybersecurity, including the following short-term and mid-to-long-term goals:

Short-Term Goals

- 2024 Information Security Target – Level A
- 100% of cybersecurity incidents must be reported, responded to, and recovered within the required timeframe.
- Availability of core and high-security-level information systems must exceed 99.5% (downtime/total operating time ≤ 0.5%).
- 100% remediation rate for critical and high-risk vulnerabilities identified through vulnerability scans and penetration tests on core information systems.
- Email open rate for phishing simulation exercises must be below 7%.
- Click rate on attachments in phishing simulation emails must be below 4%.
- In 2024, all dedicated cybersecurity personnel must complete at least 12 hours of professional or competency-based cybersecurity training.
- In 2023 and 2024, all IT personnel must complete at least 3 hours of professional or competency-based cybersecurity training.
- In 2024, 100% of IT personnel must complete at least 3 hours of general cybersecurity awareness training.
- In 2024, 100% of general users and supervisors must complete at least 3 hours of general cybersecurity awareness training.
- Internal audits must find no more than two non-compliant software installations per department.
- Core systems must complete data backup operations as required, with a 100% backup completion rate.
- In 2024, each information system must undergo at least one account audit to verify appropriate access permissions.
- In 2024, each information system must conduct at least one backup data restoration test.

Mid-to-Long-Term Goals

- 100% of cybersecurity incidents must be reported, responded to, and recovered within the required timeframe.
- 100% remediation rate for critical and high-risk vulnerabilities identified through vulnerability scans and penetration tests on core information systems.
- All dedicated cybersecurity personnel must complete at least 12 hours of professional or competency-based cybersecurity training.



Information Security Measures

- All core information systems—including the Operations Management System, Water Billing System, and the official website—undergo annual third-party ISO 27001 recertification audits in accordance with the Cybersecurity Management Act, ensuring continued validity of certification (Certificate No.: ISMS117, issued by TUV).
- Information System Classification and Protection Standards: All information systems have been classified and corresponding control measures implemented. The appropriateness of system classification is reviewed at least once annually.
- Internal Cybersecurity Audits: Conducted twice per year.
- Business Continuity Drills: All core information systems undergo one drill annually.
- Security Testing: All core information systems undergo two vulnerability scans and one penetration test annually.
- Cybersecurity Health Check: Conducted annually to review network architecture, malicious activity on networks, endpoint devices, servers, directory server configurations, and firewall settings.
- Threat Detection and Monitoring Mechanism: Firewalls, IPS, WAF, and AD servers have been integrated into the SOC for real-time threat detection.
- Cybersecurity Protection Measures: Antivirus software, network firewalls, email filtering mechanisms (for systems with mail servers), intrusion detection and prevention systems, application firewalls, and advanced persistent threat (APT) defense mechanisms have been implemented for all externally facing core systems.

Employee Cybersecurity Training:
promoting internal cybersecurity awareness through ongoing education and training programs

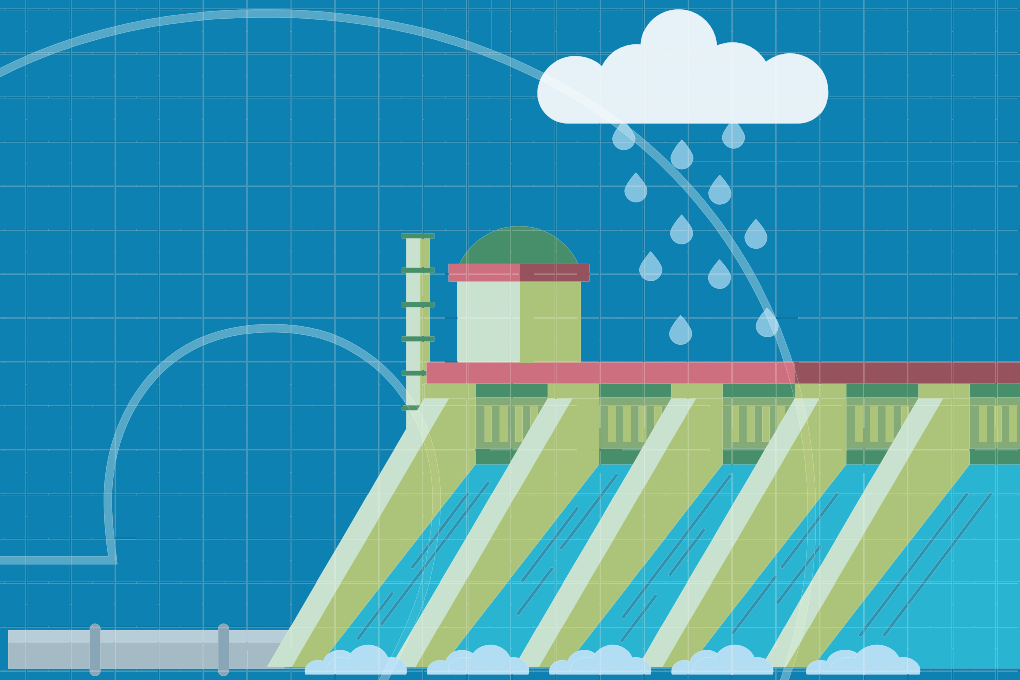
- From June 3 to 7, 2024, TWC held an "ISO 27001 Information Security Management System Lead Auditor Certification Course" at the Xinying Employee Training Center, with 20 participants successfully completing the training.
- •From July 15 to 16 and August 1 to 2, 2024, a "Transition Course for ISO 27001 Lead Auditor Certification (Old to New Version)" was held at the same location, with 40 participants attending.
- In August and September 2024, general staff and outsourced IT vendors participated in online cybersecurity training sessions organized by the TWC Headquarters.
- On July 4, 2024, a course on "Emerging Hacking Techniques and AI Security" was held at the GIS NTU Convention Center in Xinwuri.
- On August 7, 2024, a course on "Zero Trust Architecture and Cloud Service Security" was also held at the GIS NTU Convention Center in Xinwuri.

Management Evaluation Mechanism

- To ensure the effective implementation of the Information Security Management System (ISMS), TWC conducts risk mitigation actions and tracks corrective and preventive measures for any risks exceeding acceptable thresholds, in accordance with ISO 27001. These efforts are documented in the "Follow-up Report on Risk Mitigation Status."
- All core information systems undergo one business continuity drill annually, with monthly compilation of tracking and control reports on the continuity exercises.

TWC places strong emphasis on the continuous improvement of information security management. Through a systematic management framework and regular audits and testing mechanisms, we ensure the effectiveness and integrity of our ISMS. Beyond meeting international standards, we proactively strengthen protective measures to address increasingly complex cybersecurity threats. Through routine inspections and adjustment mechanisms, we maintain the security and reliability of our systems.

02



Accountable Governance

02 Accountable Governance

This chapter details TWC's governance framework, operational performance, residential water pricing policies, application of innovative technologies, and risk management mechanisms.

Corporate Governance Effectiveness

TWC received an **Excellent rating !!** in the Ministry of Economic Affairs' 2024 Corporate Governance Evaluation, demonstrating strong governance performance.

The Board of Directors' 2024 evaluation results achieved

- **4.87** Overall Average Score
- **4.97** Corporate Governance Committee's 2024 Evaluation Results Averaged
- **5** Directors' Land Transaction Review Subcommittee

Integrity in Governance

In 2024, TWC completed integrity risk assessments for its headquarters and all 16 management (engineering) branches, achieving **100%** coverage

TWC conducted **82** integrity awareness campaigns throughout the year, with a total of **19,312** participants, strengthening a culture of integrity across the organization.

An outsourced public opinion survey on pipeline engineering (new installation, laying, replacement, or leak repair) and occupational safety integrity successfully collected **193** valid samples. The resulting report serves as a reference for integrity governance decisions.

Technological and Innovative Development

TWC operates with "innovation" as a core management philosophy, focusing on four key research and development (R&D) areas: "Stable Water Supply," "Improved Water Quality," "Enhanced Key Technologies," and "Increased Operational Management Efficiency." Based on these, seven clear R&D objectives have been established.

TWC has formulated the "Research and Development Management Guidelines" to manage R&D activities. This includes evaluating research project effectiveness through a comprehensive Key Performance Indicator (KPI) system that assesses economic, technical, intellectual property management, knowledge dissemination, and environmental sustainability aspects, while also promoting innovation through incentive mechanisms.

1 Stable Water Supply

Research focuses on equipment corrosion prevention, water quality monitoring, and coagulation and flocculation in water purification, extending equipment lifespan and reducing water supply costs.

2 Improved Water Quality

Initiatives include water quality monitoring, odor treatment, and chemical application research, optimizing water treatment processes and expanding available water sources.

3 Enhanced Key Technologies

This involves integrating AI monitoring systems, developing resource recovery technologies, and pioneering innovative construction methods to promote a circular economy and optimize infrastructure.

4 Increased Operational Management Efficiency

Efforts are directed towards enhancing earthquake-resistant design standards, applying AI-enabled Leak Detection technology, and conducting financial analysis to enhance water supply performance and reduce costs.

Proactive Risk Response

Since 2023, the Risk Management Committee has elevated the former "Risk Management Project Team" to a higher-level decision-making unit, strengthening its authority and effectiveness in risk control. The committee convenes semi-annually for rolling reviews and revisions of annual implementation plans, integrating risk management concepts into the everyday responsibilities of every employee. This embodies our governance philosophy of "managing risks effectively during normal times and handling crises appropriately when they arise."

2.1 TWC's Operational Governance

As a state-owned company, TWC is committed to upholding relevant laws and regulations across all aspects of its operations, processes, products, services, environmental practices, labor and human rights, and integrity. This commitment helps maintain our corporate image, mitigate operational risks and liabilities, enhance ethical sensitivity, continuously strengthen internal controls, and foster an anti-corruption culture.

The water utility sector is characterized by its public and utility nature, positive externalities, natural monopoly, and capital intensity. Most countries operate their water utilities as public entities. Similarly, TWC operates as a state-owned enterprise, with the central government (Ministry of Economic Affairs) holding 86.28% ownership and the local government holding 13.72%. TWC is responsible for providing tap water to Taiwan's main island (excluding Taipei Water Department's jurisdiction) and Penghu.

To achieve public policy objectives, we are dedicated to enhancing operational efficiency and accelerating the modernization of water infrastructure to ensure a sufficient supply of high-quality tap water. We also continue to expand water supply coverage to Indigenous communities, remote areas, and regions without existing water infrastructure. Furthermore, we offer preferential rates for outlying islands, schools, and municipal public water use, and provide fire-fighting water free of charge. In line with the government's policy to support livelihoods and industrial development, TWC continues to advance new and expansion projects for our water infrastructure even under current water pricing conditions, ensuring the effective execution of public policy goals established by the government.

2.1.1 Corporate Governance

TWC's corporate governance is not merely about its operational efficiency; it also has a far-reaching impact on Taiwan's economy, environment, and social well-being. Effective corporate governance ensures a stable and secure water supply, which supports industrial and commercial development and public demand, contributing to economic efficiency. It also demonstrates the fundamental right of all citizens to access water while emphasizing its important role in public health. Regarding environmental sustainability, governance practices must fully support water resource protection and efficient resource utilization to prevent potential environmental strain. On a social level, fair and transparent governance plays a vital role in upholding the water rights of all users and fostering social harmony. Furthermore, robust governance is a fundamental pillar for maintaining a company's long-term operational stability and maintaining public trust, ensuring continued investment and reinforcement.

Effective governance mechanisms are essential for addressing potential risks and challenges. For instance, any room for improvement in the efficiency of governance mechanisms could impact on the stability and quality of water supply services, subsequently affecting customers'operations and daily lives. Addressing the water supply needs of remote areas also contributes to balanced regional development. Additionally, as a critical public utility, TWC's transparency, accountability, and efficiency in governance serve as a valuable benchmark for other business partners, collectively fostering a healthy business ecosystem.

In summary, TWC's corporate governance has multifaceted and critical impacts. Its effectiveness not only determines the company's sustainable development but is also closely linked to the nation's economic

resilience, environmental resource protection, and overall social well-being and equity. Therefore, continuously strengthening corporate governance structures and practices is a crucial and long-term valuable undertaking for investment for both TWC and greater society.

(1) Policy Foundation and Promotion Strategies for Corporate Governance

To strengthen corporate governance structure and practices, we adhere to the Executive Yuan's "Policy Guidelines and Action Plan for Strengthening Corporate Governance." Drawing from the "Corporate Governance Best Practice Principles for Listed and OTC Companies," TWC has developed its own "Corporate Governance Best Practice Principles." This document clearly outlines the company's policy direction, core commitments, and specific strategies for advancing corporate governance.

According to Article 1 of these principles, the purpose of TWC's corporate governance policy is to establish an excellent governance system and to promote a spirit of corporate self-governance. Our core objectives are to "improve the company's constitution" and "shape its management culture," committing to the dual goals of "promoting corporate operational development" and "fulfilling corporate social responsibility." To achieve robust corporate governance, the best practice principles outline six key principles:

01 Establish an effective corporate governance framework.

02 Protect the rights and interests of all shareholders.

03 Enhance the effectiveness of the Board of Directors.

04 Optimize the role of supervisors.

05 Respect stakeholder rights and interests.

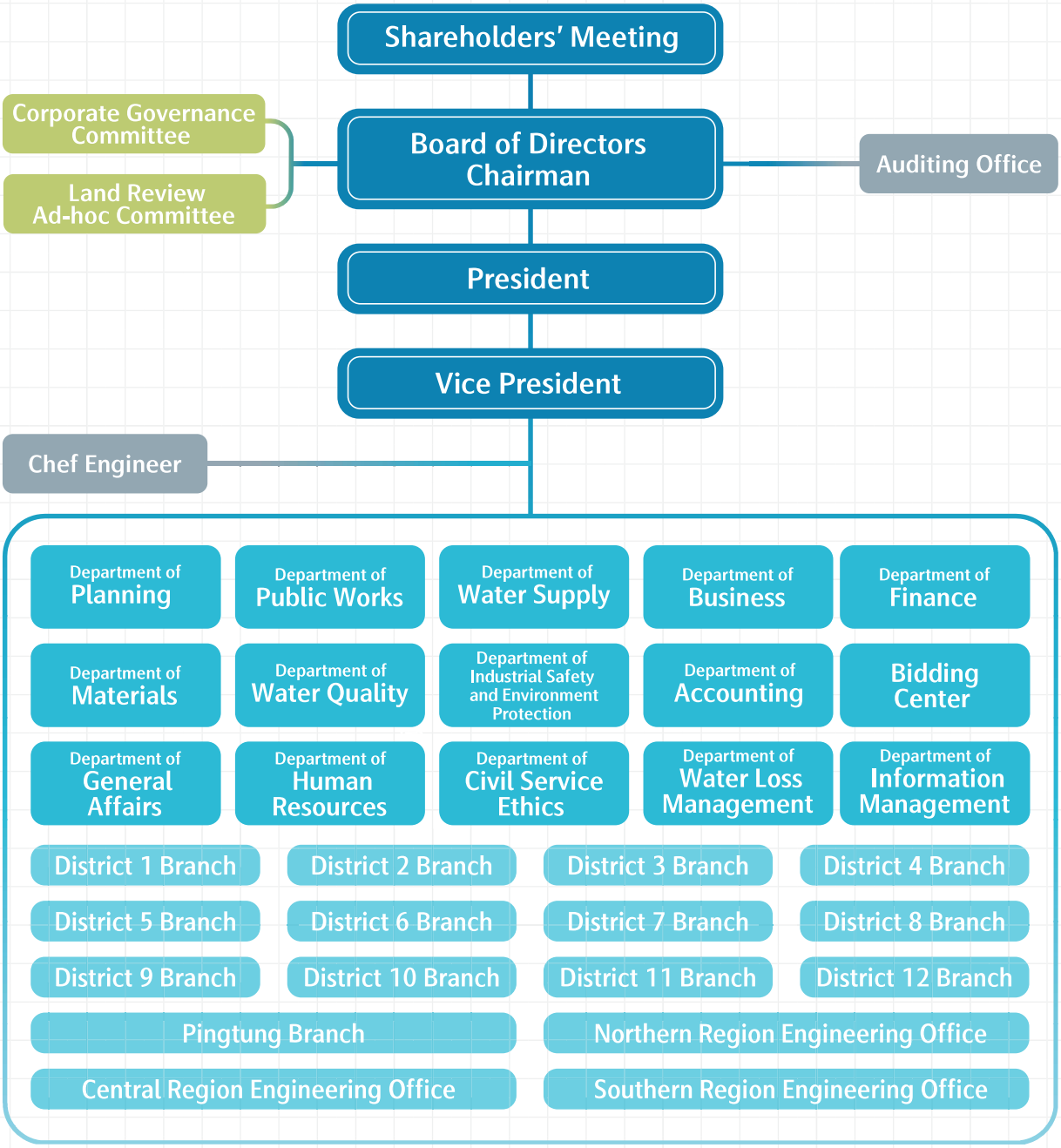
06 Increase information transparency.

Regarding corporate governance strategies, TWC adopts a phased approach, emphasizing the promotion of governance principles to foster internal alignment. We also adjust our strategies based on external factors, such as government policies and industry characteristics, as well as internal conditions, including resources, organizational culture, and resolutions from shareholder and board meetings. This pragmatic and effective approach ensures we achieve all corporate governance objectives.

(2) Robust Corporate Governance Structure and Operations

TWC has established headquarters and branch offices to align with its operational goals and business development needs, conducting its operations through a model of "centralized management, decentralized operations." The headquarters is responsible for the overall planning, supervision, and evaluation of institutional frameworks, and for coordinating human and financial resources. It consists of 16 de-partments, offices, and centers, including the Department of Planning. The branch network includes 13 Branch Offices and 3 Region Engineering Offices. Within the Branch Offices, various plants and teams manage the day-to-day operations of production, system operation, maintenance, sales, and customer service.

TWC Corporate Governance Organizational Chart



TWC is dedicated to establishing transparent and accountable corporate governance mechanisms to ensure sustainable enterprise development and protect the interests of all stakeholders. We not only fully disclose corporate governance information but also actively implement various governance mechanisms, demonstrating corporate integrity and responsibility.

a.Transparent Information Disclosure

TWC's official website features a "Corporate Governance" section, comprehensively disclosing information on shareholder meetings, board meetings, financial and non-financial data, and relevant corporate governance regulations. Stakeholders can access this public platform to understand the company's shareholder structure, corporate governance framework, and operational status, highlighting our commitment to information transparency.

b.Comprehensive Governance Mechanisms

- To enhance corporate governance effectiveness, the Board of Directors has established several functional committees. This allows directors, independent directors, and supervisors to actively participate in corporate operational decision-making through functional committees such as the Governance Committee, interactive sessions, and the Land Transaction and Exchange Review Committee, besides participating in regular Board meetings.
  - **Corporate Governance Committee:** Composed of five directors (including independent directors, labor directors, and government representatives or academic experts), with two independent directors serving as conveners. This committee is responsible for reviewing the direction of corporate governance, the progress and effectiveness of annual plan implementation, and other matters assigned by the Board of Directors.
  - **Land Transaction and Exchange Review Committee:** TWC has enacted the "Regulations for the Establishment and Review Procedures of the Board of Directors' Land Transaction Review Subcommittee" and formed this subcommittee (including two independent directors, two labor directors, and one director). All cases involving the acquisition of land for engineering, the public sale, disposition, or activation of idle land through superficies exceeding NTD50 million, are subject to preliminary review by this subcommittee before being submitted to the Board of Directors for resolution.
  - **Interaction Meetings between Independent Directors, Supervisors, the Board's Auditing Office, and Management:** To strengthen audit and risk management functions, TWC annually formulates an "Interaction Plan for Independent Directors, Supervisors, the Board's Auditing Office, and Management." Independent directors and supervisors mutually appoint a convenor to lead regular interactive meetings with management teams. These meetings are regularly held to discuss and deliberate on issues submitted for Board review or significant company matters, enabling participants to gain insight into critical areas such as financial reporting, internal control systems, operational information, and execution status, thereby effectively fulfilling management and oversight duties."
- As of December 2024, the company convened one shareholder meeting, 12 board meetings, five Corporate Governance Committee meetings, four Land Transaction Review Subcommittee meetings, and four Interaction Meetings between Independent Directors, Supervisors, the Board's Auditing Office, and Management. Resolutions and statements from all meetings are recorded and tracked, with regular reports on their progress provided to the Board of Directors, effectively enhancing corporate governance performance.

c.Regulatory Compliance and Internal Control Mechanisms

TWC's responsible business conduct policy is built upon a comprehensive framework of regulations. We strictly adhere to government regulations such as the Company Act, the Government Procurement Act, and the Labor Standards Act to ensure compliance in our corporate governance and business practices. Key management guidelines and standards are regularly reviewed by implementing units to assess practical feasibility, timeliness, and alignment with central regulations. These are then reviewed by the Legal & Regulatory Team in the Planning Department to address any ambiguities before finalizing amendments. Additionally, we compile and review all revisions to management guidelines and regulations every second quarter, submitting a report to the Corporate Governance Committee to ensure regulatory compliance and prevent legal violations.

To uphold integrity in operations, TWC has established robust internal control and review mechanisms, including internal audits and significant financial risk control. For the "Interaction Plan for Independent Directors, Supervisors, the Board's Auditing Office, and Management" in 2024, TWC's implementation summary is as follows:

Meeting Number	Agenda Items	Date of Meeting	Submitted to Board of Directors
Meeting 1	→ Preliminary review of the company's 2023 unaudited financial statements. → Preliminary review of the company's 2023 financial statement (including internal controls) audit and certification. → Preliminary review of the 2023 internal control system self-assessment report and internal control system statement (draft).	March 22, 2024	→ Reported to April Board meeting. → Approved by April Board meeting.
Meeting 2	→ Preliminary review of the renewal of the 2024 accountant's contract for "Financial Statement and Capital Increase Audit and Certification (including registration changes)." → Preliminary review of the accountant's independence and suitability assessment. → Preliminary review of the addition of "Site Information Facility Operation and Maintenance Management" to the "Information Cycle" of the company's internal control system. → Preliminary review of the addition of "Sustainability Report Preparation and Disclosure" and "Personal Data Risk Assessment and Management" to the "Related Management Control Systems" of the company's internal control system. → Preliminary review of the deletion of "Contractor Management Operations" from the "Engineering Management Cycle" of the company's internal control system.	April 26, 2024	→ Approved by May Board meeting.
Meeting 3	→ The company's 2023 audited financial report. → The company's 2024 first-half accountant's review report.	August 23, 2024	→ Noted as per meeting resolution.
Meeting 4	→ Preliminary review of 2025 Interaction Plan for Independent Directors, Supervisors, the Board's Auditing Office, and Management (draft). → Review of the accountant's recommendations for improving the internal control system in 2023. → Preliminary review of the company's 2025 internal audit plan (draft).	November 22, 2024	→ Reported to December Board meeting. → Noted as per meeting resolution. → Approved by December Board meeting.

Board of Directors' Land Transaction and Exchange Review Committee record for 2024 as follows:

Meeting Number	Agenda Items	Date of Meeting	Submitted to Board of Directors
1	On-site inspection for the "National Museum of Indigenous Peoples" Phase 1 land exchange case between the 7th District Office and the Kaohsiung City Government.	February 16, 2024	Approved by the December 2023 Board meeting (on-site inspection to proceed as per Board's opinion).
2	Re-evaluation of the land purchase reserve price for the "Guishan Second Pumping Station New Distribution Reservoir Project."	August 2, 2024	Approved by the August Board meeting.
3	Re-evaluation of the agreed-upon land sale price in conjunction with the Tainan City Government's "Tainan City Yongkang District Zhongxiao Section 8M Road Development Project."	October 18, 2024	Approved by the August Board meeting.
4	Re-evaluation of the agreed-upon land sale price in conjunction with the Kaohsiung City Government's "Kaohsiung Metropolitan Area Mass Rapid Transit System Urban Line (Yellow Line) MRT Project."	November 8, 2024	Approved by the August Board meeting.

(3) Corporate Governance Effectiveness Assessment

TWC has established a comprehensive mechanism for assessing and tracking corporate governance effectiveness, ensuring continuous optimization of its governance performance.

Responsibility Center Mechanism

- Building on the company's mission and vision, TWC annually sets "overall annual targets" for each responsibility center, based on its future operational strategic objectives. These targets are approved by the Chairperson and establish a system of key metrics for each level. The performance indicators are structured around the four perspectives of the Balanced Scorecard—Financial, Customer, Internal Process, and Learning & Growth. Key metrics include water supply revenue, customer satisfaction, meter-reading inspections and water flow monitoring, anti-corruption prevention activities, and procurement compliance monitoring. This approach ensures a balanced and healthy development of both financial and non-financial performance, as well as short-term and long-term achievements.

Regulatory Authority Assessment

- The Ministry of Economic Affairs, the governing authority, annually reviews internal and external environmental changes, major policy directions, and other factors to establish operational performance evaluation guidelines for its subordinate enterprises. These guidelines cover seven key areas: Business Operations, Financial Management, Production Management, Planning and Management, Human Resources Management, Environmental Protection and Industrial Safety, and Other. Control targets are set for each area, including metrics critical to operational performance and risk, such as Water Supply Coverage Rate, water supply stability, Water Leakage Rate reduction, return on assets, short-term solvency, industrial safety (occupational disasters, labor safety incidents), and Water Quality Compliance Rate. These control standards aim to enhance operational efficiency and reduce operational risks.

Corporate Governance Evaluation

- TWC participates annually in the "Corporate Governance System Assessment for State-Owned Enterprises" conducted by the Ministry of Economic Affairs. This comprehensive evaluation covers six key dimensions: the purpose of state-owned enterprises and the government's role, the competitive market environment for state-owned enterprises, fair treatment of stakeholders, information disclosure, transparency and accountability, board composition and responsibilities, and sustainable development.
  - Integrated corporate governance with sustainable development by establishing a Sustainability Development Committee as a functional committee under the Board of Directors, thereby strengthening the sustainable governance framework.
  - Introduced AI sensors and ground-penetrating radar technology, which not only improved the accuracy of underground Leak Detection but also addressed the challenge of transferring specialized leak detection expertise during generational transitions.
  - Collaborated with the Industrial Technology Research Institute (ITRI) to develop an AI-powered acoustic underground leak detection system, which was awarded the IWA Project Innovation Award.
  - Awarded the highest rating of "twAAA" by Taiwan Ratings Corporation for five consecutive years, demonstrating its financial resilience and flexible capital allocation. This consistently strong performance highlights the recognition of its overall operations and innovative achievements.

(4) Board Operations and Governance Mechanisms

a.Board member

TWC's highest governing body, the Board of Directors, in accordance with Article 14 of the company's Articles of Incorporation, consists of 15 directors and 5 supervisors. The nomination and selection process for board members follows the "Directions for the Appointment of Directors, Supervisors, and Other Important Positions in Public and Private Enterprises and Foundations Dispatched by the Ministry of Economic Affairs and its Subordinate Agencies and Institutions," the "Operational Essentials for Implementing Independent Director

Systems in Enterprises Subordinate to the Ministry of Economic Affairs," Article 35 of the "State-Owned Enterprise Management Act," and the "Selection Procedures for Directors and Supervisors of Taiwan Water Corporation." These members are elected at the shareholders' meeting.

The Board of Directors is comprised of the Chairperson, labor directors, independent directors, academic experts, and representatives from local county and city governments. All members possess the necessary knowledge, experience, skills, and qualities to perform their duties. Their professional backgrounds and experiences encompass areas such as water utility management, environmental engineering, civil engineering, hydraulic engineering, business administration, international business, marketing management, international trade, economics, information and finance, technology, accounting, financial management, public affairs, industrial development, architectural planning, urban planning, social (women's) welfare, gender equality, labor-management communication and coordination, and risk management. Notably, seven of these members are women (five directors and two supervisors), ensuring diverse perspectives in fulfilling the board's operational and governance functions.

Mr. Chia-Jung Lee serves as TWC's Chairperson, responsible for guiding company policy, while Mr. Ding-Lai Lee is the President, overseeing the company's operations and policy implementation. The Chairperson and President are not the same person, nor are they spouses or first-degree relatives, maintaining a clear separation of leadership roles. TWC's Board of Directors convenes meetings, generally monthly, in accordance with its rules of procedure. These meetings serve to review TWC's operational plans, key proposals, financial projections, business performance, and to deliberate on significant strategic issues.

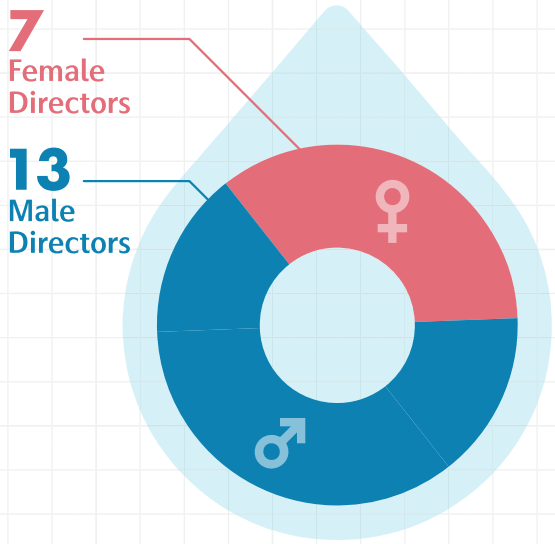
Overview of TWC Directors, Independent Directors, and Supervisors Qualifications

Title	Name	Gender	Age	First Appointment Date	Primary Education	Current Role & Experience
Board Chairperson	Jia-Rong Lee	Male	Over 50	2023/8/1	→ Master of Business Administration, National Chiayi University → Master of Civil Engineering, National Chung Hsing University	→ Board Chairperson, TWC → President, Vice President, Chief Engineer, Director of Public Works Department, Manager of First District Branch, Manager of Ninth District Branch, Deputy Manager, Section Chief, Section Head, Engineer, TWC
Director (Labor Union Representative)	Hsueh-Lun Liu	Male	Over 50	2023/8/1	→ Bachelor of Leisure Management, Minghsin University of Science and Technology	→ Engineer & Section Chief, Engineer, Deputy Chairperson of Enterprise Union, Standing Director, Director, Member Representative, Chairperson of Third Branch, TWC Third District Branch → Convener of Supervisors Board, National Federation of Energy Industry Workers' Union, R.O.C.
Director (Labor Union Representative)	Chi-Yuan Li	Male	Over 50	2023/8/1	→ Bachelor of Business Administration, National Open University	→ Engineer & Section Chief, Standing Director of Enterprise Union, Director, Labor-Management Representative, Welfare Committee Member, Occupational Safety Committee Member, Chairperson of Sixth Branch, TWC Sixth District Branch → Director & Representative, National Federation of Energy Industry Workers' Union, R.O.C. → Representative, Greater Tainan General Labor Union
Director (Labor Union Representative)	Wen-Yu Lin	Male	Over 50	2021/7/3	→ Bachelor of Bio-Industry Management, National Chiayi University	→ Technician, TWC Fifth District Branch → Chairperson, Standing Executive, Labor-Management Representative, TWC Enterprise Union Branch
Director	Yi-Feng Wang	Male	Over 50	2016/12/20	→ Ph.D. in Civil Engineering, National Taiwan University	→ Deputy Director-General, Chief Secretary, Director of Conservation and Management Division, Director of Water Disaster Prevention Center, Water Resources Agency, Ministry of Economic Affairs

Title	Name	Gender	Age	First Appointment Date	Primary Education	Current Role & Experience
Director	Chia-Ying Wu	Female	Over 50	2022/9/13	→ Master of Biochemical Sciences, National Taiwan University	→ Deputy Director-General, Small and Medium Enterprise and Startup Administration, Ministry of Economic Affairs → Counselor, Minister's Office, Ministry of Economic Affairs → Director, Patent Division II, Intellectual Property Office, Ministry of Economic Affairs
Director	Wan-Chin Chiu	Male	Over 50	2022/5/4	→ Master of Land Economics, National Chengchi University → Bachelor of Law, Soochow University	→ Specialist Commissioner, Division Chief, Deputy Division Chief, Supervisor, Section Chief, Department of State-Owned Enterprise Management, Ministry of Economic Affairs
Director	Hsiu-Yi Ting	Female	30-50	2021/7/3	→ Ph.D. in Business Administration, National Chengchi University	→ Professor, Department of Information and Finance Management, National Taipei University of Technology → Associate Professor, Department of Information and Finance Management, National Taipei University of Technology → Professor, Department of Finance, National Kaohsiung University of Science and Technology
Director	Feng-Yuan Chang	Male	Over 50	2023/1/31	→ Visiting Scholar, Department of Chemical Engineering, Princeton University, USA → Ph.D. in Chemical Engineering, National Taiwan University	→ Commissioner, Economic Development Bureau, Taichung City Government → Advisor, New Taipei City Government → Director, Economic Development Bureau, New Taipei City Government → Senior Specialist, Ministry of Economic Affairs → Chief Secretary, Economic Development Bureau, New Taipei City Government
Director	Kuo-Jung Huang	Male	30-50	2023/1/31	→ Master of Marketing and Communications Management, National Sun Yat-sen University	→ Deputy Magistrate, Pingtung County Government → Director, Research, Development and Evaluation Commission, Pingtung County Government → Director, Secretary, Department of Agriculture, Pingtung County Government
Director	Jui-Hui Chang	Female	Over 50	2023/8/1	→ Graduate Institute of Environmental and Occupational Safety and Health, National Kaohsiung University of Science and Technology → Graduate Institute of Adult Education, National Kaohsiung Normal University	→ Director, Deputy Director, Environmental Protection Bureau, Kaohsiung City Government → Deputy Director, Drug Prevention Bureau, Kaohsiung City Government
Director	Li-Li Chiu	Female	Over 50	2024/8/23	→ Bachelor of International Trade, Dahan Institute of Technology	→ Deputy Magistrate, Miaoli County Government → Executive Director, Legislator Chen Chao-Ming's Congressional Office
Director	Ming-Lu Chou	Female	Over 50	2023/8/1	→ Master of Political Science, National Chung Cheng University	→ Senior Secretary, Deputy Director of Administration Department, Section Chief of Labor Welfare Section, Section Chief of Labor Relations Section, Yunlin County Government → Adjunct Lecturer, Department of Business Administration, National Formosa University
Independent Director	Shih-Fang Kang	Male	Over 50	2020/6/23	→ Ph.D. in Civil Engineering, Tohoku University, Japan → Master/Bachelor of Environmental Engineering, National Cheng Kung University	→ Professor, Department of Water Resources and Environmental Engineering, Tamkang University → Director/Supervisor, Chinese Taipei Water Works Association → Chairperson, Chinese Institute of Environmental Engineering → Director, Taipei Feitsui Reservoir Administration, Taipei City

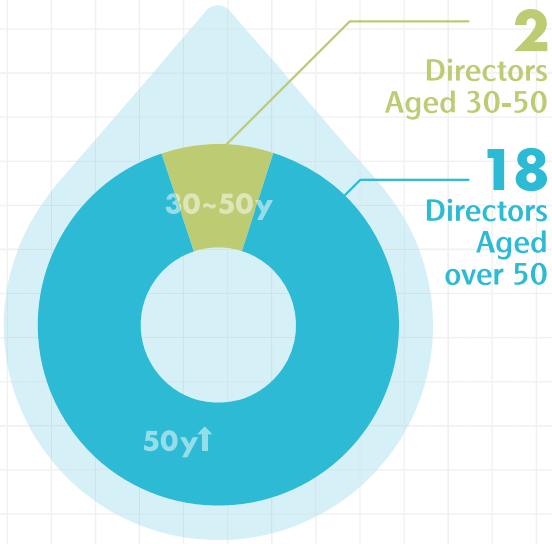
Title	Name	Gender	Age	First Appointment Date	Primary Education	Current Role & Experience
Independent Director	Sheng-Kai Su	Male	Over 50	2019/6/21	→ Ph.D. in International Business, Argosy University, Tampa Campus, USA → Master of Business, Iowa State University, USA → Bachelor of International Trade, National Chengchi University	→ Associate Professor, Department of Marketing Management, Takming University of Science and Technology → Director, Litong Biomedical Technology Co., Ltd. → Director, China-American Petrochemical Co., Ltd. → Consultant, Trade-Van Information Services Co. → Director, Taiyao Petrochemical Material Technology Co., Ltd. → Supervisor, Trade-Van Payment Financial Technology Co., Ltd.
Supervisor	Chung-Chuan Chiu	Male	Over 50	2019/6/21	→ Master of Civil Engineering, National Chung Hsing University	→ Director, Water Resources Bureau, Tainan City Government → Deputy Chief Secretary, Tainan City Government → Director, Sixth River Management Office, Water Resources Agency, Ministry of Economic Affairs → Director, Northern Region Water Resources Office, Water Resources Agency, Ministry of Economic Affairs → Deputy Director, Central Region Water Resources Office, Water Resources Agency, Ministry of Economic Affairs
Supervisor	Ting-An Fang	Male	Over 50	2023/1/31	→ Ph.D. in Architecture and Urban Planning, Chinese Culture University → Master of Urban Planning, National Cheng Kung University	→ Secretary-General, Keelung City Government → Deputy Director-General, Director of Urban Renewal Department, Chief Engineer, Chief Secretary, Section Chief, Deputy Chief Engineer, Department of Urban Development, Taipei City Government
Supervisor	Ching-Pin Chiu	Male	Over 50	2019/1/22	→ Ph.D. in Urban Planning, National Taipei University → Master of Urban Planning, National Chung Hsing University	→ Secretary-General, Deputy Secretary-General, Director, Deputy Director, Chief Secretary, Senior Specialist, Department of Urban and Rural Development, New Taipei City Government
Supervisor	Hsiu-Ying Hsiao	Female	Over 50	2021/7/30	→ Department of Accounting and Statistics, National Taichung Institute of Commerce	→ Director, Department of Budget, Accounting and Statistics, Changhua County Government → Senior Specialist, Section Chief, Specialist, Section Member, Directorate-General of Budget, Accounting and Statistics, Executive Yuan → Section Member, Department of Budget, Accounting and Statistics, Taiwan Provincial Government → Group Member, Criminal Investigation Corps, Taiwan Provincial Police Headquarters → Assistant Administrator, Accounting Office, Mingjian Township Office, Nantou County
Supervisor	Liang-Chu Li	Female	Over 50	2021/7/30	→ Master of Public Affairs, Tunghai University	→ Director, Department of Finance, Nantou County Government → Director, Nantou Office, Central Branch, National Property Administration → Director, Taoyuan City Office, Northern Branch, National Property Administration → Section Chief, Central Branch, National Property Administration

Board of Directors Gender Diversity Chart



Board of Directors Gender Distribution

Board of Directors Age Structure Distribution Chart



Board of Directors Age Distribution

b. Conflict of Interest Avoidance

TWC directors are expected to maintain a high level of self-discipline. If a director has a conflict of interest, either personally or through a legal entity they represent, regarding an agenda item before the Board of Directors, they must disclose the material nature of that interest during the board meeting. If there's a potential detriment to the company's interests, the director must recuse themselves from discussions and voting on that item. They also cannot exercise voting rights on behalf of other directors for that item. If the Chairperson is aware of a director's obligation to recuse themselves and the director fails to do so, the Chairperson must mandate their recusal. Furthermore, Article 14 (Conflict of Interest for Directors), Paragraph 1, of the Board Meeting Rules, stipulates that a director with a conflict of interest, either personal or through a legal entity they represent, concerning a meeting agenda item, must disclose the material nature of that interest during the board meeting. If there's a potential detriment to the company's interests, they are prohibited from participating in discussions and voting, must recuse themselves during discussions and voting, and cannot exercise voting rights on behalf of other directors. TWC reminds directors of their obligation to avoid conflicts of interest in every board meeting notice.

c. Director and Supervisor Training

In accordance with the "Taiwan Water Corporation Corporate Governance Best Practice Principles" and referencing the "Guidelines for Continuing Education of Directors and Supervisors of Listed and OTC Companies," TWC regularly plans and conducts training courses for its directors and supervisors (including newly appointed ones) on topics related to Corporate Governance. The company also designs diverse courses focused on corporate operations and Sustainable Development to continuously enhance the professional knowledge and skills of the Board of Directors, thereby strengthening its leadership and decision-making capabilities and ensuring it fulfills its duties of faithful execution and good management.

Based on the directors' academic, professional, and industry backgrounds, relevant training units and course information are provided to facilitate their enrollment in these programs. In 2024, all TWC directors met the statutory training standard, with a total training time of 156 hours and an average of 7.8 hours per participant. The goal of this external training is to ensure they grasp international trends, foster diverse perspectives, and ultimately enhance the company's competitiveness in an ever-evolving business environment. The training activities conducted are detailed below:

Board of Directors Training Overview

Title	Name	Training Date	Organizer	Course Title	Training Hours	Total Hours
Board Chairperson	Jia-Rong Lee	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	
Director (Labor Union Representative)	Hsueh-Lun Liu	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	13
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/10/24~ 2024/10/25	Ministry of Labor	2024 Labor Education Promotion Workshop - Union and Labor Directors Activities	7	
Director (Labor Union Representative)	Chi-Yuan Li	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	13
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/10/24~ 2024/10/25	Ministry of Labor	2024 Labor Education Promotion Workshop - Union and Labor Directors Activities	7	
Director (Labor Union Representative)	Wen-Yu Lin	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	13
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/10/24~ 2024/10/25	Ministry of Labor	2024 Labor Education Promotion Workshop - Union and Labor Directors Activities	7	
Director	Kuo-Jung Huang	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Director	Chia-Ying Wu	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Director	Yi-Feng Wang	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	
Director	Wan-Chin Chiu	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Director	Hsiu-Yi Ting	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	
Director	Feng-Yuan Chang	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Director	Ming-Lu Chou	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	

Title	Name	Training Date	Organizer	Course Title	Training Hours	Total Hours
Director	Li-Li Chiu	2024/9/26	Chinese Association for Financial Development	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	12
		2024/11/14	Chinese Association for Financial Development	Post-US Presidential Election Global Political & Economic Analysis	3	
		2024/11/18	Taipei Foundation of Finance	Sustainable Finance	3	
		2024/11/22	Chinese Association for Financial Development	New Trends in Circular Economy and Sustainable Management	3	
Director	Jui-Hui Chang	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Independent Director	Sheng-Kai Su	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	
Independent Director	Shih-Fang Kang	2024/10/4	Accounting Research and Development Foundation	Mastering Corporate Governance and Compliance Internal Controls from Court Cases	6	9
		2024/11/12	Accounting Research and Development Foundation	Three Steps to Proper Disclosure of Sustainability Reports	3	
Supervisor	Chung-Chuan Chiu	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Supervisor	Ting-An Fang	2024/8/1	Corporate Management & Sustainable Development Association	Analysis of Regulations and Practical Disputes Related to Boards of Directors	3	6
		2024/8/2	The Business Development Foundation of the Chinese Straits	Discussing Nature-Positive Growth for Enterprises from the COP28 Theme	3	
Supervisor	Ching-Pin Chiu	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	
Supervisor	Hsiu-Ying Hsiao	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	6
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
Supervisor	Liang-Chu Li	2024/6/7	Taiwan Institute of Directors	2023 Global New Legal Compliance Issues	3	7
		2024/6/7	Taiwan Institute of Directors	Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency	3	
		2024/11/1	Taipei Foundation of Finance	Business Integrity Principles	1	

Note：

- TWC designed and hosted two internal training courses for the Board of Directors in 2023, totalling six hours: "2023 Global New Legal Compliance Issues" and "Net-Zero Strategy & Low-Carbon Governance in a Climate Emergency." We continue to arrange diverse external training programs to enhance their professionalism, ensuring they faithfully execute their duties, uphold the due diligence of a prudent manager, and fully exercise their operational decision-making, leadership, and oversight functions.
- Ms. Li-Li Chiu was appointed as a new director on August 23, 2024.

d. Remuneration Policy

The compensation for TWC's Board of Directors members adheres to the "Schedule of Monthly Remuneration for Directors and Supervisors of State-Owned Enterprises Affiliated with the Ministry of Economic Affairs." Independent Directors receive a monthly salary remuneration of NT30,000. For Directors who hold concurrent positions, compensation is determined by the nature of their primary role: military personnel and civil servants receive NT8,500, while faculty members of public universities and private sector professionals receive NTD10,400. No additional bonuses, profit-sharing, or retirement/severance benefits are provided.

The annual remuneration for the Chairperson and President are is determined in accordance with Article 4 of the "Guidelines for the Management of Personnel Expenses and Salaries in Enterprises Affiliated with the Ministry of Economic Affairs." Their annual compensation is assessed and approved by the Ministry of Economic Affairs based on factors such as enterprise scale, achievement of business objectives, and operational performance, provided it does not exceed the annual salary of the Minister of Economic Affairs. This compensation is then reported to the Executive Yuan for record. Furthermore, the retirement and severance of the Chairperson and President of TWC are handled in accordance with the "Principles for Retirement, Severance, and Survivor Benefits for Directors and Managers of State-Owned Enterprises." Compensation for other personnel is formulated by TWC, considering the characteristics of the enterprise, productivity, operational performance, and capacity to bear personnel expenses. These proposals are then submitted to the Board of Directors for approval and reported to the competent authority for review.

e. Performance Evaluation

TWC conducts annual performance evaluations in accordance with the "State-Owned Enterprise Performance Evaluation Regulations." Evaluations for Independent Directors, Directors, and Supervisors are conducted under the "Directions for the Ministry of Economic Affairs and its Subordinate Agencies and State-Owned Enterprises on Appointing Directors, Supervisors, and Other Important Positions in Public and Private Enterprises and Foundations."

To enhance corporate governance and improve the functionality and operational efficiency of TWC's Board of Directors and its functional committees, the "Taiwan Water Corporation Board of Directors Performance Evaluation Guidelines" have been established. An annual performance evaluation process is conducted, wherein the Corporate Governance Committee's administrative unit distributes self-assessment questionnaires for the Board and its functional committees. The collected data is then compiled, and the evaluation results are recorded. These results are subsequently submitted for discussion at the Corporate Governance Committee meeting and reported at the following month's Board of Directors meeting.

- **Board of Directors Performance Evaluation Self-Assessment Questionnaire:** This questionnaire assesses the Board's involvement in company operations, the enhancement of Board decision-making quality, Board composition and structure, director selection and continuous training, and internal controls. It includes 26 indicators across 5 major dimensions, with a maximum score of 5 points. The overall average score for the 2024 evaluation was 4.87.
- **Corporate Governance Committee Performance Evaluation Self-Assessment Questionnaire:** This questionnaire evaluates the Corporate Governance Committee's involvement in company operations, the enhancement of its decision-making quality, its composition and structure, the selection and continuous training of its members, and internal controls. It includes 20 indicators across 5 major dimensions, with a maximum score of 5 points. The overall average score for the 2024 evaluation was 4.97.
- **Board of Directors Land Purchase, Sale, and Exchange Review Ad Hoc Group Performance Evaluation Self-Assessment Questionnaire:** This questionnaire assesses the ad hoc group's involvement in company operations, the enhancement of its decision-making quality regarding land matters, its composition and selection, and internal controls. It includes 12 indicators across 4 major dimensions, with a maximum score of 5 points. The overall average score for the 2024 evaluation was a perfect 5.00.

- **Individual Director Performance Evaluation:** This is conducted in accordance with the regulations set by the Ministry of Economic Affairs.

Corporate Governance Information Transparency Section

Corporate Governance Best Practice Principles	Annual Board of Directors Performance Evaluation Report	Board of Directors Members and Operations Information	Supervisors' Mailbox is disclosed in the "Corporate Governance Section"	Public Feedback Mailbox

2.1.2 Anti-Corruption

TWC is dedicated to implementing various anti-corruption measures aimed at reducing corruption and fostering a fair competitive environment. This prevents vendors from securing long-term contracts through improper relationships, which could exclude qualified competitors and lead to the waste or misuse of public resources.

TWC actively promotes integrity awareness and provides educational training to deepen employees' understanding and adherence to anti-corruption regulations. We've also established accessible reporting channels to ensure that any improper conduct is promptly discovered and addressed. We proactively prevent risks by strengthening internal controls and risk management to maintain the integrity and transparency of the company's operations. The following outlines our anti-corruption efforts across four key dimensions:

(1) Prevention and Risk Management

TWC's Department of Civil Service Ethics continuously provides oversight of subordinate ethics units to enhance integrity promotion efforts, ensure the thoroughness of performance evaluations by unit supervisors, regularly convene integrity meetings, and conduct integrity risk assessments. These efforts help us monitor potential integrity-related incidents and prevent their recurrence. In 2024, integrity risk assessments were conducted for TWC's headquarters and all 16 of its branches (engineering offices), achieving a 100% completion rate.

The risk assessments analyze both "event" and "personnel" typologies. Significant integrity risks identified include procurement-related leaks of official secrets, fraudulent acceptance of goods or services, document forgery, and unethical conduct. The analysis results and corresponding response plans are detailed in the table below.

Risk Event and Personnel Typology Analysis

Risk Event Typology Analysis	Risk Personnel Typology Analysis
→ For 2024, a total of 32 risk events were identified. Of these, 1 event (3%) was categorized as high-risk, 20 events (62%) as medium-risk, and 11 events (34%) as low-risk. → Upon analyzing the risk event typology, most incidents were engineering-related, followed by other categories. Our corresponding mitigation strategies primarily involved continuously collecting intelligence, ensuring oversight and joint review of procurement processes, and conducting special procurement audits. These measures aim to reduce the likelihood of risk events and uphold the company's integrity and governance effectiveness.	→ Analysis of risk personnel typologies for 2024 revealed that the primary concerns were operational irregularities and poor conduct. In response, we've focused on strengthening performance evaluations and pursuing administrative accountability.

(2) Education and Training Initiatives

TWC cultivates a robust corporate integrity culture and ethical standards through comprehensive education and training programs and a well-established institutional framework. This lays a long-term, stable foundation for integrity governance. Our key strategies include:

- **Integrity Education and Training:** We conduct integrity education and training to enhance employees' anti-corruption awareness. Following these training sessions, we use post-course questionnaires and assessments to measure participant satisfaction and comprehension, which helps us refine future course content and intensify outreach in areas our personnel find challenging.
- **Establishing a Code of Ethics and Conduct for an Ethical Corporate Culture:** To guide the behavior of TWC's Board members, management, and general employees in accordance with ethical standards, and to ensure stakeholders better understand our ethical principles, we've established the "TWC Code of Ethics and Conduct." This code covers principles of integrity, transparency, fair dealing, prevention of conflicts of interest and opportunities for personal gain, confidentiality, protection and proper use of company assets, compliance with laws and regulations, and the prohibition of gifts, bribes, or improper benefits. This emphasizes the importance of integrity, promotes correct values, and fosters a high-quality corporate culture.
- **Implementing Integrity and Ethics Regulations for Employee Conduct:** We consistently promote employee adherence to regulations such as the "Guidelines for Employee Interaction with Vendors," "Employee Integrity and Ethics Regulations," "Procedures for Handling Received Gifts," "Procedures for Handling Influence Peddling and Lobbying Incidents," and "Procedures for Handling Entertainment and Social Engagements." These are all accessible on the TWC official website's e-regulation query system, allowing every employee to easily review conduct guidelines and disciplinary actions. We also mandate that all levels of management supervise their subordinates to ensure strict compliance, aiming to embed these practices into our corporate culture to foster beneficial outcomes, eliminate malpractices, and prevent future issues. Employees with questions regarding ethical conduct can consult the Department of Human Resources.
- **Strengthening Whistleblower Protection Mechanisms and Establishing Standardized Procedures:** To enhance whistleblower channels and provide related protection measures and rights for secure whistleblowing, TWC has enacted the "Taiwan Water Corporation Whistleblower Protection Guidelines." These guidelines clearly define the scope of whistleblowing, procedures, and protections for whistleblowers' rights, encouraging individuals to expose misconduct and help combat illegal activities while safeguarding their employment rights and personal lives. Reported cases are handled by designated personnel from each unit in accordance with the "Taiwan Water Corporation Implementation Essentials for Confidentiality of Whistleblower Identities."
- **Enhancing Integrity and Ethics Regulations and a Lobbying Registration System:** To effectively promote integrity and ethics regulations and the lobbying registration system, TWC's "Government Ethics Section" on its website features an "Anti-Corruption Business Area." This section includes relevant regulations under "Integrity and Ethics Regulations," such as the "Operational Guidelines for the Registration and Investigation of Lobbying by the Executive Yuan and its Subordinate Agencies," "Ministry of Economic Affairs' Employee Integrity and Ethics Regulations," "Ministry of Economic Affairs Taiwan Water Corporation's Guidelines for Employee Interaction with Vendors," and "Supplementary Requirements for Ministry of Economic Affairs' Employees' Interaction with Businesses during Traditional Festivals." It also provides procedures and registration forms for handling received gifts, entertainment, and lobbying for TWC colleagues' reference. Simultaneously, we actively conduct employee integrity and ethics training and strongly encourage colleagues to adhere to the "Civil Servant Integrity and Ethics Regulations" and "Procurement Personnel Ethics Guidelines" during procurement activities. In 2024, TWC recorded 7 integrity and ethics registration events, with no lobbying registration events.
- **Establishing Diverse Whistleblowing Channels and Reporting Mechanisms:** To effectively combat corruption and illegal activities, TWC provides multiple reporting channels. If employees are involved in corruption or related illegal matters, they can report to the respective government ethics units. The reporting channels are as follows:

Adress	No. 2-1, Section 2, Shuangshi Road, North District, Taichung City
Tel.	04-22221112
Fox.	04-22233905
Mail	hqiai1@mail.water.gov.tw General Management Office: Taichung Post Office Box 26-28 For other branch offices and engineering offices, please refer to the TWC website:

TWC 2024 Education and Training Outcomes

2 cases of procurement integrity platform		
2024 Integrity Education and Outreach:		
2024 Initiatives	**Number of Sessions**	**Total Participants**
Water Pipeline Engineering & Occupational Safety Integrity Outreach	14	921
Integrity and Ethics Regulations Outreach	22	1,141
New Hire Integrity Outreach	7	418
Social Engagement Outreach	39	16,841
Total	**82**	**19,321**

(3) Monitoring and Execution

To ensure the effective implementation of periodic and ad-hoc audit systems, supervise management, establish robust internal controls, and achieve fraud prevention in our operations, TWC's Department of Civil Service Ethics conducts annual special audits on key core businesses, public welfare-related operations, or high-risk activities.

We also solicit professional assistance from relevant operational units. In 2024, we completed two specialized business audits: "Water Pipeline Engineering and Occupational Safety Project Audit" and "2024 Material Management Project Business Audit." Additionally, we carried out a "2024 Project Clean-up for No Water Supply Areas" to conduct on-site spot checks across TWC's subordinate units. These efforts aim to encourage improvements, enhance administrative efficiency, and effectively achieve the company's integrity goals.

In 2024, 55 cases were filed through TWC's integrity complaint hotline, fax, and email (from "accepted complaints" and "other" sources). Following investigations, 21 cases resulted in administrative accountability, and 49 cases involved administrative handling, all promptly transferred to relevant operational units for explanation or resolution. Specifically, one employee received a major demerit, two employees received demerits, nine employees received warnings, and seven employees received other disciplinary actions. Furthermore, no vendors had their contract awards revoked, contracts terminated, or contracts rescinded.

There were also no vendors published on the government procurement gazette under Article 101 of the Government Procurement Act. However, three vendors were penalized based on contractual terms.

In one ongoing case, a technician and other personnel are suspected of jointly illicitly benefiting a vendor in matters under their supervision. The case has been indicted by the Taiwan Keelung District Prosecutors Office and is currently under review by the Taiwan Keelung District Court. TWC has conducted an administrative investigation, resulting in disciplinary actions against three personnel involved and four relevant supervisors. Additionally, the company has filed a civil lawsuit against the implicated employees to seek compensation for losses incurred.

Moreover, in 2024, we commissioned an external survey on public opinion regarding integrity in pipeline engineering projects (new installations, laying, replacement, or leak repairs) and occupational safety. This survey yielded 193 valid samples, and the resulting report is used as a reference for the company's integrity governance.

(4) Continuous Review and Improvement

TWC regularly holds integrity meetings and integrity work review meetings to comprehensively assess the progress of our integrity initiatives. All anti-corruption risk control efforts for this year have been completed as planned. In 2024, fraud prevention and integrity risk management implementation and achievement were incorporated into the performance evaluation metrics for responsibility centers. Annually, the company sets anti-corruption outreach targets through the "Anti-Corruption Business Control and Scoring Table" and requires all subordinate government ethics units to submit their implementation results. Currently, all progress is on track and meets expectations.

In 2024, 17 integrity meetings were held, all chaired by the head of the organization. These meetings focused on reviewing and revising various business fraud prevention measures, generating 40 special reports on prevention measures, discussing 50 proposals, and addressing 6 ad-hoc motions. The discussions included conveying superior-level integrity laws and policies, and through special reports and proposal discussions, collaboratively deliberating and strategizing preventive measures for potential deficiencies or risks. This aims to thoroughly implement clean governance, rectify organizational discipline, and enhance administrative efficiency.

Anti-Corruption Information Transparence Section

Complete TWC "Integrity and Ethics Regulations"

2.1.3 Penalty Records

For penalty cases in 2024, TWC actively cooperated with rectification efforts to prevent similar incidents from recurring. In 2024, there were no significant incidents of non-compliance related to product labelling, marketing communications, or voluntary codes.

Summary of TWC Administrative Penalties in 2024

Unit	Fine Amount (NTD)	Description of Violation	Subsequent Improvement Measures
First District	60,000	Fined for exceeding aluminium levels at Laomei Water Treatment Plant, violating drinking water quality standards.	→ Completed repair of water purification equipment (flocculator rotation to accelerate suspended solids coagulation) and adjusted operational mode. → Re-established the chemical dosing curve for Laomei Plant for future operational reference.
Third District	60,000	Fined for exceeding total trihalomethane levels at the Newpu Water Treatment Plant's distribution point, violating drinking water quality standards.	In response to the water source pollution incident in Guanxi's Fengshan Stream, which led to the Newpu Water Treatment Plant's distribution point exceeding drinking wat'r quality standards, the following improvements were implemented: → Enhanced continuous monitoring of residual chlorine and total organic carbon (TOC) at the clear water reservoir outlet. When TOC monitoring values or sodium hypochlorite dosages show significant abnormalities, the mixing ratio of raw water intake and water supply distribution is adjusted immediately. → Strengthened inspection and cleaning of sludge in various water treatment units, such as sedimentation tanks, rapid filter beds, and wastewater tanks, to ensure normal function of each unit and effectively improve the treatment capacity of the water purification system, ensuring water quality meets drinking water standards. → Intensified operational personnel training on chemical dosing emergency response. Water quality samples from clear water and direct supply points at the distribution end now comply with drinking water quality standards.
Third District	6,000	Fined for violating the Waste Disposal Act due to an emergency sludge removal at Newpu Water Treatment Plant. This was in response to the Guanxi Fengshan Stream water pollution incident to eliminate potential pollution sources, leading to sludge volume exceeding the monthly permitted quantity.	→ This case involved an emergency waste liquid discharge into the Fengshan Stream. To prevent pollutants from accumulating in the sludge and becoming an internal pollution source, an urgent cleanup was conducted. This resulted in the volume exceeding the permitted quantity in the waste clearance document, leading to the fine. → The incident was an unforeseeable circumstance, and the emergency measures taken were necessary to eliminate pollutants. Following the incident, our relevant departments mobilized immediately and worked diligently to prevent the situation from worsening. Normal water supply was restored within three days, safeguarding public water safety and rights. → Strengthened training and promoted compliance with relevant regulations for industrial waste disposal. In the event of future emergencies where cleaning or emptying various pool units at the water treatment plant for urgent operational needs might violate the Waste Disposal Act or Water Pollution Control Act, approval will be sought from the competent authority in accordance with regulations to prevent similar incidents.

Unit	Fine Amount (NTD)	Description of Violation	Subsequent Improvement Measures
Fifth District	60,000	Fined for violating the Drinking Water Management Act due to turbidity and color exceeding drinking water quality standards at the Zhongpu distribution point of the Zhuchi Operating Office.	➔ Delivered letters re-emphasizing the importance of adhering to "Precautions for Water Quality Sampling with Environmental Agencies" before, during, and after joint sampling with environmental units. Also required all plants and offices to simultaneously collect water samples during joint sampling with environmental units and refrigerate them for two months to ensure samples collected by environmental units align with our internal control values. ➔ Conducted "2024 Water Purification Chemical Sampling and Water Quality Business Management Personnel Training" at Hushan Plant and Gongyuan Plant, respectively, to enhance personnel sampling training. ➔ Installed water quality monitoring equipment at Zhongpu Second Pumping Station to effectively monitor water quality changes in the downstream distribution network of Chuokou Water Treatment Plant. ➔ Before sampling by the Chiayi County Environmental Protection Bureau, confirmed the pressure changes upstream of the "Longxing Subdistrict - Anjiacuo Flow Meter" valve to prevent disturbances in the downstream distribution network of Chuokou Plant from affecting water quality stability.
Seventh District	60,000	Fined for violating the Drinking Water Management Act at the Dagong Road No. 47 water supply point in Yancheng District, Kaohsiung City.	➔ The Seventh District Office submitted a review report on December 27, 2024, which found no human error. It was determined that the violation was likely caused by contamination during the sampling transportation or testing process by the environmental agency. To protect the company's rights, the office filed an appeal on November 14, 2024, but the Kaohsiung City Government's appeal decision on March 12, 2025, rejected the appeal. ➔ The office has strengthened training for accompanying sampling personnel and will pay close attention to and record the environmental bureau's sampling procedures.
Eleventh District	10,000	Fined for violating the Water Pollution Control Act and regulations concerning wastewater treatment specialists. This was due to the Luguang Office's Xiucuo Water Treatment Plant failing to promptly fill a vacancy after the departure of their dedicated wastewater specialist.	➔ The Eleventh District Office's Luguang Office assigned an additional person for training in 2024 to serve as a certified reserve. The number of wastewater specialists' certifications at each office has been tracked to prevent vacancies during transfers or retirements, and the Operations Department regularly reviews whether there are sufficient wastewater specialists. ➔ Encouraged colleagues to participate in training and obtain certifications to expand the pool of reserve wastewater specialists. ➔ The head office officially requested all district offices on June 27, 2024, to comply with regulations. They also asked the Operations Department of each district office to strengthen inspections and promotions during plant visits, dispatch more personnel for training and certification to build up certified staff, and submit a roster of wastewater treatment specialists to the Human Resources Department for notification to relevant units in case of personnel changes. The head office will also strengthen oversight during site inspections to prevent similar fines.

Unit	Fine Amount (NTD)	Description of Violation	Subsequent Improvement Measures
Central Region Engineering Office	300,000	Fined for multiple failures to conduct cultural heritage construction monitoring, as required by the "Environmental Impact Statement for the Niaozuhtan Artificial Lake Downstream Water Supply Project - Niaozuhtan Water Treatment Plant," during land grading and excavation (September 2023 to February 2024). This was in violation of the "full process" requirement stated in the EIS.	→ The contract for the cultural heritage construction monitoring outsourced project was amended on June 28, 2024, to adjust the monitoring frequency to "full process" to comply with EIS requirements. → To prevent information discrepancies between the executive unit and the on-site supervision unit, subsequent monitoring operations were transferred to the Fourth Public Works Office of this department starting July 1, 2024. A communication group comprising the Public Works Office, the construction team, and the cultural monitoring vendor was established to confirm on-site monitoring needs in real-time.

Note:

1. Total: 7 cases, with total fines amounting to NTD556,000.
2. TWC's definition of significant fines for disclosure aligns with Article 4 of Chapter 2 (Material Information) of the "Taiwan Stock Exchange Corporation Procedures for Verification and Disclosure of Material Information of Companies with Listed Securities," According to this regulation, any single event with cumulative fines reaching or exceeding NT$1 million must be disclosed. To strengthen stakeholder communication and demonstrate accountability, Taiwan Water Corporation discloses the more significant penalties in this table.

Construction Site (Contractor) Penalties, Case Descriptions, and Improvement Plans

Project Name	Penalty Amount (NTD)	Violation Description	Corrective Actions
Guanmiao District Zhongzheng Road Pipeline Replacement Project	21,430	The contractor failed to maintain comprehensive construction insurance coverage for periods when no work was being performed, prior to project completion.	Insurance subsidies were deducted for the period without coverage, and a Class A penalty was imposed in accordance with our company's classification table for poor construction and breach of contract. ◦
Xinzhuang and Luzhou Offices Retaining Measures Penalty Case	6,000	Excavation of pipeline trenches with a vertical depth exceeding 1.5 meters without implementing retaining or other relevant safety measures.	Penalty imposed in accordance with contractual provisions.
Xinying District Gongcheng Street and Fuxing Road Lane 700 Pipeline Replacement Project	25,500	Failed to apply for and implement a construction site runoff reduction plan before commencing construction, as required.	During the company's "Second Engineering Supervision Meeting for 2024" on March 18, 2024, all units were reminded to meticulously implement the "Company's Work Assessment Guidelines." Should similar incidents recur, the unit director must report and discuss improvement measures at the management meeting. Furthermore, all units are now required to submit monthly reports on all penalized cases (including construction and environmental violations) for individual review at the "Engineering Supervision Meeting."

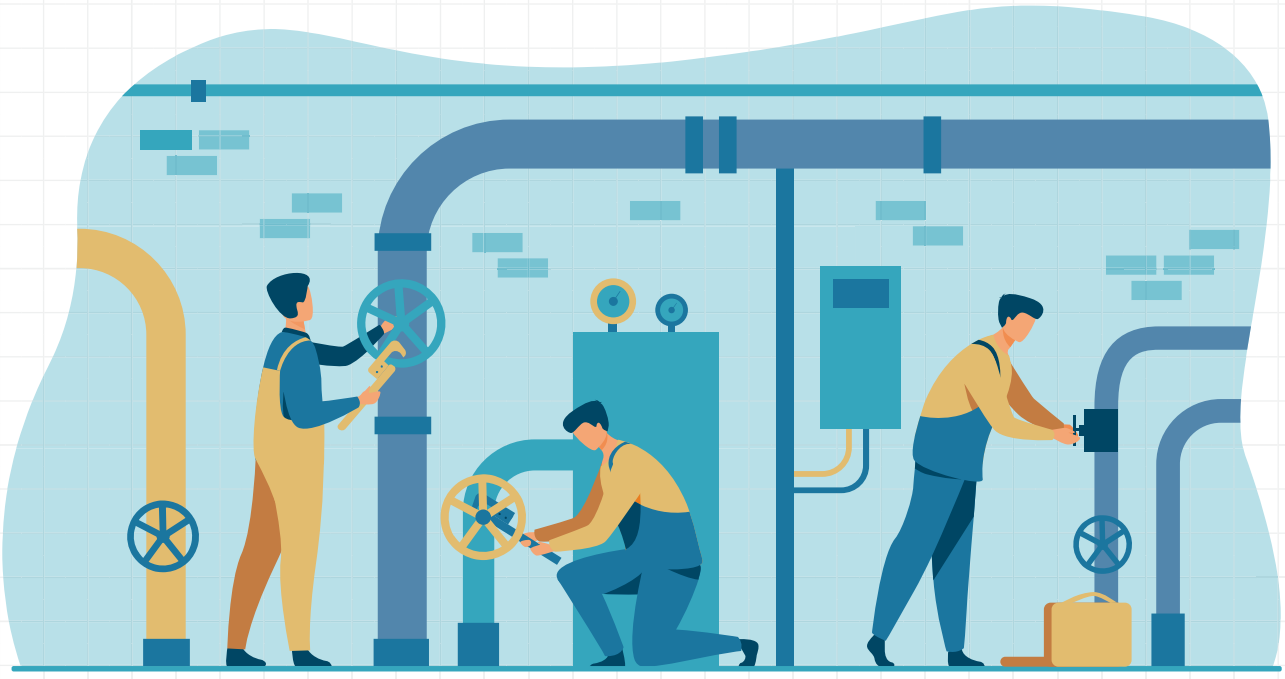
2.2 Operational Overview and Outlook

2.2.1 Operational Performance

Capital is the lifeblood of an enterprise, and financial health is the root of operational vitality. Overcoming operational challenges and improving the financial structure are crucial for TWC's sustainable development. TWC maintains a pragmatic approach, carefully evaluating and seeking opportunities for diversification in advantageous markets. In the future, in addition to striving for stable development of its core business, TWC must also leverage its core capabilities to explore various avenues for revenue growth.

In 2024, TWC's net loss from settled accounts was NTD 3.949 billion, an increase of NTD 1.683 billion compared to the budgeted net loss of NTD 2.267 billion. This was primarily due to decreased water supply revenue and increased expenses for power, machinery repair, outsourcing, interest, and depreciation. In 2024, the Ministry of Economic Affairs invested and subsidized TWC's fixed asset construction projects with NTD 3.345 billion and NTD14.73 million, respectively, as detailed in the table below. Operational performance is fundamental to corporate sustainability. TWC is actively reviewing the reasonableness of water tariffs and improving adjustment methods, such as tiered pricing and subsidy mechanisms, while proactively engaging with regulatory authorities and the public to optimise operational efficiency.

TWC follows regulations, filing corporate income tax returns on time and refraining from establishing offshore tax avoidance entities. Annual budgets and financial statements are published on the company's official website, demonstrating transparent and responsible tax disclosure and reporting. This public presentation of the company's operating status is part of TWC's commitment to sustainable corporate development.



Taiwan Water Corporation Financial Budget and Final Accounts

Item	2020 (Audited Settlement)	2021 (Audited Settlement)	2022 (Audited Settlement)	2023 (Audited Settlement)	2024 (Self-Compiled Settlement)
Operating Revenue	31,489,387	31,016,321	32,096,203	31,870,408	32,841,427
Non-Operating Income	411,694	524,824	871,226	635,691	1,288,523
Total Revenue	31,901,081	31,541,145	32,967,429	32,506,099	34,129,950
Operating Costs	26,889,725	26,830,247	27,501,999	29,939,949	31,802,222
Operating Expenses	3,550,209	3,520,980	3,652,095	3,696,213	3,890,682
Non-Operating Expenses	2,190,388	2,628,894	1,661,456	3,134,088	2,620,165
Income Tax Expense (Benefit)	-114,929	-200,128	80,649	23,668	- 233,706
Total Expenses	32,515,393	32,779,993	32,896,199	36,793,918	38,079,363
Net Profit (Loss)	- 614,312	- 1,238,848	71,230	- 4,287,819	- 3,949,413
Personnel Expenses	6,460,618	6,254,600	6,433,360	6,473,231	6,675,764
Payments to Government (including income tax, penalties, and other government levies)	412,657	452,439	541,661	441,958	336,612
Community Engagement and Philanthropic Expenses	78,357	77,295	77,846	103,705	78,529
Profit Before Tax	- 729,241	-1,438,976	151,879	- 4,264,151	- 4,183,119

Note:
All financial figures are in thousands of New Taiwan Dollars (NTD). The settlement figures for each year are presented as follows: 2019-2023 represent audited settlement figures, while 2024 represents self-compiled settlement figures adjusted to align with Generally Accepted Accounting Principles (GAAP) and account revisions.

Taiwan is annually impacted by natural disasters such as typhoons, earthquakes, and droughts. These events damage water supply facilities and lead to water scarcity, significantly increasing operational, human resource, and equipment maintenance costs, thereby threatening the daily water supply for citizens. TWC has established disaster prevention and relief business plans and related operational guidelines in accordance with disaster prevention laws and regulations. This framework aims to strengthen the disaster prevention and relief system, enhancing preparedness, emergency response, and post-disaster recovery and reconstruction efforts. Existing equipment is not covered by natural disaster insurance. In 2024, the major financial losses from disaster-related emergency repairs amounted to NT189,696 thousand, while water supply equipment reconstruction/restoration costs totaled NT 8,200,000 resulting in a grand total expenditure of NTD197,896,000.

TWC will continue to revise its disaster prevention and relief plans and operational guidelines based on past and potential emergency water supply incidents. This ongoing process will bolster capabilities across all stages—prevention, readiness, response, and recovery—to mitigate disaster and accident-related losses.

TWC Government Funding Overview

Investment Item	
Project Name	Water Resources Agency Allocation (NTD)
Public Budget	1,223,126,967
Improvement Plan for Pressurized Water Receiving Equipment for Older High-Altitude Community Users (2021-2024)	198,526,967
(1) Improvement of User Pressurized Water Receiving Equipment	146,000,000
(2) Water Resources Agency Cash Investment Operating Fee	52,526,967
Daan and Dajia River Interconnection Pipeline Project	910,000,000
Taichung to Yunlin Regional Water Transfer Pipeline Improvement Project	49,800,000
Second Phase of Subsurface Water Development Project	63,000,000
Shimen Reservoir to Hsinchu Interconnection Pipeline Project	1,800,000
Forward-looking Infrastructure Program Special Budget	2,122,082,000
Second Phase of Water Supply Improvement Plan for Outlying Islands	164,400,000
Zengwen-Nanhua Interconnection Pipeline Project	30,000,000
Tainan Shan-Shang Water Treatment Plant Water Supply System Improvement Project	249,800,000
Backup Dispatch Main Pipeline Project	62,000,000
Strengthening Flatland Artificial Lakes and Subsurface Water Promotion Project - Wuxi Phase II & Drought Resilience 2.0 Enhancement and Improvement	41,882,000
Fourth Phase of Water Supply Improvement Plan for Areas Without Tap Water - Tap Water Extension Pipeline Project	1,574,000,000
Total Investment Items	3,345,208,967
Subsidy Items	
Project Name	Water Resources Agency Cumulative Allocation (NTD)
0918 Earthquake Hualien-Taitung Area Tap Water Extension Pipeline Project - Hualien-Taitung Area Sustainable Development Fund Subsidy	14,730,038
Total Subsidy Amount	14,730,038

Operational Performance Information Transparency Section

Here are the complete Taiwan Water Corporation (TWC) Budget and Financial Settlement Reports

2.2.2 Affordable Water Tariffs and Public Water Rights

Taiwan Water Corporation (TWC) plays a crucial role in promoting sustainable water resource management. Our water tariff policy significantly influences not only the efficiency of water allocation but also social equity and environmental sustainability. A rational water pricing structure balances economic development, social equity, and environmental protection. Through a tiered water tariff design, we ensure access to basic water for economically disadvantaged groups while using appropriate price signals to encourage responsible water use and minimize waste. We also deeply recognize that any water tariff adjustments must carefully consider their impact on various social groups, especially the affordability for vulnerable populations. Moving forward, TWC will continue to optimize the water tariff mechanism. This will involve securing essential daily water needs while gradually reflecting the true value and environmental cost of water resources, thereby laying a solid foundation for Taiwan's sustainable water utilization.

(1) Implementing Mechanisms to Safeguard Basic Water Rights

TWC policy on water tariffs and accessibility is to "ensure low prices for basic household water consumption, guaranteeing all citizens can afford essential water for daily life." We are committed to carefully and responsibly balancing the pressure of water costs on both the public and industries with TWC's operational sustainability. Our specific actions to implement this policy and strategy include:

a. Diverse Communication Channels and Response Mechanisms

To address potential negative impacts related to water tariffs and accessibility, TWC has established multiple communication channels and response mechanisms. These include explaining water tariff policies and adjustment considerations to stakeholders through annual shareholder meetings, operating a 1910 customer service hotline for immediate inquiries, and maintaining a public feedback mailbox to gather suggestions from all sectors. These channels serve not only as platforms for collecting public opinion before tariff adjustments but also as crucial mechanisms for ensuring the transparency of water resource policies. This enables TWC to uphold its commitment to maintaining low prices for basic household water.

b. Fairly Tiered Water Pricing: Stepped Tariff Structure

To maximize the positive impact of water pricing and accessibility, TWC adheres to principles of fairness and universality by implementing a tiered water tariff structure. This structure keeps the cost of basic living water at a reasonably low price, ensuring that all households can afford essential water for daily life. Currently, the water tariff structure does not differentiate between user groups; it is solely based on consumption volume tiers:

- 1-10 cubic meters: NTD 7.35 per cubic meter
- 11-30 cubic meters: NTD 9.45 per cubic meter
- 31-50 cubic meters: NTD 11.55 per cubic meter
- 51 cubic meters and above: NTD 12.075 per cubic meter

c. Diverse and Convenient Water Bill Payment Channels and Services

TWC has developed a comprehensive system of diverse payment channels to enhance customer convenience. In addition to in-person payments at service centers, users can pay water bills online through TWC's official website and app. The company has also integrated various modern payment methods, including mobile payment services and automated payment mechanisms such as recurring deductions from postal savings accounts and financial institutions, as well as recurring credit card payments. Furthermore, to provide even greater convenience, TWC has partnered with financial institutions and convenience stores to expand water bill collection points. For those facing economic constraints, TWC offers installment payment plans to effectively ease short-term financial burdens, demonstrating thoughtful consideration for public needs.

d. Efficient Reconnection: Guaranteeing Water Access

To safeguard public water rights, TWC provides convenient reconnection services for users whose water supply has been suspended due to non-payment. Upon payment and application for reconnection, TWC promptly handles the subsequent meter installation, typically completed within one business day, ensuring that basic water needs are not disrupted for extended periods.

e. External Pipeline Subsidy Program for Water Affordability

To enhance water affordability and accessibility, TWC actively promotes and implements the Ministry of Economic Affairs' Water Resources Agency's "Water User External Pipeline Subsidy Program." This program provides subsidies for external pipeline construction costs (excluding road repair fees charged by road authorities) for general users with water meter calibers of 25 millimeters or less. The subsidy amounts are as follows:

- Full subsidy for low-income or medium-low-income households.
- Full subsidy for external pipeline construction costs up to 20 meters in villages with a tap water supply coverage rate below 70%. For lengths exceeding 20 meters, two-thirds of the cost for the additional length is subsidized.
- For cases not covered by the above two points, two-thirds of the construction cost is subsidized.

The public can apply for subsidies through two methods:

- After connection: After the external pipeline project is completed and the meter is installed and activated, applicants can apply for the subsidy with the local government by presenting the "User New Water Supply Installation and Payment Certificate" and relevant external pipeline subsidy application documents.
- Before connection: After TWC's external pipeline design is completed and payment is notified, applicants can apply for the subsidy with the local government by presenting the "Payment Notice" and relevant external pipeline subsidy application documents.

(2) Water Tariff Review Mechanism

Regarding water tariff reviews, TWC annually conducts comprehensive financial assessments. While TWC performs these yearly reviews to ensure reasonable water tariffs, any adjustments are considered a major government policy. These adjustments require deliberation by the Water Tariff Review Committee, convened by the Ministry of Economic Affairs. This committee gathers diverse input from government agencies, academics, industry representatives, and consumer groups to ensure that tariff adjustments are fair, reasonable, and meet the needs of Taiwan's populace and industrial economy. TWC adheres to policy directives and has enhanced communication with regulatory authorities, providing more comprehensive water supply cost analyses and assessments of public impact. This supports the government in balancing public water rights with sustainable water resource management.

In terms of practical implementation, TWC employs a tiered water tariff system, which helps balance the affordability of basic household water with encouraging conservation. However, long-term frozen water prices struggle to reflect actual supply costs, leading to increasing financial pressure on TWC to maintain and upgrade infrastructure. We will continue to engage with various stakeholders on water resource issues, aiming to foster public acceptance of water tariff policies through transparency and a pragmatic approach, enabling TWC and Taiwanese society to prosper together.

(3) Water Bill Affordability Analysis

TWC has long been committed to ensuring the accessibility and affordability of tap water services. An examination of customer water bill expenditures over the past decade reveals that TWC's services have remained

at a reasonable and stable price level, allowing average households to afford their basic daily water needs. While the average daily water consumption per person has shown minor fluctuations, the average monthly water bill per household has remained remarkably stable. The following data demonstrates that TWC's water tariff policy effectively achieves its goal of ensuring affordable water for the public:

Average Household Water Expenditure Over the Last Decade

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Average Daily Water Consumption per Person (cubic meters)	0.263	0.265	0.268	0.271	0.276	0.281	0.273	0.280	0.279	0.282
Average Monthly Water Bill per Household (NTD)	229	231	231	231	233	234	224	227	225	225

Note:
1. Average daily domestic water consumption (cubic meters) = Domestic water consumption ÷ Mid-year population supplied with water ÷ Total days in the year.
2. Households consuming 30 cubic meters of water or less per month account for 83.86% of all users. In 2024, the average monthly water bill per household was NTD225, demonstrating that basic household water consumption remains affordable for most families.

2.2.3 Technological and Innovative Development

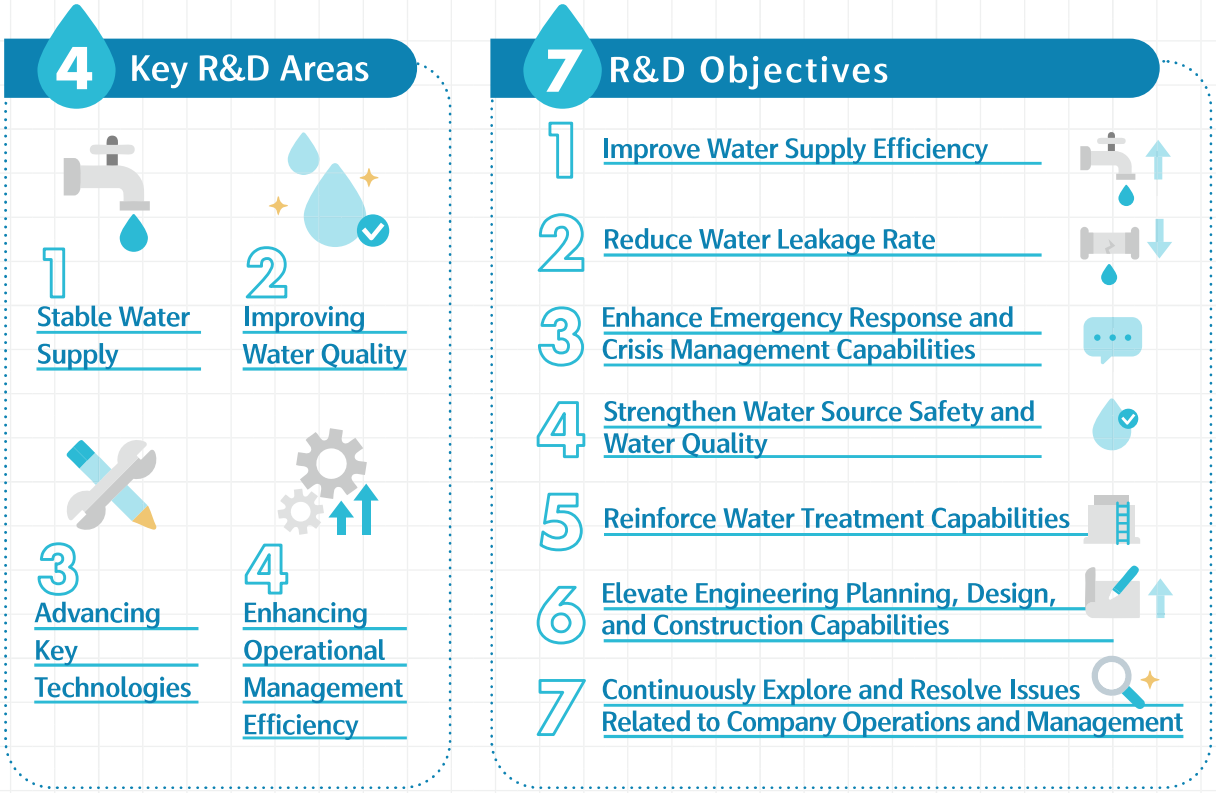
Taiwan is a global hub for the technology supply chain, making technological innovation and smart development the foundation of the competitiveness of all enterprises in this new era. As the most crucial water supplier on this technology-driven island, TWC continuously strives to integrate technological and innovative development into its entire water supply infrastructure and service applications. This enables smarter, more energy-efficient, effective, and precise operations and management across all aspects of our work, including water intake, purification, and supply. Through technological innovation and smart development, TWC will enhance its overall operational performance and environmental and social benefits.

TWC focuses on four key areas of technological research and development (R&D) and has seven specific objectives. We ensure the effectiveness of our R&D through rigorous management processes and outcome verification mechanisms. Our current approaches, including data management, AI applications, and new technology R&D, have positively impacted various stages of TWC's operations. We will continue to implement and strengthen our R&D capabilities to become a leading next-generation water utility with international recognition on this technological island.

(1) Innovation and Technology Development Strategy

"Innovation" is one of TWC's core business philosophies and has a fundamental value. Guided by our "Future Operational Strategy," we continuously promote technological and innovative development based on business needs, government policies, technological trends, and future development goals. This commitment aims to enhance operational efficiency and effectiveness, solidifying our role as a robust state-owned enterprise supporting social and economic development. Our core value is to provide customers with sufficient supply and superior quality tap water. Therefore, our technological and innovative development efforts concentrate on four key R&D areas focused on core technologies: "stable water supply," "improving water quality," "advancing key technologies," and "enhancing operational management efficiency." Based on these four key areas, we have outlined seven major R&D objectives, aligning them with TWC's operational goals and challenges, as shown below.

TWC's Key R&D Focus Areas and Objectives



TWC is committed to three core technological innovation promises: clearly setting seven major R&D objectives, rigorously executing project management, and evaluating R&D impact. These three commitments form a comprehensive cycle, ensuring that technological innovations effectively address practical challenges and promote sustainable development.

TWC's Three Major Commitments to Technological Innovation

1. Strategic Planning:
Dedicated to Achieving Seven Major R&D Objectives

To concretely implement its technology and innovation policy, TWC is committed to investing research and innovation resources and striving to achieve the following seven R&D objectives:

1. **Strengthen Water Source Safety and Water Quality:** Enhance water source protection and water quality monitoring capabilities through research and technological applications.
2. **Reinforce Water Treatment Capabilities:** Develop and implement advanced water treatment technologies to ensure the provision of high-quality tap water.
3. **Improve Water Supply Efficiency:** Optimize water supply system operations to reduce losses and energy consumption during the supply process.
4. **Reduce Water Leakage Rate:** Invest technological resources in leak detection, repair, and distribution network management to effectively reduce water loss.
5. **Enhance Emergency Response and Crisis Management Capabilities:** Improve rapid response and handling efficiency when facing water supply emergencies.
6. **Elevate Engineering Planning, Design, and Construction Capabilities:** Enhance the quality and efficiency of engineering project execution through innovative methods and technologies.
7. **Continuously Explore and Resolve Issues Related to Company Operations and Management:** Apply research-driven thinking to find solutions for various challenges in operational management.

2. Execution Management:
Implementing Research Project Management and Performance Tracking

We meticulously review research projects and rigorously manage relevant expenditures, including R&D, training, and overseas travel budgets, while tracking research outcomes.

3. Impact Assessment:
Stakeholder Impact Assessment and Environmental Sustainability Considerations

Throughout the process of technological and innovative development, we pay close attention to the potential impacts on stakeholders, including customers, suppliers and business partners, and employees, as well as the environment.

By adhering to the three technological innovation commitments: Strategic Planning, Execution Management, and Impact Assessment, TWC effectively allocates resources to critical technology areas, fulfilling its goals and responsibilities for sustainable water resource management.

(2) Innovation Management

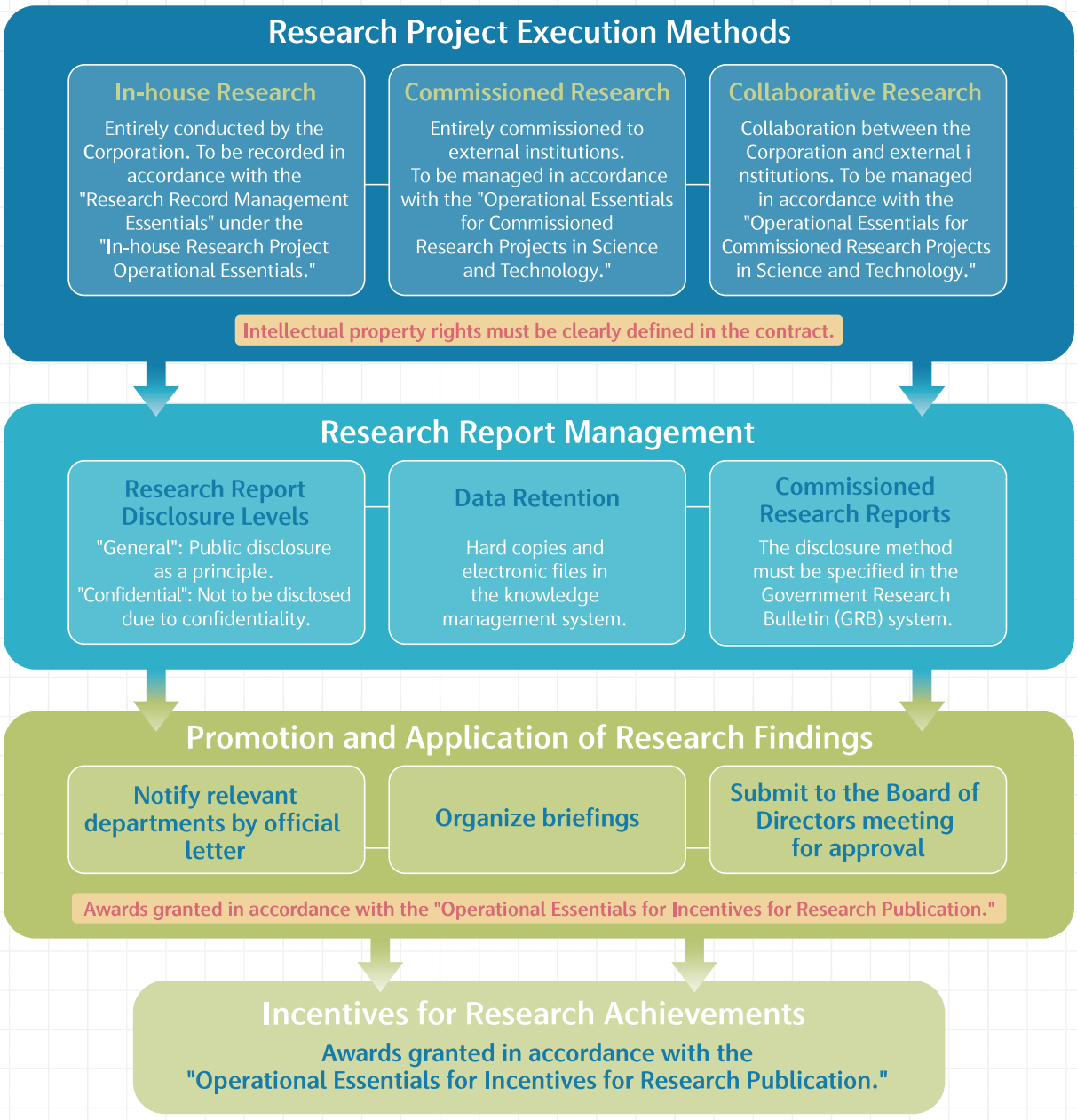
Effective R&D innovation management is crucial for efficiently achieving related goals and for adaptively adjusting objectives, resource allocation, and action plans. To foster R&D, development, and application, and to strengthen innovation and competitiveness, TWC has established the "Taiwan Water Corporation Research and Development Management Operating Guidelines." These guidelines also ensure proper oversight and management of R&D project execution effectiveness. All annual R&D projects are managed, tracked, and reviewed in accordance with these guidelines.

a. Research Project Management

Departments propose research projects based on business development needs, government policies, technological trends, or future development goals. The Department of Planning is responsible for overall planning, supervision, and auditing of R&D activities. When submitting a research project, a detailed research proposal must be included, along with a financial breakdown, expected benefits, Key Performance Indicators (KPIs), and other relevant information. If the project involves designing and developing new technologies or products, or requires obtaining intellectual property rights such as patents or trademarks, a thorough intellectual property search and evaluation analysis must be conducted.

The effectiveness of research projects is assessed through a comprehensive system of expected benefits and KPIs, covering various aspects: economic (increased revenue, cost reduction), technical (product development, process improvement, technological innovation), intellectual property management (patent applications), knowledge dissemination (reports, theses, technical services and transfers), and environmental sustainability (energy and environmental benefits). Each research project must clearly define its anticipated targets and explain its alignment with the company's overall KPIs. This ensures that R&D activities effectively support TWC's strategic goals, respond to regulatory requirements, policy directives, and international standards, and ultimately contribute to our sustainable operations.

TWC's Research Project Management Process



TWC's research projects are categorized into three types based on their execution method (as shown in the figure below). Departments select the most suitable type considering factors such as human resources, professional knowledge, resources, equipment, technology, practical circumstances, and legal requirements. Upon project completion, a self-conducted, commissioned, or collaborative research report must be submitted, depending on the nature of the research. These reports, in both hard copy and electronic formats, are stored in the company's knowledge management system. For commissioned research projects, the responsible unit must specify the public accessibility of the full research report within the Government Research Bulletin (GRB) system in the project's final report, promoting public interest.

b. R&D Innovation Execution and Promotion

Upon completion of each research project, the responsible unit may, based on operational needs, disseminate

the research report, practical application methods, or subsequent implementation tasks to relevant departments. Alternatively, they may organize briefings to report on research findings and gather feedback from attendees, which will inform the future promotion and broader application of the research. The Department of Planning consolidates the execution results of research projects, along with the concrete benefits and application status of research outcomes, for reporting to the Board of Directors. External publication of research findings requires prior approval from the responsible supervisor. If the research results in patentable inventions, creations, or designs, the patent application process must be completed before publication. To incentivize research, the company has established the "Research Outcome Publication Incentive Program," which provides appropriate rewards for outstanding research to foster proactive and innovative R&D.

c. R&D Performance Management and Control

TWC employs full-lifecycle control and tracking to ensure effective resource utilization and expected outcomes at each R&D and innovation stage. This ensures that relevant investments lead to effective innovations or benefits for TWC and optimize resource utilization. Tracking at each stage is described below:

- **Before R&D Project Execution:** The Department of Planning serves as the dedicated management unit. Annually, between May and July, departments propose projects and estimate costs based on business development needs, government policies, technological trends, or future development goals. After initial and secondary reviews, these are used to formulate the annual research budget. For temporary or urgent projects arising during the year, a special budget can be prepared after obtaining approval from senior management.
- **During R&D Project Execution:** Each research project holds review meetings according to its contract schedule to assess adherence to objectives and progress. A copy of the review is sent to the Department of Planning for records, and monthly tracking of each research project's budget execution progress is performed.
- **After R&D Project Execution:** Annual research outcomes are submitted to the Board of Directors for review and approval, and their concrete benefits and application status are tracked for three years. For five years following project completion, annual evaluations of R&D contributions are conducted to ensure the research's ongoing contribution to the company.

(3) TWC's R&D and Innovation Achievements

Based on its four key R&D focus areas, TWC continuously invests in diverse research projects to systematically enhance water supply service quality and operational efficiency, thereby achieving its sustainable operation goals. The R&D investments in each area for 2024 are detailed below.

Area	2024 Major Research Projects	R&D Objectives	Primary Achievements
Stable Water Supply	→ Corrosion prevention technology for water supply equipment → Real-time water quality monitoring technology and data application research → Research on the application of Laboratory Charge Analyzer (LCA) in water treatment plant chemical dosing and coagulation	To enhance the resilience and stability of water supply infrastructure, reduce water leakage rate, and decrease replacement needs. To ensure water quality management is more intelligent and scientific.	→ Future research findings are expected to extend equipment lifespan, strengthen safety monitoring, and optimize water treatment chemical usage, leading to reduced water supply costs.

Area	2024 Major Research Projects	R&D Objectives	Primary Achievements
Improving Water Quality	→ Assessment of water quality monitoring and operational benefits for Niaozuitan Artificial Lake → Optimization strategies for odor and taste treatment in water treatment plants → Evaluation of Polysilicate Iron (PSI) coagulant application efficacy in water treatment and establishment of chemical specifications → Nanshan water treatment plant deep well high ammonia-nitrogen breakpoint chlorination pilot project	To optimize water quality management and water treatment. Through monitoring and chemical usage research, we aim to improve water quality, expand available water sources, and reduce customer complaints.	→ Established chemical dosing strategies and optimal treatment procedures for odor removal in water treatment plants. → Addressed water treatment challenges caused by persistently low turbidity raw water and high organic wastewater recirculation. → Ensured that the ammonia-nitrogen effluent quality from Nanshan water treatment plan's deep wells meets drinking water standards, thereby increasing backup water sources.
Advancing Key Technologies	→ Introduction of AI for pump operation status monitoring and anomaly analysis → Development of crystallization softening crystal resource recovery and reuse technology → Discussion on increasing waterproofing for fair-faced concrete compactors in reservoirs → Development and establishment of a seismic preliminary assessment information management system for water storage structures → Rehabilitation methods for existing large-diameter pipelines in high-traffic urban areas	To strengthen the introduction and application of AI, research various resource recovery and reuse technologies, and explore innovative construction methods for infrastructure, thereby enhancing TWC's core operational capabilities and competitiveness.	→ AI monitoring of pump anomalies will reduce energy consumption and labor costs. → Crystallization softening crystal resource recovery and reuse technology can significantly expand the practice of circular economy. → Research in various engineering fields will serve as a reference for future construction and new facility standards, enhancing hard infrastructure capabilities.
Enhancing Operational Management Efficiency	→ Revision and explanation of the draft seismic design code for water storage structures → Seismic assessment and reinforcement manual for aqueducts → Research on improving the application efficacy of AI-assisted leak detection technology → External research on revising the "New Service Connection Fee Standard for Customer Inlet Pipes" → Discussion on the impact of outsourced counter services on operational performance—taking District 12 as an example → Research and analysis of chemical costs in District 12 → Financial benefit assessment of optimal leak repair scale → Investigation of potential interfering factors in free available chlorine testing operations	To comprehensively update TWC's management standards, deepen the introduction and application of new technologies like AI, and utilize financial analysis as a proactive method for cost control, thereby optimizing operational performance.	→ Completed seismic and design code assessments for infrastructure (reservoirs, water supply pipelines, etc.), which can serve as future references for facility management. → AI-assisted leak detection technology can effectively improve leak detection efficiency, reducing personnel, training, and water waste costs. → Multilateral improvements in management methods and practical approaches will enhance water supply performance and reduce costs.

(4) Talent Development and International Exchange

People are at the core of innovation. When introducing new technologies, TWC actively addresses employees' practical needs for learning new knowledge. We implement measures such as contractual stipulations, training programs, and rolling reviews to help team members adapt smoothly to technological changes. Simultaneously, TWC recognizes the value of international exchange and actively dispatches personnel to participate in global water resource management activities, drawing on international experience for local development. By prioritizing both internal training and external exchange, we foster technological innovation and cultivate a robust talent pool.

Internal Training	External Exchange
➔ TWC recognizes that when new technologies are introduced, company personnel need to acquire new knowledge areas to adapt to change. To address the pressure of personnel adaptation during technology transitions, the company clearly defines responsibilities and methods for technology transfer in contracts with external partners, assisting employees in a smooth transition. ➔ Contracts for new technology introduction require a certain number of hours for training or technology transfer to ensure employees effectively master new knowledge. ➔ Employee training programs are reviewed annually to arrange specialized training courses for new technologies or knowledge, continuously enhancing employees' ability to adapt to and transition to new technologies, thereby building a talent team that meets the company's operational needs.	We encourage our colleagues to visit other countries. Our international participation and exchange achievements in 2024 include: ➔ Sending personnel to Singapore in 2024 to participate in "Singapore International Water Week" and engage in learning and exchange on topics such as water source quality management, water purification technology, and water treatment research. They also visited Rex Instruments to learn about related water quality biotoxicity monitoring equipment. ➔ Attending the "2024 IEEE 10th International Conference on Applied System Innovation" in Kyoto, Japan. ➔ Participating in the World Water Congress & Exhibition IWA2024 in Toronto, Canada. ➔ Attending the "17th Asia Water Works Association Network Meeting" in South Korea. ➔ Participating in the "2024 Asia Leakage Control Conference & Exhibition" in Malaysia. ◦

(5) TWC's Innovation Outlook and Challenges

TWC will continue to balance the application of innovative technologies with their societal impact, striving to create maximum value for Taiwanese society. Through technological innovation and collaboration, TWC can provide more stable and higher-quality water supply services while reducing environmental impact and promoting the balanced development of the industrial ecosystem. The challenges in R&D and innovation, along with TWC's corresponding responses, are outlined below:

a. Management and Enhancement of Technology Partnerships

The management of technology partnerships is an area TWC will continue to focus on and improve collaboratively with external partners. A significant number of TWC's suppliers and contractors are small and medium-sized enterprises in Taiwan. Introducing advanced foreign equipment or technologies may impose operational pressure on traditional suppliers, potentially leading to reduced collaboration opportunities or affecting partnerships if their human resources and technical capabilities cannot keep pace. Furthermore, automation or the introduction of AI assistance may reduce the demand for outsourced labor and raw material procurement, such as decreasing purchases of water treatment chemicals, reducing the need for outsourced leak detection personnel training, and lessening the demand for outsourced leak repairs. On the other hand, over-reliance on certain technologies or manufacturers could reduce TWC's future procurement flexibility. Therefore, TWC will continually review relevant procurement items and progression, striving for technological innovation in procurement partnerships and shared prosperity with our partners.

b. Personnel Management and Risk Mitigation

In the early stages of advanced technology development, as technical resources and professional capabilities are not yet fully established, collaboration with external partners possessing specialized knowledge and practical experience is necessary to mitigate development risks and accelerate progress. This may increase costs associated with outsourced research, pilot programs, and training. Concurrently, the introduction of technology may alter the human resource demand structure. To ensure human resource allocation aligns with operational needs, TWC regularly conducts human resource inventories, reviews staffing levels, and assesses alignment with organizational, operational, and functional requirements. We make timely adjustments to human resource arrangements while conducting relevant vocational training and adapting future job skill requirements.

c. Comprehensive Feasibility Assessment

TWC adopts a strategic approach to new technology development, emphasizing thorough pre-assessment, phased implementation, comprehensive supporting measures, and the integration of professional expertise and experience. This approach aims to mitigate risks while optimizing development efficiency.

Before committing to new technologies, TWC conducts extensive feasibility studies, which include engaging professional organizations for evaluation and research. Pilot programs are initiated in high-demand areas, smaller regions, or with specific user groups, followed by staged deployment. Full-scale application only proceeds after successful outcomes and demonstrable benefits have been achieved.

For instance, to reduce the Water Leakage Rate, TWC has partnered with international teams experienced in implementing successful Non-Revenue Water (NRW) reduction strategies. This collaboration led to the "Consulting Technical Services Project for Non-Revenue Water (NRW) Reduction Program." Concurrently, TWC is progressively establishing District Metered Areas (DMAs) within its distribution network. These efforts are further enhanced by TWC's internally developed big data-assisted Leak Detection system and automated monitoring systems, significantly improving the precision of leak detection. In recent years, TWC has collaborated with the Industrial Technology Research Institute (ITRI) to develop AI-powered Leak Detection technologies tailored for Taiwan, continuously striving to lower the Water Leakage Rate.

2.3 Risk Management

As Taiwan's main water supplier, our mission is to provide superior quality and sufficiently supplied drinking water. As a state-owned enterprise, we also bear policy responsibilities, including safeguarding public water use and balancing regional water resource allocation. Therefore, the implementation of risk management is not only vital for our own operations and development but also has a significant external impact.

Effective risk management can prevent or reduce operational damage from detrimental internal and external factors, enhancing water supply stability, contributing to social stability, and promoting economic activity. Furthermore, it can improve water supply efficiency, lower operational costs, and mitigate the environmental burden caused by excessive water resource development. A stable business operation also provides a secure working environment for employees and supports the survival and development of suppliers.

2.3.1 Risk Management Policy and Strategic Commitment

In response to rapid changes in the internal and external operating environment, TWC has established "Criteria for Risk Management and Crisis Handling" to build an effective risk management mechanism, manage potential risks, and minimize adverse impacts. This document, approved by the Board of Directors and published on our official website, outlines our risk management policy (as follows), demonstrating our commitment to risk governance and serving as a guiding principle for all employees' risk-related activities:

- All levels of management are committed to fulfilling their supervisory duties and assuming risk management responsibilities.
- Provide necessary resources to ensure the effective operation of the company's risk management mechanism.
- All employees at every level must receive appropriate training to develop the capabilities required for executing various risk management tasks.
- Strengthen communication with internal and external stakeholders to enhance overall risk management awareness.
- Introduce the best risk management practices for continuous improvement.
- Focus on public risk and water quality safety as the core of risk management.

2.3.2 Concrete Practices and Organizational Structure for Risk Management

(1) Regular Risk Identification

Following the "P (Plan), D (Do), C (Check), A (Act)" management cycle, TWC annually identifies uncontrollable external risks, such as climate change, natural disasters, war, and supply chain disruptions, that could affect the achievement of the company's operational objectives. Corresponding response strategies and execution plans are then developed.

In 2024, nine significant risk items were identified (as follows), including those related to climate, natural disasters, procurement, and strengthening supplier management to ensure continuous water supply during wartime. Risk countermeasures were developed for each:

- Water shortages or outages due to abnormal climate or natural disasters
- Water quality pollution and anomalies
- Road sinkholes caused by broken water pipes
- Cybersecurity incidents impacting operations
- Sudden, unannounced drops in water pressure or water outages
- Procurement irregularities
- Major occupational safety incidents
- Labor-management disputes and employee protests
- Damage to critical infrastructure

(2) "Risk Management Committee" Reports Regularly to the Board of Directors

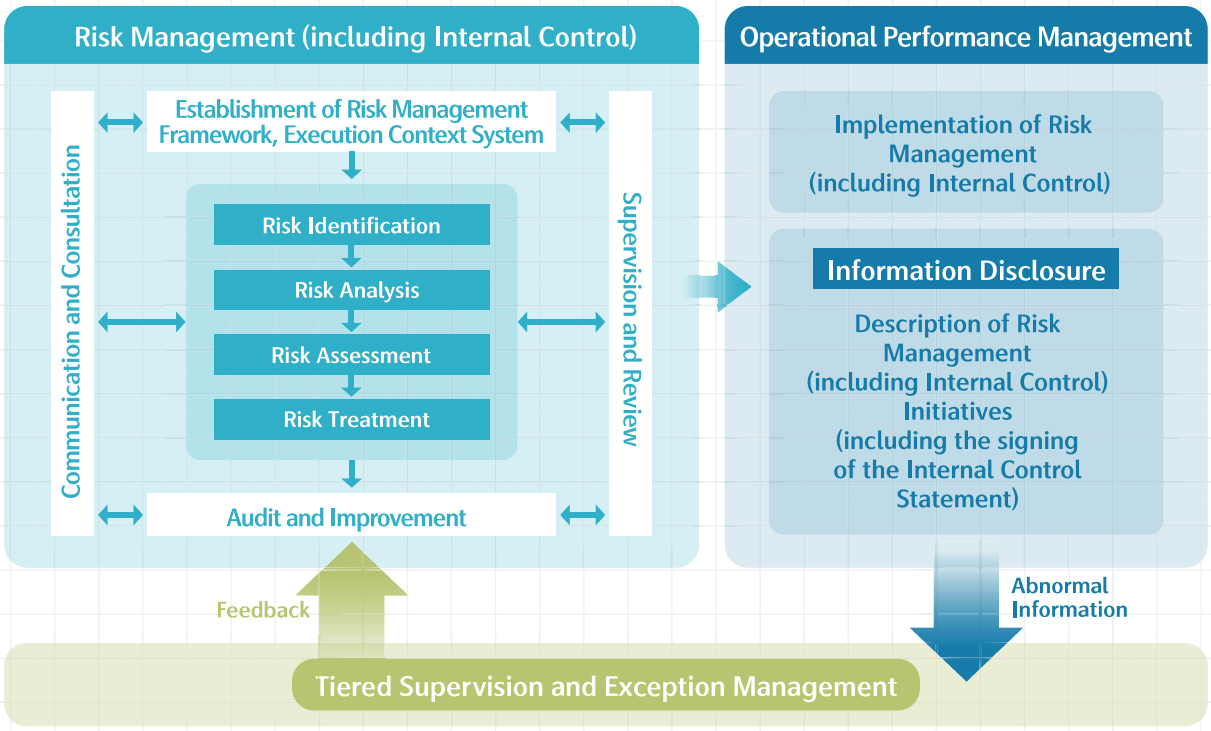
Since 2023, TWC has elevated its former "Risk Management Task Force" to a "Risk Management Committee" to strengthen risk management awareness and enhance risk management capabilities. The "Guidelines for the Establishment of the Risk Management Committee" have been revised and incorporated into the company's "Criteria for Risk Management and Crisis Handling." The committee's composition includes the Chairperson as the guiding committee member, the President as the Chairperson, the Vice President overseeing the Department of Planning as the deputy Chairperson, and the Director of the Department of Planning as the executive secretary. Additionally, two independent directors are invited to serve as members, one representative nominated by the labor union is invited to serve as a member, and the Chief Auditor, Vice President, Chief Engineer, and heads of relevant departments under general management are ex-officio members. Experts and scholars may be invited to attend for guidance when necessary.

The Risk Management Committee is responsible for reviewing the annual risk management implementation plan and its execution results. The status of these activities is reported to the Board of Directors for review in December. The committee is scheduled to meet at least once annually as a rule, with extraordinary meetings convened when necessary. Members unable to attend may appoint a proxy. The primary responsibilities include reviewing the annual risk management execution plan, approving the annual company risk profile, examining the annual risk management execution status and review results, and reporting these annual execution outcomes to the Board of Directors.

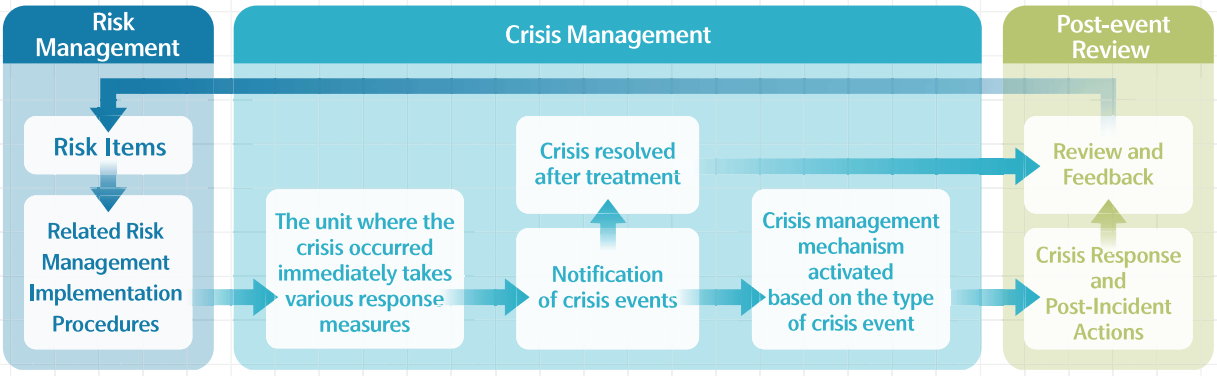
(3) Quarterly Tracking of Annual Risk Items and Control of High-Risk Issues :

- For annual risk items with a risk index of 6 (high risk) or above, the unit responsible must present a special report to the Board of Directors.
- Drinking Water Quality and occupational safety and environmental protection issues are specially reported to the Board of Directors every six months.
- If a significant risk event reported by the media occurs during the year, the business unit responsible must report it at the next month's Board of Directors meeting.

TWC Risk Management Framework



TWC Risk Management and Crisis Handling Operational Principles Flowchart



2.3.3 Risk Management Effectiveness Evaluation and Continuous Improvement

The effective review and improvement of risk management are crucial for a company's stable operation. In addition to identifying risks annually, TWC also proposes corresponding countermeasures to reduce residual risk.

(1) Dynamic Risk Management Review Mechanism

TWC conducts quarterly rolling reviews, and the Risk Management Committee meets semi-annually. This dynamic process involves reviewing and amending the "Annual Implementation Plan", integrating risk management concepts into the company's strategy and the daily work of every employee. This ensures that

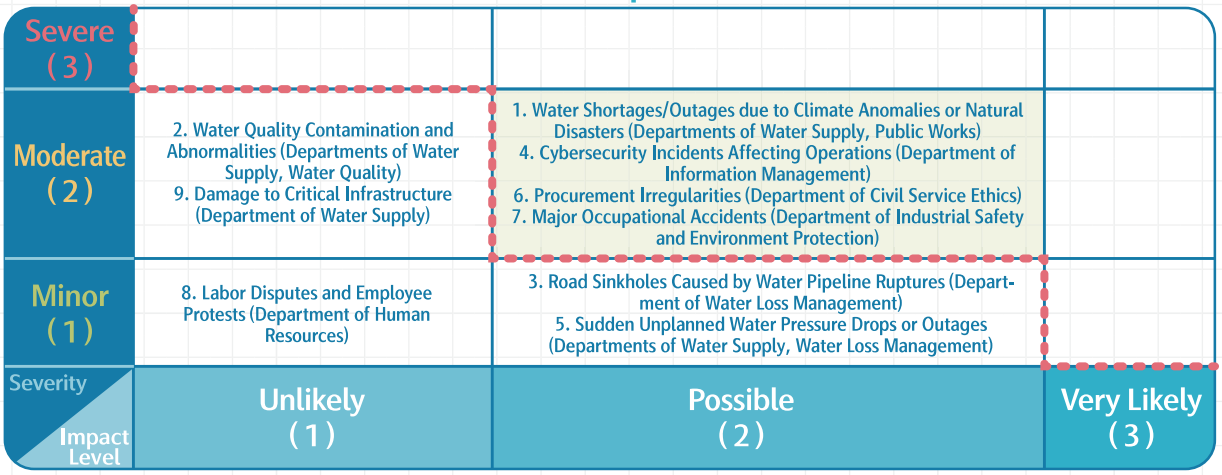
the company can "effectively manage risks during normal operations and proficiently handle crises when emergencies arise."

(2) Risk Management Performance Evaluation

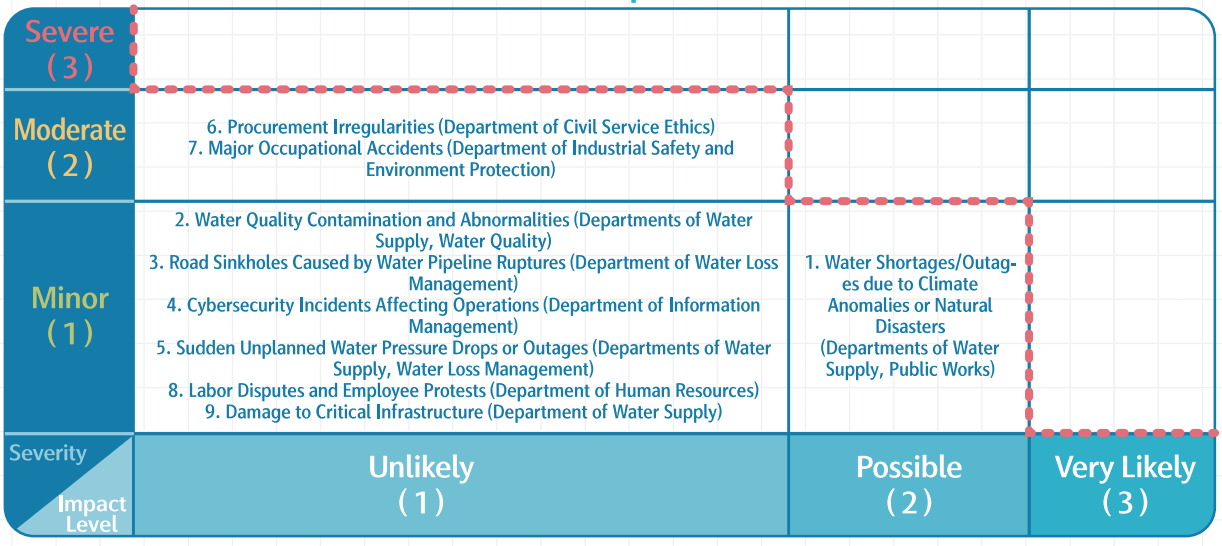
In 2024, the committee convened two meetings (July 29, 2024, and November 20, 2024) to review implementation. The inherent risk profile and residual risk profile for 2024, as depicted below, demonstrate the effectiveness of our risk management due to the successful implementation of risk countermeasures.

TWC Risk Management Profile

Inherent Risk Landscape for TWC in 2024



Inherent Risk Landscape for TWC in 2024

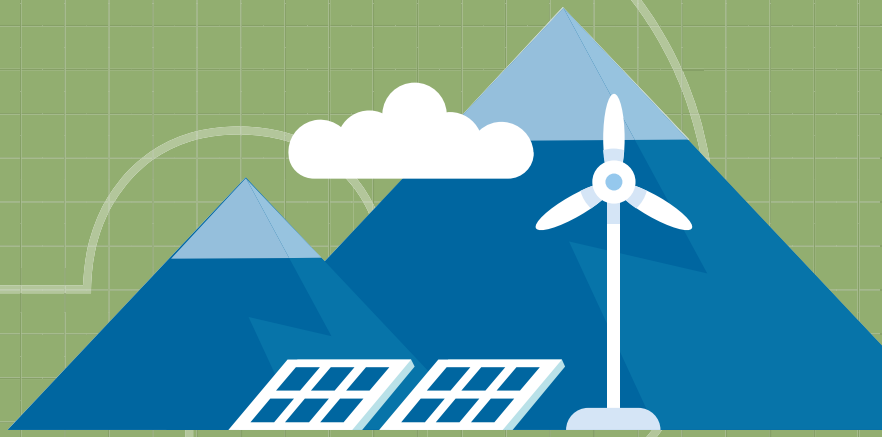


Risk Management Transparency Resource Section

The "Criteria for Risk Management and Crisis Handling," "Risk Management Policy," and "Operational Flowchart" are all disclosed in the Corporate Governance section of our website:

03

3



Transition for Sustainability

03 Transition for Sustainability

This chapter outlines TWC's vision, strategy, and assessment regarding its transition toward sustainability, aiming to help stakeholders better understand the company's current approaches to sustainable governance, climate risk, and nature-related risk.

Building a Comprehensive Sustainability Management Framework to Lead a New Benchmark in Water Resource Sustainability

TWC has established a comprehensive sustainability management framework, grounded in the "Sustainable Development Best Practice Principles." This framework clearly defines four core principles: implementing corporate governance, fostering environmental sustainability, upholding social welfare, and enhancing information disclosure. Based on these principles, TWC has developed six major sustainability policies and established a Sustainability Development Committee. The committee is chaired by the President and guided by the Chairperson, responsible for reviewing sustainability implementation plans and outcomes, thereby forming a complete management system from vision to execution.

Regular Meetings of the Sustainability Development Committee

From 2023 to 2024, TWC held two regular meetings of the Sustainability Development Committee each year. In 2024, the committee systematically reviewed implementation progress in the first half of the year and assessed annual performance at year-end to formulate plans for the following year. The Board of Directors reviewed a total of 58 major ESG-related proposals in 2024, demonstrating the high-level commitment to sustainability issues.

Sustainability Action Plan

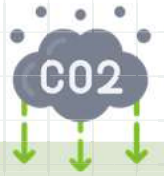
The 2024 Sustainability Implementation Plan focuses on 18 material topics, outlining 44 specific actions and KPIs. These cover key areas such as water supply management, carbon reduction, and circular economy. Through the PDCA (Plan-Do-Check-Act) management cycle, TWC ensures the effective implementation and achievement of its sustainability goals.

Promoting Climate Governance: TWC's Risk Identification and Response

In response to the risks posed by climate change-such as extreme weather events, shifts in drought and flood frequencies, water resource shortages, and rising electricity prices-Taiwan Water Corporation (TWC) has taken proactive measures. These include not only establishing a robust climate governance framework and identifying risks but also exploring opportunities such as the renewable energy development.

In terms of climate governance, the Board of Directors serves as the highest governing body - The Risk Management Committee, Sustainability Development Committee, and Net-Zero Transition Task Force are responsible for identifying and assessing risks as well as formulating strategic plans, while each business unit is responsible for implementation. A risk management process has been established, which includes steps such as data collection and consolidation, risk identification and analysis, risk assessment, financial impact evaluation, and rolling reviews to identify and respond to climate-related risks.

In terms of risk and opportunity analysis, TWC systematically identifies climate-related risks by referring to the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). Climate risks are assessed based on different risk categories, time horizons, and levels of impact. For each identified risk, the company analyzes its potential impact and formulates preliminary response strategies to ensure that TWC can continue to develop sustainably under the challenges of climate change.



Five Key Strategies to Achieve the Net-Zero Vision

TWC aims to enhance energy efficiency through power-saving measures and green buildings; develop green energy such Solar PV system and small-scale hydropower; promote green office practices including energy-saving operations and low-carbon transportation; advance green services through paperless operations; and strengthen green production and resource efficiency by reducing water leakage and reusing sludge.

Continuous Enhancement of Net-Zero Strategies

In response to the 2030 target of reducing carbon emissions by 30% compared to 2005 levels, TWC has established the "Solar PV 2.0 Task Force". As of April 2025, an additional 44 sites have been identified for solar panel installation, with an estimated reduction of 1,535 metric tons of CO_2 equivalent.

Biodiversity and Ecosystem Impact Assessment: TWC's Preliminary TNFD Identification

Taiwan Water Corporation (TWC) has conducted a preliminary analysis and disclosure of nature-related information based on the Taskforce on Nature-related Financial Disclosures (TNFD) and its LEAP approach. In terms of biodiversity, TWC used Geographic Information System (GIS) overlays to assess 21 reservoirs and 17 major water treatment plants, identifying seven biodiversity types and six categories of national ecological green network areas, along with seven types of environmentally sensitive areas designated by competent authorities. Regarding ecosystem services, TWC found that reservoirs impact all four major categories of services, while water treatment plants primarily affect provisioning services (i.e., water supply).

Referring to the draft TNFD guidance for the water utility sector, TWC has preliminarily identified the potential impacts of its operations on ecosystems, biodiversity, and ecosystem services. The company has initially analyzed five impact drivers and identified areas where its operations may generate positive outcomes. Moving forward, TWC will continue to strengthen biodiversity and nature-positive outcomes, building on its foundation of water source conservation.

3.1 TWC Sustainable Development

3.1.1 Sustainability Vision and Implementation Principles

TWC is committed to promoting balanced development across economic, social, and environmental dimensions. While focusing on providing high-quality tap water services, the company actively practices the concept of sustainable development, pledging to enhance its contribution to the national economy and improve the quality of life for employees, communities, and society. Grounded in corporate responsibility, TWC leverages sustainability to strengthen its competitive advantage.

TWC refers to the "Corporate Sustainability Best Practice Principles for TWSE/TPEx Listed Companies" and has established the "Taiwan Water Corporation Corporate Sustainability Best Practice Principles" as the guiding framework for all business operations. These principles clearly define TWC's "Sustainability Implementation Principles":

Sustainability Implementation Principles	Content
Implement sound corporate governance	→ Emphasize good corporate governance and establish an effective governance structure. The Board of Directors actively supervises the implementation of social responsibility, continuously reviews performance, and enforces sustainability policies. The Sustainability Development Committee executes sustainability policies and reports regularly to the Board of Directors. Through appropriate communication methods, the company understands stakeholder needs and responds to key sustainability issues. → At the same time, the company implements the Corporate Governance Best Practice Principles and Code of Ethical Conduct, strictly complies with regulations, fosters a fair competitive environment, avoids unfair competition, fulfills tax obligations, and opposes bribery and corruption.
Developing a Sustainable Environnement	→ **Environmental Protection Commitment:** Comply with environmental regulations and international standards, and appropriately protect the natural environment in all business activities. → **Sustainable Resource Utilization:** Actively improve the efficiency of resource use, prioritize the adoption of recycled materials with low environmental impact, ensure sustainable use, and reduce environmental burdens. → **Environmental Management System:** Actively promote an environmental management system suited to industry characteristics. The system focuses on three core areas: (1) Continuously collect and assess sufficient and timely information on the environmental impacts of operational activities; (2) Continuously set and optimize measurable environmental goals, and regularly review their continuity and relevance; (3) Continuously track the implementation progress of environmental sustainability objectives and targets.

Sustainability Implementation Principles	Content
Developing a Sustainable Environnement	→ **Environmental Education and Promotion:** Regularly conduct environmental education and training courses. → **Emphasis on Ecological Benefits and Impacts:** Reduce the environmental impact of operations, implement environmental protection, and incorporate the concept of sustainable consumption into operational processes. → **Sustainable Water Resource Management:** Emphasize the proper and sustainable use of water resources, establish comprehensive water resource management measures, avoid environmental pollution, and adopt the best available pollution prevention and control technologies to reduce adverse impacts on health and the environment. → **Climate Change Response:** Closely monitor the impact of climate change on operations, and implement energy-saving, carbon-reduction, and greenhouse gas mitigation measures based on operational conditions to reduce environmental impact.
Upholding Social Welfare	→ Strictly comply with labor laws, protect employees' legal rights, and respect international labor and human rights principles. Human resource policies ensure non-discriminatory treatment, implement equal opportunities in all aspects, and facilitate communication regarding employee rights. → Provide a safe and healthy working environment, strive to reduce hazardous factors, and regularly conduct safety education and training. Create a positive career development environment for employees and establish effective training programs. Set up regular communication channels to ensure the right to access information and express opinions and provide reasonable notice of major operational changes. → Adhere to product responsibility and marketing ethics, ensure product and service quality, provide transparent complaint procedures, and protect customer privacy. → Actively assess the environmental and social impacts of operations and procurement and collaborate and communicate with suppliers to jointly promote sustainable development. → Reduce community impact, invest resources to enhance community recognition, and promote development.
Enhancing Sustainability Information Disclosure	→ Disclose information in accordance with legal requirements and fully reveal sustainability-related information to enhance transparency. The company prepares a sustainability report to disclose its sustainability performance, including system structure and policies, stakeholder issues, implementation results and reviews, and future improvement directions.

TWC Sustainability Development Milestones

2014 Oct.

- Established the "Corporate Social Responsibility Best Practice Principles"
- Established the "Corporate Social Responsibility Policy"

2014 Nov.

- Established the "Guidelines for the Establishment of the Corporate Social Responsibility Promotion Committee"

2015 Dec.

- Published the first sustainability report compiled in accordance with the latest international GRI guidelines, with content verified by an independent third party

2022 Apr.

- Established the "Net-Zero Emissions Project Task Force"

2023 May.

- Reorganized the "Corporate Social Responsibility Promotion Committee" into the "Sustainability Development Committee," adding independent directors and labor union representatives as members
- Revised the "Corporate Social Responsibility Policy" to the "Sustainability Development Policy"
- Revised the "Corporate Social Responsibility Best Practice Principles" to the "Sustainability Development Best Practice Principles"

2024 Jan.

- Revised the "Sustainability Development Committee Guidelines" to include the Deputy General Manager and Chief Engineer as committee members.
  (This aims to embed the company's sustainability vision throughout all operational and business units from the top down and to promote a culture of sustainable governance.)
- Renamed the "Net-Zero Emissions Project Task Force" to the "Net-Zero Transition Task Force"
  (to align with government policies and updated concepts, and to elevate task force member roles to department head level).

2024 Mar.

- Established the "Solar PV 2.0 Task Force"

2024 Apr.

- Established the "Green Office Promotion Task Force"

2024 Nov.

- The Sustainability Development Committee will be merged with the Corporate Governance Committee starting in 2025 and elevated to a functional committee under the Board of Directors. This move not only demonstrates the company's commitment to sustainability issues but also enhances decision-making efficiency by streamlining meeting procedures and adjusting meeting frequency.

2025 Jan.

- The Net-Zero Transition Task Force will be led by the Chief Sustainability Officer to further strengthen strategy and execution in net-zero development

3.1.2 Sustainability Governance

(1) Sustainability Development Policy

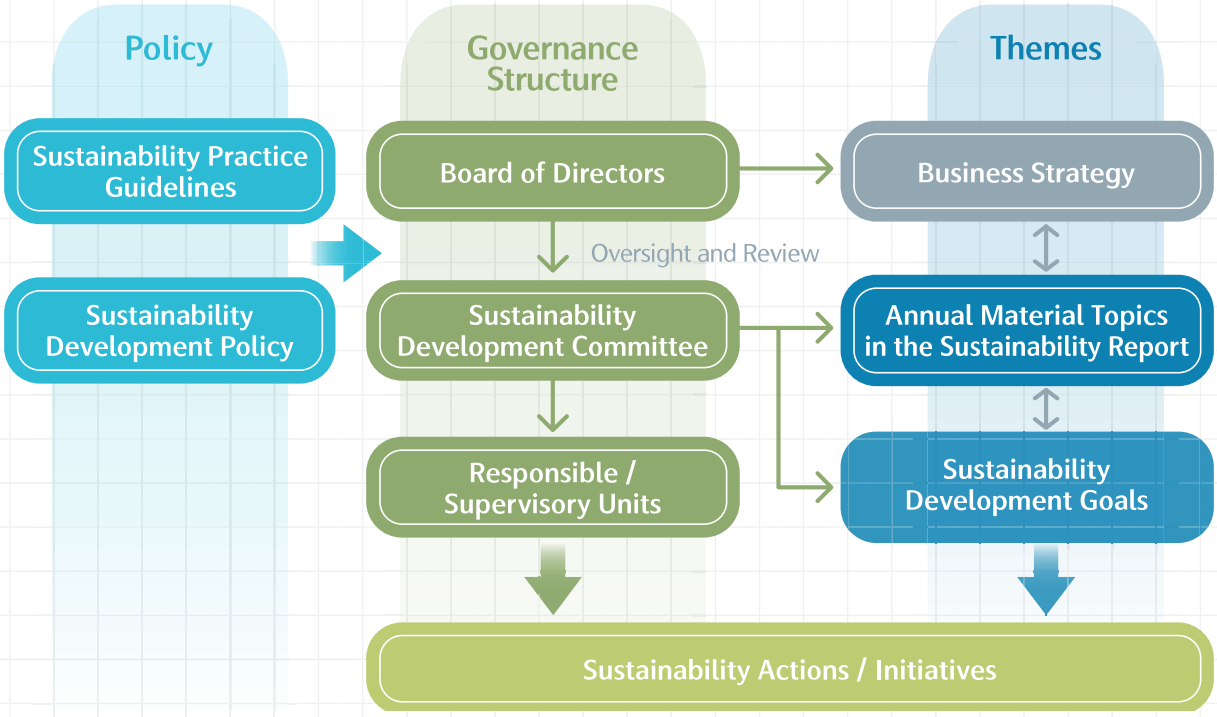
To pursue corporate sustainability and development, fulfill corporate social responsibility, meet societal needs, norms, and values, and give back to society, TWC has considered domestic and international sustainability trends and overall operations. In 2014, the Board of Directors approved the "Corporate Social Responsibility Policy," which was revised in 2023 as the "Sustainability Development Policy." This policy is not only a commitment but also a guide to action, directing us to build trust and cooperative relationships with stakeholders across four dimensions: economy, society, environment, and corporate governance.

TWC Sustainability Development Policy:

- Strictly comply with government regulations and uphold integrity in business operations
- Implement sound corporate governance and create corporate value
- Actively promote benefits and eliminate drawbacks to drive economic development
- Foster a quality environment and afeguard employee well-being
- Participate in social services and care for community development

To implement the sustainability vision, principles, and the Sustainability Development Policy, the company formulates relevant action plans based on the material topics identified in the annual sustainability report, which are reviewed and supervised by the Sustainability Development Committee. The overall governance structure is shown in the diagram below. Through the Board of Directors and the Sustainability Development Committee, responsibilities are allocated among relevant units to align with TWC's business strategies and actions.

TWC Sustainability Governance Structure



(2) Sustainability Development Committee

In response to the global sustainability trend and growing societal expectations, TWC established the Corporate Social Responsibility Promotion Committee in 2014 to implement its sustainability commitments through high-level governance. After several adjustments, the committee was renamed the "Sustainability Development Committee" in May 2023 and elevated in status, with the addition of Independent Directors and labor union representatives as members, reflecting our evolving sustainability mindset. In January 2024, the committee's guidelines were revised again to include the Vice President and Chief Engineer as members, further strengthening the organizational foundation for sustainability and enhancing the committee's capacity to address related issues.

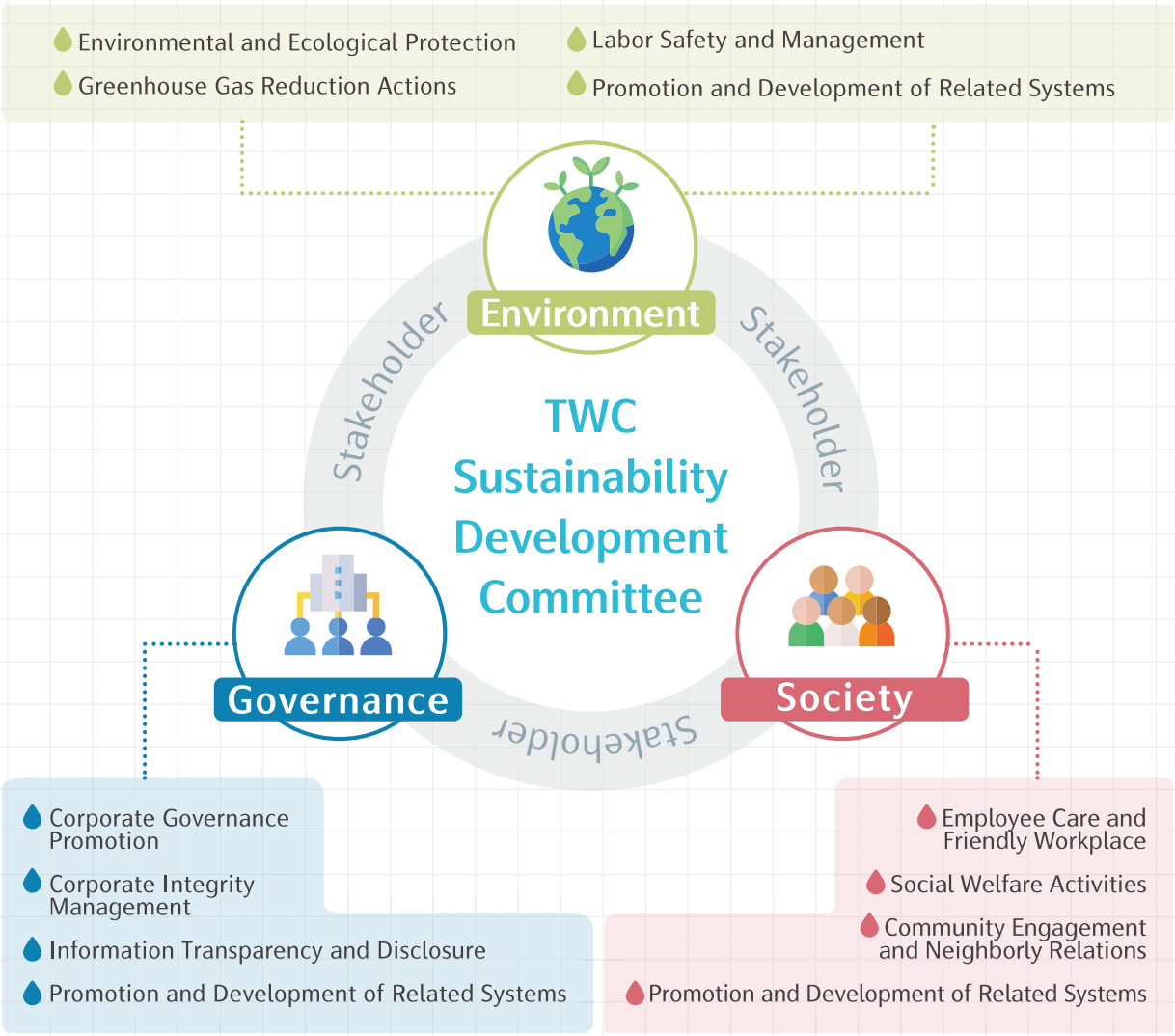
a. Sustainability Development Committee Structure

The Sustainability Development Committee is guided by the Chairperson and chaired by the President. It brings together the expertise of department heads, Independent Directors, and labor union representatives to form a diverse and professional decision-making team. The committee places great emphasis on incorporating various perspectives and may invite external experts and scholars to provide professional advice when necessary, ensuring the foresight and feasibility of sustainability strategies.

The Department of Planning serves as the secretariat of the committee, coordinating sustainability initiatives. The structure includes participation from all relevant units, enabling the smooth transmission of sustainability concepts from the decision-making level to all execution units, including the Head Office, Branches, and Region Engineering Offices, forming a company-wide sustainability action network.

Organizational Structure of the TWC Sustainability Development Committee

Guiding Committee Member: Chairman
Chief Committee Member: General Manager
Deputy Chief Committee Member: Deputy General Manager of Planning Department
Committee Members (1): Two Independent Directors, One Union Representative
Committee Members (2): Deputy General Manager, Chief Engineer, Corporate Governance Officer (also serving as Board Secretary), and Directors of Relevant Business Management Units under the General Administration Office
Executive Secretary: Director of Planning Department



b. 2024 Operations of the Sustainability Development Committee

The primary responsibility of the Sustainability Development Committee is to review the annual sustainability implementation plan and its outcomes. The scope encompasses corporate governance and operations, environmental protection and occupational safety, employee care and social services, as well as information disclosure and transparency. According to Article 6 of the Committee's Charter, at least one regular meeting must be held each year to ensure continuous attention and discussion on sustainability issues. In both 2024 and the previous year (2023), the Committee convened two meetings, proactively adhering to a semiannual meeting frequency. This ensures that TWC effectively implements and reviews its sustainability initiatives, demonstrating the company's strong commitment to sustainable development.

The annual sustainability implementation plan and the previous year's performance report, once approved by the Committee, are submitted directly to the Board of Directors. This strengthens vertical integration in sustainability governance and ensures alignment between sustainability strategies and the company's overall operations and long-term development goals. It also reflects the active involvement and full support of senior management in the sustainability transition. We integrate sustainability principles into the daily operations of all departments, embedding environmental friendliness, social inclusion, and transparent governance as core corporate values. Through the Sustainability Development Committee, TWC is steadily advancing toward a more sustainable future—taking concrete actions to protect water resources, care for society, and create a better living environment for future generations.

Meeting Summary of the Sustainability Development Committee of TWC in 2024

Date	Meeting Topic	Meeting Summary
July 29, 2024 (1st Meeting)	Review of First-Half Implementation	→ This meeting focused on a comprehensive review and improvement of the first-half implementation. Seven key initiatives were discussed in depth, including backup transmission pipeline projects, carbon reduction, major reservoir desilting operations, annual replacement of customer water meters, employee training, leakage reduction, and environmental education, establishing future directions. → The meeting was chaired by the Chairperson and attended by senior executives, demonstrating the company's strong commitment to sustainable development. TWC ensures effective execution of its sustainability strategies through clear KPIs and regular review mechanisms. Notably, the leakage rate target for the first half of the year was achieved, reflecting the company's concrete actions in sustainable water resource utilization. → The meeting not only reviewed the progress of various sustainability indicators but also set clear directions for improvement.
November 20, 2024 (2nd Meeting)	Review of Annual Implementation and Planning for the Following Year	→ This meeting reviewed the results of the sustainability implementation plan from January to September. It demonstrated the company's proactive governance and practice of sustainability issues. → Committee members provided constructive feedback, with particular focus on carbon reduction and water resource management. The company achieved a carbon reduction of 68,900 metric tons, surpassing the Ministry of Environment's target, and continues to work toward its self-set annual goal of 100,000 metric tons. In terms of water resource management, members discussed the implementation of reservoir desilting and water quality management plans, and recommended improving KPI setting by using the average of the past three years as a baseline to make targets more scientific and reasonable. → The Chairperson instructed that the full implementation results be reported to the Board of Directors.

(3) Sustainability Execution and Management

The Board of Directors serves as the highest supervisory body for TWC's sustainability strategy, bearing the responsibility of guiding the company toward sustainable development. In advancing ESG initiatives, the Board demonstrates strong commitment and active participation. Through the review and decision-making mechanisms for ESG-related proposals, the Board ensures the effective implementation of the company's sustainability strategies.

In 2024, the Board reviewed a total of 58 major ESG-related proposals, including 30 on corporate governance, 24 on environmental matters, and 4 on social aspects, reflecting its comprehensive focus on sustainable development. In particular, the Board carefully reviewed senior management performance evaluations, authorization and signature approvals, and financial reports, while overseeing the implementation plans of the Corporate Governance Committee and the Sustainability Development Committee. On environmental matters, the Board actively participated in reviewing water supply conditions and making decisions on water infrastructure projects, demonstrating a strong commitment to sustainable water resource management. Through strategic guidance and rigorous oversight by the Board, TWC has successfully embedded sustainability into its corporate DNA. While fulfilling its mission of public service, the company also creates long-term value for the environment and society, positioning itself as a benchmark enterprise in sustainable water resource management in Taiwan.

Summary of ESG-Related Communications by the Board of Directors

Category	Key Communication Outcomes	
	Number	Description
E- Environmental	24	Review of water supply conditions, expansion of related water supply infrastructure to address water shortages, etc.
S- Social	4	Approval of performance bonuses, guidelines for the selection of personnel in evaluated positions, etc.
G- Governance	30	Senior management performance evaluation forms, review of procurement cases, financial report reviews, deliberation on implementation plans of the Corporate Governance Committee and the Sustainability Development Committee, etc.

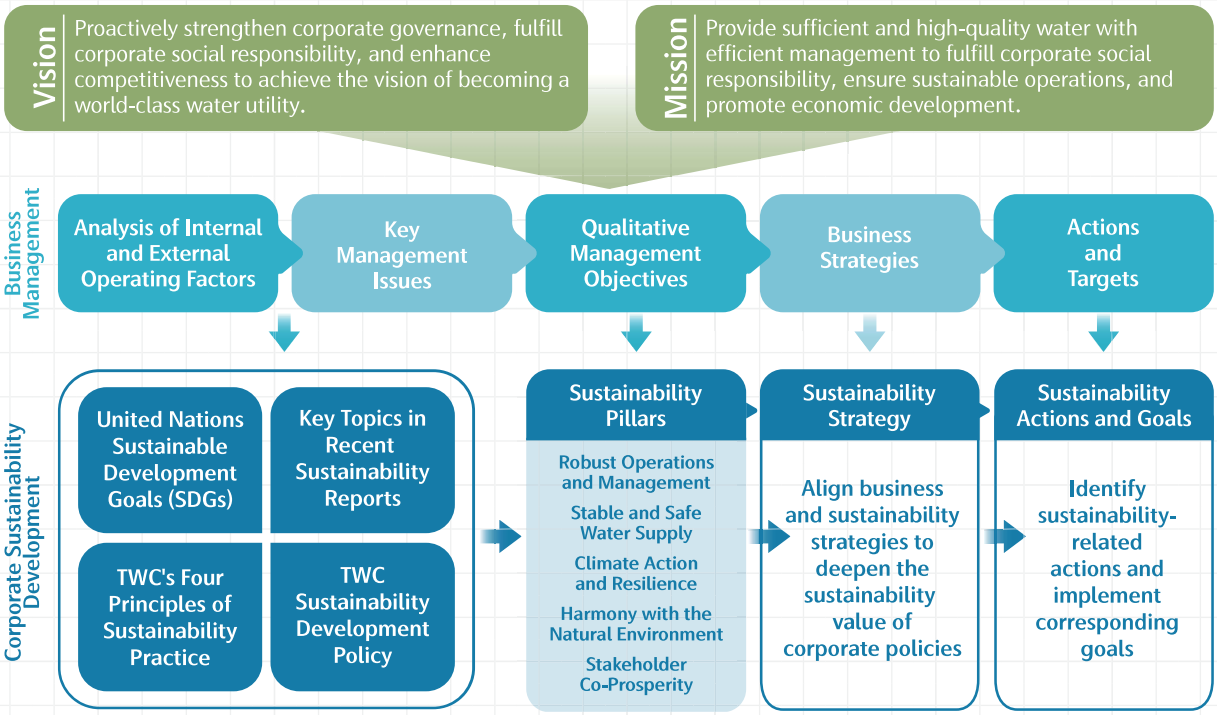
3.1.3 Sustainability Goals and Strategies

(1) Business Strategy and Sustainability Goals

TWC's sustainability development strategy aligns with its future business strategy, taking business operations as the foundation for advancing sustainability. The future business strategy (2026 to 2031) is rooted in the company's values and beliefs, and formulated by assessing external opportunities and threats, as well as internal strengths and weaknesses. Based on this, corresponding strategic plans and performance management targets are developed.

Grounded in the company's vision and future strategic goals, TWC integrates sustainability principles and the material topics identified in recent sustainability reports, while referencing domestic and international sustainability trends such as the United Nations Sustainable Development Goals (SDGs). With input from expert consultants, TWC has defined five key pillars of sustainability development. These five pillars embody the company's strategic sustainability objectives, envisioned as converging streams that collectively sustain a continuous flow of long-term development.

Overview of the Link Between TWC Sustainability Development and Business Strategy



The five key pillars of TWC's sustainability development and their corresponding goals are illustrated in the figure below. At the same time, we actively align with the United Nations Sustainable Development Goals (SDGs), aiming to become a world-class water utility and fulfill our corporate citizenship responsibilities.

Sustainability Development Strategy of Taiwan Water Corporation

TWC's Five Sustainability Pillars

Sound Operations and Managemetnt

6.1 Safe and affordable drinking water
16.6 Effective, accountable, and transparent institutions
16.7 Inclusive, participatory, and representative decision-making

12.7 Sustainable public procurement
1.4 Access to basic services

Pursue sustainable operations, including financial and managerial sustainability, to become a competitively sustainable water utility.

- Build asustainable governance
- Strengthen financial resilience
- Develop new business opportunities and revenue streams
- Enhance servicequality and capacity

Coexistence with Nature

6.6 Protect and restore water-related ecosystems
14.1 Reduce marine pollution
14.2 Protect and restoreecosystems

12.5 Substantially reduce waste generation
15.1 Protect and restore terrestrial and inland freshwater ecosystems

Respond to trends in circular economy, nature-positive growth, and biodiversity conservation, while continuously enhancing environmental management capabilities to achieve symbiosis with nature.

- Enhance environmental management
- Expand external collaboration
- Strengthen aquatic conservation and governance
- Promote circular economy

Climate Action and Resilience

7.2 Increase the share of renewable energy
7.3 Improve energy efficiency

13.1 Strengthen resilience and adaptive capacity
13.2 Integrate climate change into policies and planning

Establish comprehensive climate response capabilities, move toward net zero emissions and climate resilience, and provide low-carbon, resilient water supply to position Taiwan as a climate leader.

- Improve energy efficiency and services
- Implement diverse carbon reduction actions
- Develop renewable energy
- Strengthen climate resilience and adaptation

Stable and Safe Water Supply

6.1 Safe and affordable drinking water
6.3 Improve water quality and wastewater treatment
6.4 Increase water-use efficiency
6.5 Integrated water resources management

9.1 Resilient infrastructure

11.5 Reduce the adverse effects of disasters

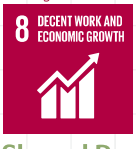
13.1 Strengthen resilience and adaptive capacity

Strengthen core water supply capabilities, proactively identify and respond to climate change and other risks to water supply stability, and become a trusted water utility. Ensure water supply safety and protect customer rights. Actively adopt smart technologies to advance toward a next-generation water utility for Taiwan's livelihood and economic development.

- Diversify and develop water sources
- Strengthen emergency response capabilities
- Enhance pipeline network resilience
- Increase water treatment capacity
- Develop smart water networks and user collaboration
- Promote end-to-end water safety

Shared Prosperity with Stakeholders

8.5 Full and productive employment and decent work for all
8.8 Protect labor rights and promote safe working environments



12.6 Encourage companies to adopt sustainable practices and reporting

17.16 Strengthen global partnerships for sustainable development
17.17 Promote effective public-private and civil society partnerships

Actively engage and collaborate with internal and external stakeholders to pursue shared prosperity and create mutual value. Internally, optimize labor conditions and implement talent development, diversity, and inclusion. Externally, promote communication and sustainable development.

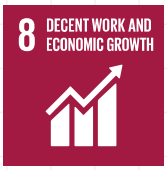
- Cultivate the next generation of water professionals
- Transparent communication and disclosure
- Ensure employee well-being
- Collaborate with diverse stakeholders

(2) TWC Contribution to the United Nations Sustainable Development Goals (SDGs)

Since their launch in 2015, the United Nations Sustainable Development Goals (SDGs) have garnered significant attention and commitment from governments and enterprises worldwide. Under these shared sustainability goals, stakeholders are actively contributing their expertise and capabilities to achieve a more sustainable global society by 2030. Aspiring to become a world-class water utility, TWC actively aligns with the SDGs. In line with its core business objectives and responsibilities as a state-owned enterprise, TWC has mapped its five key sustainability pillars to the relevant SDGs. This alignment helps identify the company's core contributions and related SDGs, as illustrated below.

TWC's Contributions and Commitments to the United Nations Sustainable Development Goals (SDGs)

Level	Corresponding SDG Description	TWC's Primary Contributions / Impact
Core Contributions	 **SDG 6 – Clean Water and Sanitation:** Based on TWC's core business, we pro-vide safe, affordable, high-quality, and efficient water supply services across Taiwan, and invest in integrated water resource management to ensure universal access to quality water services.	→ Water supply coverage rate: 95.04% → Water dispatch achievement rate: over 80% → Water quality compliance rate: 99.94% → NTD1.53 billion invested in pipeline extensions for non-serviced areas
	 **SDG9– Industry, Innovation and Infrastructure:** Promote industrial development in Taiwan through high-quality water supply and maintain resilient water infrastructure. TWC continues to apply innovation and technology to enhance operational efficiency and resilience.	→ Leakage rate reduced to 11.99% in 2024. → Promoted digital upgrades in water supply monitoring. → Continued implementation of Water Safety Plans (WSP) at 26 water treatment plants. → Developed AI leak detection technology.
	 **SDG 12 – Responsible Consumption and Production:** As a state-owned enterprise, TWC actively promotes sustainability-based procurement and transparent disclosure, while optimizing responsible production in water services.	→ Promoted sludge recycling and reuse in water treatment → Actively managed suppliers and implemented green procurement.

Level	Corresponding SDG Description	TWC's Primary Contributions / Impact
Related Goals	 **SDG 7 – Affordable and Clean Energy:** Developed solar and small hydropower generation, and continuously improved energy efficiency in operations.	→ Achieved 104,000 metric tons CO_2e reduction in 2024 through diverse carbon reduction actions. → Developed 130 solar sites totalling 79,556 kW; continued planning and construction of small hydropower plants. → 5,801 employees in 2024; total annual training hours: 89,197 → Promoted workplace safety and well-being. → Implemented reservoir environmental monitoring and water source conservation.
	 **SDG 8 – Decent Work and Economic Growth:** Fostered a friendly workplace, respected human rights and well-being of all workers, and cultivated the next generation of water professionals.	
	 **SDG 13 – Climate Action:** Actively implemented various climate actions, moving toward net zero emissions and building climate-resilient water infrastructure.	
	 **SDG 15 – Life on Land:** Through active conservation and monitoring of water and land ecosystems, protected and restored terrestrial and inland freshwater ecosystems to foster ecological harmony.	
Additional Outcomes	 **SDG 1 – No Poverty:** Supported disadvantaged groups through affordable water pricing.	→ Promoted water price rationalization. → Supported government initiatives on regional water dispatch, pipeline interconnection, and seawater desalination. → Female board representation reached 35%. → Implemented corporate governance and anti-corruption management. → 15,157 participants in environmental education sessions in 2024. → 100% compliance with effluent discharge standards → Participated in various associations.
	 **SDG 11 – Sustainable Cities and Communities:** Reduced the impact of extreme events through resilient infrastructure and services.	
	 **SDG 14 – Life Below Water:** Prevented marine pollution through active environmental and effluent management and waste control.	
	 **SDG 16 – Peace, Justice and Strong Institutions:** Promoted sustainable governance for more resilient corporate operations.	
	 **SDG 17 – Partnerships for the Goals:** Created collaborative value with internal and external stakeholders.	

Core Contributions

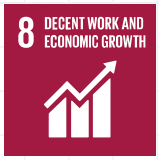
Rooted in its core business, TWC provides Taiwan with safe, affordable, high-quality, and efficient water supply services. Through integrated water resource management, the company ensures that all citizens have access to reliable and superior water services.

By delivering exceptional water quality, TWC supports industrial development in Taiwan and maintains resilient water infrastructure. The company continues to enhance operational efficiency and resilience through innovation and technological applications.

As a public utility, TWC actively promotes sustainability-driven procurement and transparent communication and disclosure, continuously optimizing responsible water supply operations.

Related Goals

As a public utility, TWC actively promotes sustainability-driven procurement and transparent communication and disclosure, continuously optimizing responsible water supply operations.



TWC fosters a friendly workplace environment, respects the rights and well-being of all workers, and cultivates the next generation of water professionals.

The company takes proactive climate actions toward net-zero emissions and builds climate-resilient water infrastructure.

Through active investment in terrestrial and freshwater conservation and monitoring, TWC protects and restores ecosystems, promoting environmental sustainability and ecological harmony.

Additional Outcomes

3.1.4 Sustainability Actions and Performance Management

In December 2023, TWC formulated the "2024 Sustainability Implementation Plan" in accordance with the Sustainability Development Best Practice Principles. Building upon the 18 material topics identified in the previous year, the plan consolidates 44 concrete action items. To ensure effective implementation, each action item is assigned clear Key Performance Indicators (KPIs), designated responsible units, and a defined timeline for progress monitoring. This plan represents a structured action framework developed by TWC to advance sustainability, covering ESG dimensions and aligning with the SDGs.

It reflects the company's strong commitment to the material topics identified each year, with each responsible department proposing implementation items tailored to their respective areas.

Summary of Key Actions in the 2024 Sustainability Implementation Plan

Theme	Key Action Summary	KPI
Environment		
Stable Water Supply (Water Supply Resilience)	Improve water supply monitoring platform, coordinate with the Water Resources Agency on water dispatch, reduce water outage duration	40% achievement rate for transmission architecture adjustment; ≥80% water dispatch achievement rate; average outage duration per household lower than the average of the past three years
Pipeline Management (Transmission Efficiency)	Reduce leakage rate, conduct safety assessments of major public pipelines	Leakage rate reduced to 12%; safety assessment reports submitted on time
Pipeline Resilience and Climate Adaptation	Implement backup transmission pipeline projects	Completion of 3 backup pipelines
Greenhouse Gas Emissions	Reduce carbon emissions	104,580 metric tons CO_2e reduced
Watershed Conservation	Conduct major reservoir desilting, watershed conservation and patrols	Total desilting volume: 1.95 million m^3; 6,000 watershed patrols conducted
Circular Economy	Resource reuse, develop small hydropower generation	Annual sludge cake reuse rate: 99.9%; completion of small hydropower integration at Shalu Distribution Center
Social		
End-Use Water Efficiency	Annual inspection and replacement of customer water meters	Defective rate within 4%; 99% replacement rate for aged meters
Drinking Water Quality (Customer Health and Safety)	Strengthen water quality management: implement WSP, maintain TAF (Taiwan Accreditation Foundation) certification	≥26 WSP sessions; 13 branches pass TAF renewal; headquarters passes surveillance audit to maintain certification
Occupational Health and Safety	Promote TOSHMS (Taiwan Occupational Safety and Health Management System, TOSHMS) certification, reduce contractor accident rate, employee health checks, on-site physician services	16 units audited regularly; 1 unit recertified every 3 years; ≤1 major contractor accident; 1,607 annual health checks; 67 on-site physician sessions/year
Labor/Management Relations	Conduct labor-management meetings, employee assistance programs, friendly workplace initiatives, hire persons with disabilities	4 labor-management meetings; 1,020 participants in awareness sessions; maintain nursing room hygiene, partner childcare facilities, eldercare info, reduced working hours program; ≥3% of total employees are persons with disabilities
Water Supply Coverage Rate (Water Affordability and Accessibility)	Improve water supply in non-serviced areas, promote connections in pipeline-covered areas	4,500 new approved households in 2024; 100,000 new activated households in Q4; coverage rate reaches 95.0%
Training and Education	According to the annual employee education and training plan, various pre-employment , on-the-job training, and environmental education programs are conducted	The Professional Training Center is scheduled to offer 89 sessions. The Head Office plans to organize 18 internal seminars, while regional offices are expected to hold 183 sessions. For outsourced training, the Head Office plans 25 sessions, and regional offices plan 324 sessions. Additionally, 8 overseas training cases have been budgeted, involving a total of 14 participants. All employees completed a 4-hour environmental education training
Governance		
Customer Privacy	Prevent cyberattacks and data breaches, promote e-forms to protect sensitive data	3 new web servers added to SOC monitoring; system account permission review and cybersecurity audit conducted
Corporate Governance	Corporate governance evaluation, director/supervisor training	Governance evaluation completed; directors/supervisors attend 6 hours of training
Information Security	Maintain international ISMS certification, review cybersecurity policies, enhance website stability, prevent hacking, establish backup system	Third-party certification completed; cybersecurity review meetings held; annual penetration testing and vulnerability scans; real-time malicious site updates; business continuity drills conducted
Anti-Corruption	Conduct integrity campaigns, explain Sunshine Acts, promote whistleblower protection	5 integrity promotion sessions; 1 Sunshine Act briefing; 1 whistleblower protection session
Regulatory Compliance	ISO 14001 certification, establish environmental regulations, report environmental plans per law	Maintain validity of existing certifications; 2 new sites certified; no penalties during the year
Economic Performance	Operational performance data, publish statistical yearbook	5 performance indicators and statistical yearbook published on schedule

TWC has established a clear management mechanism for its sustainability implementation plan. Progress is tracked quarterly, and the Sustainability Development Committee convenes semi-annually to review the implementation status. An annual report on implementation is submitted to the Board of Directors to ensure that the plan's progress receives attention and oversight from senior management.

Any implementation or revision of the plan must be approved by the Committee and subsequently endorsed by the Board of Directors to ensure consistency and effectiveness. This control and review mechanism forms a complete PDCA (Plan-Do-Check-Act) management cycle, ensuring that our sustainability actions progress on schedule and are adjusted in a timely manner.

3.2 Net-Zero Governance and Climate Risk

Over the past decade, climate change has evolved from a scientific and national governance issue into a challenge that all businesses must confront in their operations and commercial development. The increasing visibility and severity of climate change impacts—on policies and trade regulations, infrastructure, public life, and business operations—have heightened the importance of managing, assessing, and disclosing climate-related risks and financial impacts. Established at the end of 2015, the Task Force on Climate-related Financial Disclosures (TCFD) proposed recommendations for companies to disclose financial risks related to climate change. Building on these recommendations, the International Sustainability Standards Board (ISSB) later issued the IFRS S1 General Requirements for Disclosure of Sustainability-related Financial Information and IFRS S2 Climate-related Disclosures, providing guidance for future capital markets, corporate disclosures, and stakeholder communications.

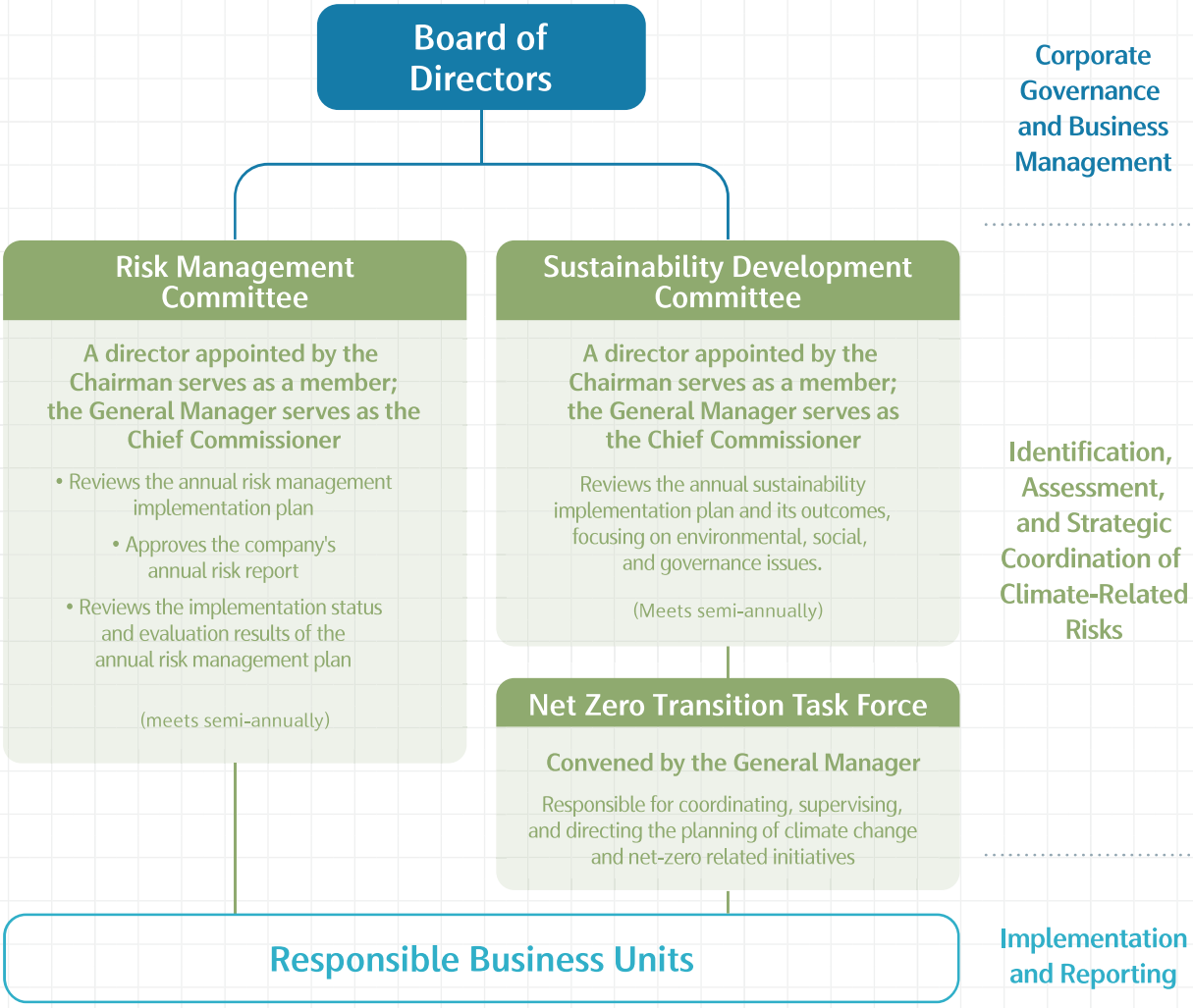
According to the "National Climate Change Science Report 2024: Phenomena, Impacts, and Adaptation" released by Taiwan's National Science and Technology Council, under various scenarios, Taiwan is projected to experience a short-term average temperature increase of 0.6°C to 0.8°C, and a rise of 1°C to 3.4°C by the end of the century (2100). Taiwan's dry season (November to April) is expected to become drier, while the wet season (May to October) will become wetter, with the contrast between dry and wet seasons intensifying as global warming progresses.

TWC's operations and financial performance are highly susceptible to the impacts of climate change, which also significantly affect public livelihood and industrial competitiveness in Taiwan. Although TWC is not a publicly listed company, it is committed to actively managing and disclosing relevant information. Accordingly, the company has referenced the disclosure requirements of TCFD and IFRS to conduct preliminary assessments and disclosures within the boundaries and scope of its sustainability report. These efforts are currently underway, and TWC will continue to enhance its climate governance and disclosure practices through collective efforts.

3.2.1 Climate Governance and Strategy

Regarding climate change, the Chairperson plays a supervisory and guiding role, serving as an advisory member of both the Risk Management Committee and the Sustain-ability Development Committee. The President of TWC serves as the Chairperson, with the Deputy Director General of the Department of Planning acting as Vice Chairperson, and the Department of Planning serving as the secretariat. This structure coordinates discussions, proposals, and the promotion of related initiatives across departments, which are then executed and tracked by the respective responsible units. Through tiered governance and professional division of responsibilities, TWC has built robust climate governance and risk response capabilities. The overall climate governance structure is illustrated in the figure below.

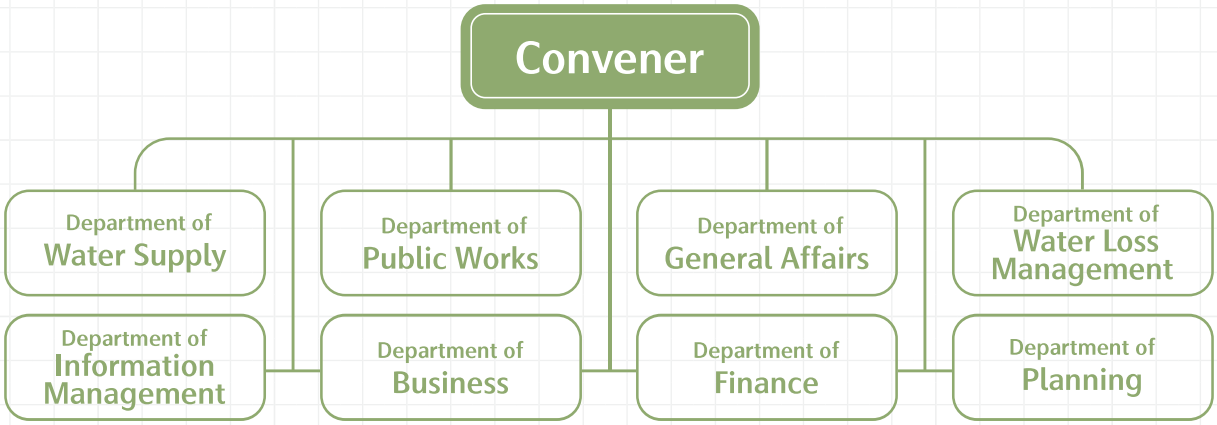
TWC's Climate Governance Structure in 2024



The Sustainability Development Committee of TWC oversees environmental, social, and governance (ESG) issues related to sustainability, including climate-related risk topics such as "distribution network resilience and climate adaptation," "net zero emissions management," and "water supply resilience." Committee members supervise the advancement of related topics and action plans, and the committee also serves as a platform for cross-departmental communication and coordination to promote climate sustainability actions. Together with the Risk Management Committee and the Net Zero Transition Task Force, this structure enables more comprehensive climate governance.

In April 2022, TWC established a Carbon Reduction and Net Zero Emissions Task Force, initially chaired by the Vice President. In August 2023, the role of convener was transferred to the President. In December 2023, in alignment with government policies and evolving perspectives, the task force was renamed the "Net Zero Transition Task Force." It comprises representatives from nine departments: Department of Water Supply, Department of Public Works, Department of General Affairs, Department of Water Loss Management, Department of Information Management, Department of Business, Department of Finance, Department of Planning, and Department of Industrial Safety and Environment Protection. Through professional expertise, facility and site assessments, and infrastructure evaluations across departments, and with reference to the Ministry of Environment's GHG reduction targets, the task force has drafted TWC's net zero vision and carbon reduction strategies. These are reviewed and updated regularly to strengthen the implementation of the company's net zero transition policy and align with national net zero goals.

Organizational Structure of TWC's Net Zero Transition Task Force



Achieving net zero emissions by 2050 has become a strategic goal across industries. In alignment with the Ministry of Environment's greenhouse gas reduction targets, TWC has established an internal governance and performance management structure to support its net zero vision and carbon reduction strategies. These strategies are reviewed and updated regularly to ensure alignment with national net zero policies. TWC's "Future Business Strategy" has preliminarily incorporated water supply risks under Taiwan's changing climate into its risk identification framework. Corresponding response strategies and actions have been developed and submitted to the Ministry of Economic Affairs for approval and implementation. Current planning focuses on reducing energy demand, improving energy efficiency, developing renewable energy, and adopting clean technologies. Guided by a phased strategy of "low carbon first, then net zero" and "pilot first, then full-scale implementation," TWC has formulated five key strategies, as illustrated in figure below.

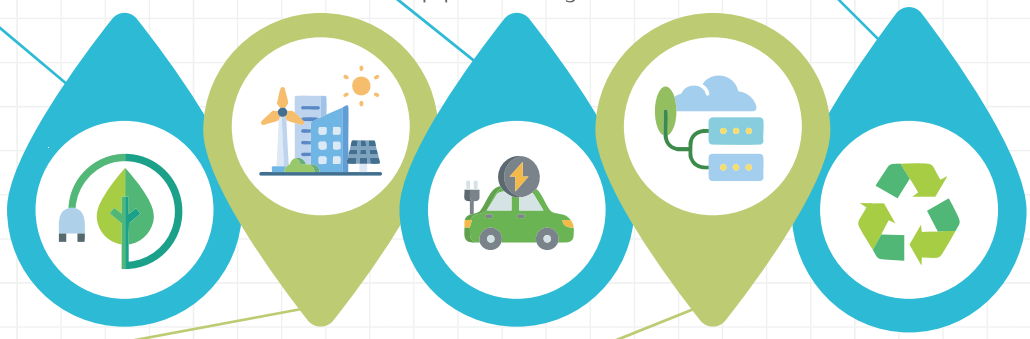
TWC's Net Zero Strategy Goals

Prioritize low-carbon actions before transitioning to net-zero; Conduct pilot projects before full-scale implementation

Enhancing Energy Efficiency
Advance equipment technologies, improve engineering design and process operations, with targets to reduce unit electricity consumption by 2% by 2025 and 4.5% by 2030.

Promoting Green Offices
Gradually regulate the efficiency of office equipment, replace air conditioning systems with energy-saving models, phase out fuel-powered vehicles, adopt low-emission cars and electric scooters, and strengthen IT equipment management.

Green Production and Efficient Resource Use
Reduce greenhouse gas emissions by reusing sludge and minimizing water supply losses.



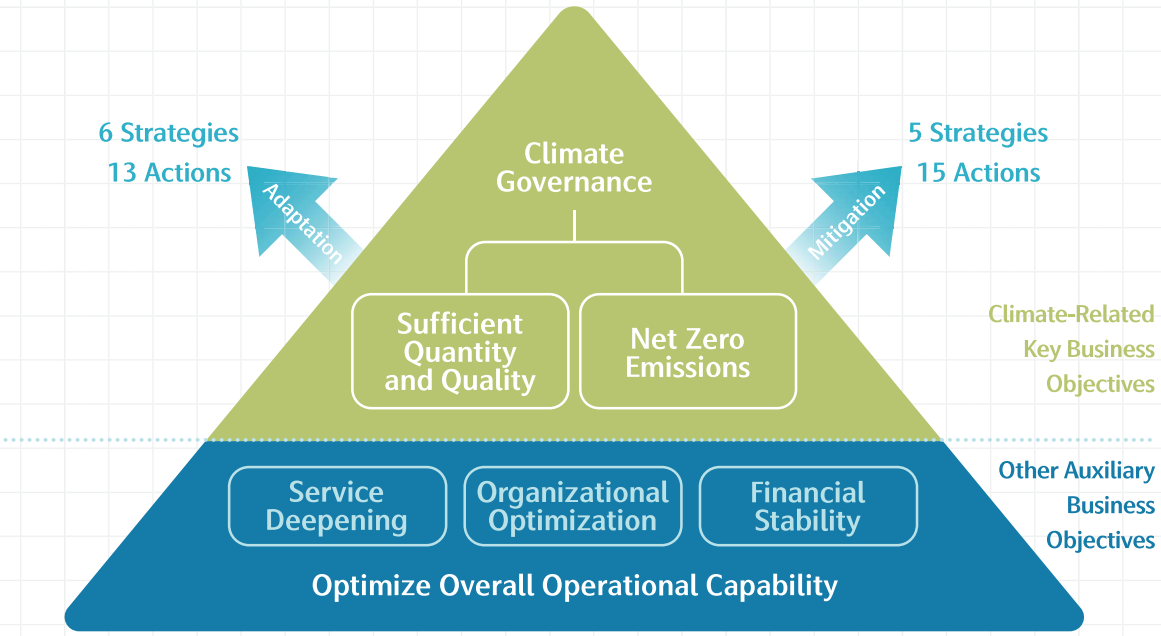
Green Energy Development
Promote solar power, small hydropower generation, andgreen energy procurement. Electricity generated is eitherself-consumed or fed into the Taipower grid to enhance regional power supply capacity.

Providing Green Services
Develop digital water account systems, promote e-billing, and implement paperless service counters to support a low-carbon lifestyle.

TWC's business strategy evaluates key internal and external environmental variables to identify critical operational issues. The figure below summarizes those related to climate change. In response to increasing risks of unstable water supply and the growing trend toward carbon reduction and environmental protection, TWC recognizes that climate-related policies and targets are receiving significant attention both domestically and internationally. These developments also pose potential impacts on water supply capacity. To address these challenges, TWC is committed to continuously improving outdated water treatment and supply equipment, as well as office facilities, in order to enhance energy and resource efficiency. Leveraging its professional expertise, experience, and suitable facilities, the company aims to further improve its performance in this area.

TWC Business Issues Identification and Qualitative Goals		International Climate Change Risk Report
Business Issue	Qualitative Goal	IWA Report: Identified Climate Change Impacts on Water Utilities → Intense rainfall and flooding → Drought and water scarcity → Rising temperatures → Sea level rise
Increasing Risk of Unstable Water Supply	Sufficient Supply, Superior Quality	
Net Zero Transition Trend	Net Zero Emissions	

TWC's Climate Governance Strategy Framework



3.2.2 Climate Risk Identification and Management

As the frontline provider of water for both public and industrial use in Taiwan, TWC has upheld its mission for over half a century, working closely with the Water Resources Agency of the Ministry of Economic Affairs to implement water supply capacity and operational risk identification and management. While climate risk identification and management are still in the early stages, TWC has adopted a risk management framework based on the "Risk Management Guidelines." Through the Risk Management Committee and related mechanisms, and in conjunction with internal and external environmental factor analysis from the company's future business strategy, TWC has preliminarily identified climate-related risks within its operational scope. With support from external consultants, this report outlines TWC's climate-related risks, opportunities, and potential impacts, as shown in the table below. Moving forward, TWC will continue to enhance its risk identification

process to align with TCFD recommendations and IFRS requirements, including financial impact assessments, thereby laying the foundation for sustainable operations.

TWC Climate Risk Identification Process

1 Data Collection and Consolidation

Based on external trends and internal operational changes, relevant departments and external experts assist in screening TWC-related risks and opportunities, identifying key risk factors.

1.TWC business strategy analysis
2.International benchmarks for climate risks in water utilities
3.National climate science reports

2 Identification and Analysis

Identify risk categories and dimensions, understand the conditions under which risks arise, and analyze their scope, time scale, and impact on TWC.

3 Risk Assessment

Assess the likelihood and severity of each risk using a climate risk matrix, and evaluate varying impacts under different scenarios.

4 Financial Impact Assessment*

Future plans include internal discussions and external consultant support to assess the financial impact of each climate risk on TWC operations.

5 Discussion and Rolling Review*

Senior executives and management teams will review and confirm assessment results, with regular updates and reviews.

*To be implemented in the future as part of TWC's climate risk management framework.

The climate-related risks and opportunities currently identified by TWC—through the Risk Management Committee and with reference to domestic and international reports by external experts—are summarized in the table above. Moving forward, TWC will continue to refine its analysis, incorporating discussions and reviews by relevant internal departments. This will support the establishment of a comprehensive climate risk response mechanism and financial impact assessment, thereby advancing climate governance and disclosure.

No.	Climate-Related Risk/Opportunity	Type	Subtype	Time Scale	Potential Impact	TWC Preliminary Response Strategy
1	Water shortages or outages due to extreme weather events	Physical	Acute	Short, Medium, Long Term	Infrastructure damage, water supply interruptions, increased treatment and maintenance costs	→ Implement zoned and reduced water supply → Invest in infrastructure maintenance and upgrades → Develop emergency response plans → Improve pressure management to reduce leakage
2	Changes in drought/flood frequency affecting water supply and quality	Physical	Acute	Short, Medium, Long Term	Unstable reservoir and groundwater quality, increased treatment costs, potential supply interruptions	→ Modernize water treatment plants → Strengthen emergency response capabilities → Enhance cross-regional water dispatch

No.	Climate-Related Risk/Opportunity	Type	Subtype	Time Scale	Potential Impact	TWC Preliminary Response Strategy
3	Water scarcity and rising demand	Physical	Chronic	Medium, Long Term	Reduced water availability or increased demand due to climate change, leading to unmet water needs	→ Strengthen supply capacity and water source management → Develop diversified sources (desalination, groundwater) → Desilt reservoirs to increase effective capacity → Support reclaimed water development policies
4	Impact of extreme weather on employee safety and health	Physical	Chronic	Medium, Long Term	High temperatures or extreme weather affecting worker safety, leading to work stoppages or accidents	→ Strengthen occupational health, safety, and environmental policies → Enhance emergency response capabilities
5	Climate policy and regulatory requirements	Transition	Policy & Regulation	Medium, Long Term	Increased obligations for climate governance and disclosure, requiring mechanisms and investment	→ Establish Net Zero Transition Task Force → Enhance climate governance capabilities
6	GHG regulations, carbon taxes, and fees	Transition	Policy & Regulation	Medium, Long Term	Increased compliance and carbon costs, potential revenue loss	→ Maintain communication with regulatory agencies → Monitor regulations via Net Zero Transition Task Force → Conduct GHG inventories → Develop renewable energy
7	Reputational risk	Transition	Reputational	Long Term	Negative public or stakeholder perception may hinder policy or project implementation	→ Enhance climate-related disclosures → Actively address climate challenges
8	Renewable energy development	Opportunity	Energy Source	Short, Medium, Long Term	Utilize land and water resources to develop solar PV and small hydropower, increasing renewable energy use and reducing emissions	→ Identify and develop renewable energy (solar, small hydro) → Actively assess internal development potential

3.2.3 Climate-Related Actions, Indicators, and Targets

The Net Zero Transition Task Force is responsible for coordinating and tracking performance and targets related to climate change. Relevant departments assist in implementing various initiatives in alignment with the government's net zero transition goals. TWC actively promotes a range of net zero strategies to progressively achieve phased carbon reduction targets. In reference to the Ministry of Environment's greenhouse gas reduction targets, TWC has established stage-specific goals as outlined below. In 2024, TWC achieved a carbon reduction of approximately 104,580 metric tons of CO_2e, surpassing the 2025 target of 53,000 metric tons of CO_2e, demonstrating the effectiveness of its carbon reduction efforts.

Phase 1	Phase 2	Phase 3
By 2025, reduce carbon emissions by 10% (53,000 metric tons CO_2e) compared to 2005 levels (530,000 metric tons CO_2e)	By 2030, reduce carbon emissions by 28±2% (159,000 metric tons CO_2e) compared to 2005 levels (530,000 metric tons CO_2e)	Continue rolling reviews to achieve Net Zero Emissions by 2050

Under the three-phase carbon reduction targets, five Net Zero strategies and fifteen corresponding measures have been formulated to achieve Net Zero Emissions by 2050. Under the strategy of "Sufficient Supply, Superior Quality," six strategies and their corresponding actions have been established. TWC has set future carbon reduction tracking targets for each business and climate action, as shown in table above and below.

TWC Climate Response Strategies and Measures

Improve Energy Efficiency
- Power Saving
- Energy-Efficient Green Building

Green Building for Energy Conservation
- Installation of Solar PV Systems
- Promotion of Small Hydropower Generation
- On-site Renewable Energy Generation System

Promote Green Office
- Office Energy Saving and Carbon Reduction
- Use of Low-carbon Transportation
- Strengthen Information Equipment Management

Providing Green Services
- Paperless Service Counters
- Paperless Water Bills
- Installation of EV Charging Stations

Enhance Green Production and Resource Efficiency
- AI-enabled Precision Chemical Dosing
- Sludge Resource Recovery and Reuse
- Reduce Water Leakage
- Tree Planting for Carbon Sequestration

Diversified Water Sources Development
- Water Source Development
- Sufficient In-house Water Sources

Accelerate Leakage Reduction
- Reduce Water Leakage Rate
- Enhance Leak Detection and Repair

Establish Backup Transmission Pipelines
- Construction and Improvement of Backup Transmission Mains

Modernization of Water Treatment Plants
- Upgrading and Improvement of Water Treatment Plants
- New Construction and Expansion of Water Treatment Facilities

Enhance Emergency Response
- Emergency Power Backup at Water Supply Stations
- Emergency Water Supply Response Plan
- Emergency Material Supply Plan

Promote End-to-End Water Safety
- Maintenance and Replacement of Water Quality Monitoring Instruments
- Enhance Safety of Drinking Water Sources and Drinking Water Quality
- Strengthen Water Quality Information Management

Overall Net Zero Emissions Targets and Action Plan of TWC

Net Zero Emission Measures	2024 Performance	Management Goals and Implementation	Estimated Carbon Reduction Volume (metric tons CO_2e)					
			2025	2026	2027	2028	2029	2030
Strategy : Enhancing Energy Efficiency								
Power Saving	Completed performance management at 8 high-voltage stations	→ Reduce unit electricity consumption by 0.5% annually, aiming for a 4% reduction by 2029 compared to 2005, reaching 0.2959 kWh/m^3 → Replace outdated pumps with high-efficiency models → Complete performance management at 43 high-voltage stations by 2025	3,189.25	4,774.50	6,421.99	8,083.81	9,759.50	11,096.83
Energy-Efficient Green Building	Obtained candidate green building certificates for Chimei and Jibei desalination plant management centers	→ Promote 8 energy-efficient green building projects for office operations based on the principles of ecology, energy saving, waste reduction, and health	7.44	21.45	31.86	46.39	235.46	270.22
Strategy : Developing Green Energy								
Solar PV Installation	Installed 10 new sites in 2024, totaling 130 solar PV sites with a cumulative capacity of 79,556 kW and annual generation of 92.384 million kWh	→ Utilize space at water treatment plants, booster stations, and reservoirs for solar PV → Assess rooftops of office buildings for solar PV → Lease idle land for solar PV installation	37,560.40	44,592.61	44,714.83	45,173.13	45,294.56	44,124.01
Small Hydropower Promotion	Completed installations at Shalu Distribution Center and Hushan Water Treatment Plant, totaling 2,345 kW	→ Complete installations at multiple sites by 2027, including Lijia (130 kW), Shalu, Nanhua Reservoir (1,440 kW), Hushan (1,500 kW), Shengou (125 kW), Taitian (86 kW), and Niaozuitan (824 kW) → Conduct feasibility assessments across TWC systems and sites → Invite private sector participation	8,757.16	8,934.02	10,518.68	11,870.86	11,870.86	11,503.72
Deployment of Renewable Energy for Self-Use	Kaohsiung Water Plant procures renewable energy generated at the Gaoping River intake station through power transfer from the clean water reservoir at Fengshan Water Treatment Plant.	→ Renewable energy and carbon reduction are promoted through on-site use, power transfer, and green power procurement.	686	771	856	856	856	835

Net Zero Emission Measures	2024 Performance	Management Goals and Implementation	Estimated Carbon Reduction Volume (metric tons CO_2e)					
			2025	2026	2027	2028	2029	2030
Strategy : Promoting Green Office								
Office Energy Saving	Replaced 692 air conditioning units by 2024, reducing approximately 296.98 metric tons CO_2e	→ Adopt energy-efficient air conditioning systems and strengthen energy efficiency management	284	336	388	440	492	544
Low-Carbon Transportation	Replaced 124 cars and 128 motorcycles by 2024, reducing approximately 206.65 metric tons CO_2e	→ Gradually replace official vehicles with low-fuel consumption or electric vehicles in line with annual budgeting and cost-saving measures	278	392	488	583	678	774
IT Equipment Management	Achieved a total carbon reduction of approximately 837.48 metric tons CO_2e by the end of 2024	→ Convert physical servers to virtual servers to reduce electricity and cooling costs → Replace physical meetings with virtual meetings → Replace outdated equipment	712.1	713.2	715.0	736.1	753.6	730.7
Strategy : Providing Green Services								
Paperless Service Counters	As of 2024, approximately 76,840 applications were processed paperlessly at service counters, reducing about 1.167 metric tons CO_2e	→ Develop water and data management systems and digitize data archiving → Implement paperless processing for in-person applications → Integrate with relevant operational systems	1.096	1.437	1.447	1.457	1.467	1.477
Paperless Water Bills	By the end of 2024, a total of 1,506,930 e-bills were issued, achieving a carbon reduction of 68.72 metric tons CO_2e	→ Increase the adoption rate of e-bills	75.23	80.60	85.97	91.34	96.71	102.08
EV Charging Stations	A total of 18 EV charging stations were installed for public use by the end of 2024	→ Promote convenience and green services	To Be Evaluated and Planned					
Strategy : Enhancing Green Production and Efficient Resource Utilization								
AI-enabled Precision Chemical Dosing	Before implementation, the chemical dosing volume was approximately 15 liters per hour. After implementation, it was reduced to 8.9 liters, representing a 41% decrease in chemical usage. Wastewater volume was reduced by approximately 2%, with a carbon reduction volume of around 2.745 metric tons of CO_2e.	→ The system is being developed through data collection and real-time water quality analysis to build an AI-enabled precision chemical dosing system. Traditional feedback-based dosing methods often lead to chemical waste under extreme weather conditions due to rapid changes in water quality.	2.30	6.00	6.00	6.00	6.00	5.81

Net Zero Emission Measures	2024 Performance	Management Goals and Implementation	Estimated Carbon Reduction Volume (metric tons CO_2e)					
			2025	2026	2027	2028	2029	2030
Sludge Resource Recovery and Reuse	Ongoing promotion and implementation	→ An estimated annual reduction of 32 metric tons of landfill waste, with a projected total carbon reduction of 57.6 metric tons of CO_2e from 2025 to 2030 → Research on reuse of dewatered sludge from water treatment processes → Promotion of circular economy practices → Compliance with relevant environmental regulations	9.6	9.6	9.6	9.6	9.6	9.6
Reducing Water Leakage	● As of 2024, the water leakage rate was reduced to 11.99%, with a carbon reduction volume of approximately 55,688 metric tons of CO_2e ● Development and implementation of AI-enabled leak detection systems, improving detection accuracy to over 80%	→ Projected leakage rates: 11.55% in 2025, 10.86% in 2027, and 10.17% in 2030 → Ongoing pipeline replacement: adopting earthquake-resistant pipe materials and replacing aging, leak-prone pipelines → Enhanced monitoring and control: widespread installation of pressure monitoring stations and booster stations, use of variable frequency drives at water treatment plants, and pressure-reducing valves to stabilize water pressure and reduce leakage and pipe bursts → Big data utilization: strengthening map data management and leveraging geographic information systems, data monitoring systems, and the WADA Smart Water Network → Promoting technological leak detection: introducing new technologies and equipment, and developing AI-assisted detection technologies	46,287	48,821	50,223	51,401	52,488	51,845
Tree Planting for Carbon Sequestration	A total of 279.29 hectares of land has been afforested, resulting in an estimated carbon reduction volume of approximately 2,714.2 metric tons of CO_2e.	→ Greening efforts have been carried out across various new and existing stations, reservoirs, management buildings, and service offices.	2,710.78	2,710.78	2,727.28	2,727.28	2,727.28	2,727.28

TWC's Overall Goals and Action Plans for Strengthening Water Supply Resilience

Water Supply Resilience Measures	2024 Performance	Management Goals and Implementation Approaches	Planned Budget and Other Inputs
Strategy : Development of Diversified Water Sources			
Water Source Development	→ Completed the design of the Caotun Water Treatment Plant (designed capacity: 50,000 m^3/day) → Completed the Yanpu Water Treatment Plant (designed capacity: 15,000 m^3/day) → Completed the design of the Caotun Water Treatment Plant (designed capacity: 50,000 m^3/day) → Completed the Yanpu Water Treatment Plant (designed capacity: 15,000 m^3/day)	→ Cooperate with the Water Resources Agency on water source development projects to effectively utilize stream water during wet seasons → Reduce groundwater extraction to mitigate land subsidence	→ Total budget for the downstream water supply project of the Niaozuitan Artificial Lake: NTD12.36 billion → TWC's share of the Daan-Dajia River interconnection pipeline project: NTD1.82 billion
Securing Proprietary Water Sources	→ Hsinchu Seawater Desalination Plant Project – awarded the contract for transmission pipelines and receiving reservoir; basic design underway → Tainan Seawater Desalination Plant Project – awarded the turnkey contract for transmission pipelines; basic design underway	→ Strengthen the development and application of artificial lakes and bank filtration in plains areas → Cooperate with the Ministry of Economic Affairs on seawater desalination plant development (Hsinchu, Tainan, offshore islands) → Construct new weirs to increase reservoir capacity and reduce flood impact → Implement raw and clean water procurement plans to reduce costs, enhance operational performance, and stabilize water supply	→ Phase II construction of Wu River bank filtration: NTD982 million → Phase II bank filtration development project: NTD200 million → Hsinchu and Tainan seawater desalination plants (executed by the Ministry of Economic Affairs): NTD3 billion and NTD4.598 billion respectively → Investment in movable weir at Nanhua Reservoir spillway crest: NTD1.101 billion → Investment in new weir at Donggang River: NTD400 million
Strategy : Accelerating Leakage Reduction			
Reducing Water Leakage Rate	→ Replaced 592 kilometers of pipelines in 2024 → Established 132 district metered areas (DMAs)	→ Reduce the water leakage rate to 9.77% by 2032	→ Total investment in leakage reduction program: NTD63.41 billion → In 2025, plan to replace 718 kilometers of pipelines and establish 74 DMAs
Enhancing Leak Repair	→ Continued to strengthen leak repair response mechanisms: 2024 one-day repair rate reached 99.41%, and three-day repair rate reached 99.93%, both exceeding the targets of 95% and 99.4% respectively → Detected 3,925 underground leakage cases in 2024, with 35,193 kilometers of pipelines inspected → Conducted safety assessments for 15 pipelines identified by the Ministry of Economic Affairs as critical to public safety and water supply risk, and developed short-, medium-, and long-term improvement plans based on risk levels	→ Enhance emergency response capabilities for pipe bursts and leak repairs → Introduce new leak detection methods and technologies → Conduct safety assessments for critical pipelines	→ Training, management enhancement, and assessment plans are budgeted annually based on project needs

Water Supply Resilience Measures	2024 Performance	Management Goals and Implementation Approaches	Planned Budget and Other Inputs
Strategy : Installation of Backup Transmission Pipelines			
Construction and Improvement of Backup Mains	→ Completed the Taoyuan-Hsinchu pipeline project for southbound water delivery to Hsinchu City in August 2024 → Backup dual pipeline project from Yunlin to Chiayi → Water conveyance pipeline project from Donggang River to the buffer pond of Fengshan Reservoir → Approximately 75% completion of the backup main pipeline project from Gangshan to Beiling Booster Station	→ Install 17 backup pipelines (5 in the north, 5 in the central region, 7 in the south) to enhance backup dispatch capacity and stabilize daily water supply at 2.61 million m3/day → Completed projects include: dual pipeline from Nanhua Plant to Fongde Distribution Reservoir, backup intake facility at Yongheshan Reservoir, improvement of regional water dispatch pipelines from Taichung to Yunlin, and supply network upgrades in Sanchong and Luzhou to enhance supply capacity and resilience	→ Total investment in backup main pipeline projects: NTD19.95 billion → Dual pipeline from Nanhua Plant to Fongde Reservoir: NTD5.749 billion → Backup intake facility at Yongheshan Reservoir: NTD1.905 billion → Pipeline improvement from Taichung to Yunlin: NTD4.08 billion → Supply network improvement in Sanchong and Luzhou: NTD2.785 billion
Strategy : Modernization of Water Treat-ment Plants			
Upgrading and Improvement of Treatment Plants	→ Approximately 82% completion of the Tainan Shanshang Water Treatment Plant improvement project	→ Maintain treatment plant capacity and reduce pressure on water source development → Increase daily water treatment capacity in Tainan by 50,000 m^3 → After Phase III upgrade of Longtan Water Treatment Plant, output restored to 190,000 CMD, enhancing water quality and supply capacity in Taoyuan	→ 11 plants scheduled for short-term modernization (by 2026), 10 plants to be rebuilt or newly constructed, and 4 plants under medium- to long-term evaluation → Tainan Shanshang Plant improvement: NTD2.79 billion → Longtan Plant Phase III upgrade: NTD606 million
New and Expanded Treatment Facilities	→ Phase II of the Zengwen Water Treatment Plant expansion project is approximately 99% complete	→ Enhance TWC's water supply capacity → Strengthen regional dispatch capabilities → Meet water demand in newly developed areas	→ Taoyuan Aerotropolis Water Supply Project: NTD322 million → Sankeng Intermediate Booster Station Project: NTD899 million → Zengwen Plant expansion (Phase II): NTD1.538 billion (fully funded by STSP Administration, executed by TWC) → Houli Industrial Park and Taichung Park support project: NTD2.893 billion (TWC share: NTD111 million) → Fengyuan Plant Phase I & II upgrade: NTD1.805 billion → South Taichung Water Treatment Plant Project: NTD2.748 billion → Guansi Plant and Xinpu Distribution Center improvement: NTD1.424 billion → Linzhuang Plant reconstruction: NTD230 million
Strategy : Strengthening Emer-gency Re-sponse			
Emergency Power Backup at Water Supply Facilities	→ Installed 483 generators across pumping stations, water treatment plants, and booster stations, with a total installed capacity of 146,504 kW	→ Add 7 emergency backup generators during 2024–2025 → Enhance power supply stability at water supply facilities during flood seasons and reduce flood risks	→ Continue assessing environmental permits for each facility → For sites with unsuitable environments, open contracts or emergency rental of temporary generators will be arranged as needed

Water Supply Resilience Measures	2024 Performance	Management Goals and Implementation Approaches	Planned Budget and Other Inputs
Emergency Water Supply Response Plans	→ Conducted 13 emergency drills → Emergency response plans for all regional branches were approved in 2024	→ Strengthen disaster prevention and response systems → Enhance disaster response and recovery capabilities → Minimize losses from disasters and incidents → Mitigate the impact of droughts on livelihoods and industries	→ Disaster prevention and response plans → Emergency response plans for each regional branch → Raw water allocation strategies during high turbidity in flood seasons → Water allocation during droughts → Earthquake and typhoon emergency response plans
Emergency Materials Supply Plan	→ Ongoing stockpiling and supply	→ Provide real-time inventory and supplier information across the company to ensure timely, adequate, and quality procurement → Shorten supplier lead times and material delivery schedules to maintain stable water supply	→ Stockpile commonly used and emergency repair materials → Ensure timely supply of materials for pipeline repairs → Update the materials management information system
Strategy : Promoting End-to-End Water Safety			
Enhancing Maintenance and Replacement of Water Quality Monitoring Instruments	→ Integrated 13 regional office datasets via ADTS, including three categories of water quality data: cloud-based monitoring, plant inspections, and laboratory testing → A total of 2,720,388 data entries were logged annually, with daily updates maintained to enhance monitoring density; water quality compliance rate reached 99.98%	→ Strengthen maintenance and management of automated water quality monitoring equipment at all TWC water treatment plants → Use advanced detection devices to issue early warnings and prevent contamination → Align with the government's open data policy by improving deployment of monitoring instruments → Replace and upgrade automated monitoring equipment to ensure proper operation and safeguard water quality	→ Allocate budget for calibration and routine maintenance of water quality monitoring instruments → Maintain stable operation and expand functionality of ADTS → Invest in staff training to improve anomaly interpretation and emergency response capabilities
Improving Drinking Water Source Safety and Quality	→ Conducted 26 Water Safety Plan drills → 1,194 tests conducted for emerging contaminants prioritized on the watchlist, including organic compounds, disinfection by-products, and pesticides	→ Identify and address potential risks to water safety through Water Safety Plans → Achieve water quality targets in compliance with regulations and internal standards → Establish testing technologies and baseline data for emerging contaminants	→ Incorporate Water Safety Plan concepts into new and expanded treatment plant projects, integrating performance evaluations and early warning systems → Develop water treatment strategies → Strengthen abnormal water quality control → Enhance water quality testing programs → Conduct research projects in response to news events and public concerns
Strengthening Water Quality Information Management	→ Real-time water quality data made publicly available across 13 regional offices, covering 496 monitoring points in 328 townships → Expanded Alarm Data Transfer System, ADTS (ADTS) user access to 439 water treatment plants, enabling staff to input and query raw and clean water quality data twice daily for real-time monitoring	→ Integrate with the company website to provide real-time water quality information to users, enhancing service quality and customer satisfaction → Establish a water quality early warning network to ensure safety and hygiene → In line with the government's open data policy, real-time water quality data is published via GIS maps on TWC's official website	→ Upgrade the Laboratory Information Management System (LIMS) → Enhance ADTS functionality

3.2.4 Future Outlook

Addressing climate change requires long-term planning, robust evaluation, and the collective implementation of clear strategies and goals. As Taiwan's primary public water utility, Taiwan Water Corporation (TWC) is committed to its mission of ensuring sufficient and high-quality water supply. Strengthening the resilience of the water supply network and enhancing supply capacity remain central to TWC's strategic direction. To this end, the company continues to develop management frameworks and implementation systems that support climate adaptation.

In its decarbonization efforts, TWC adopts a philosophy grounded in persistence and pragmatism—recognizing that meaningful progress is achieved through the accumulation of consistent, small-scale actions. The company actively identifies, evaluates, and implements carbon reduction measures, supported by ongoing research and planning to drive long-term impact.

To enhance climate risk assessment and disclosure, TWC is accelerating alignment with both domes-tic and international climate governance frameworks. By integrating qualitative and quantitative methodologies, the company aims to strengthen its evaluation of climate-related financial risks, providing a solid foundation for stakeholder engagement and risk management.

In support of Taiwan's national target to reduce carbon emissions by 30% by 2030 compared to 2005 levels, TWC has established the "Solar PV 2.0 Task Force" to expand solar panel installations and advance its renewable energy strategy. As of April 2025, 44 additional sites have been identified for solar deployment, with an estimated reduction of 1,535 metric tons of CO_2e. Looking ahead, TWC will continue to implement its net-zero strategy and deepen its decarbonization achievements. At the same time, the company will further enhance the resilience of its water supply infrastructure, positioning itself as a climate-resilient utility.

3.3 Nature Risks and Positive Action

As environmental challenges such as climate change, natural resource depletion, and biodiversity loss become increasingly severe, businesses are recognizing that the loss of natural capital is not merely an environmental externality—it also represents a source of material financial risks and opportunities. Nature-related risks can directly affect business operations, supply chains, and long-term sustainability.

In response to this growing concern, the Taskforce on Nature-related Financial Disclosures (TNFD) was officially launched in 2021 to support companies and financial institutions in identifying, as-sessing, and managing nature-related risks and opportunities. The TNFD framework encourages the integration of nature-related considerations into corporate decision-making and disclosure processes. It is structured around four core pillars: governance, strategy, risk and opportunity management, and metrics and targets. These disclosure components are designed to help organizations understand their dependencies and impacts on nature, and to direct capital toward activities that contribute positively to natural ecosystems.

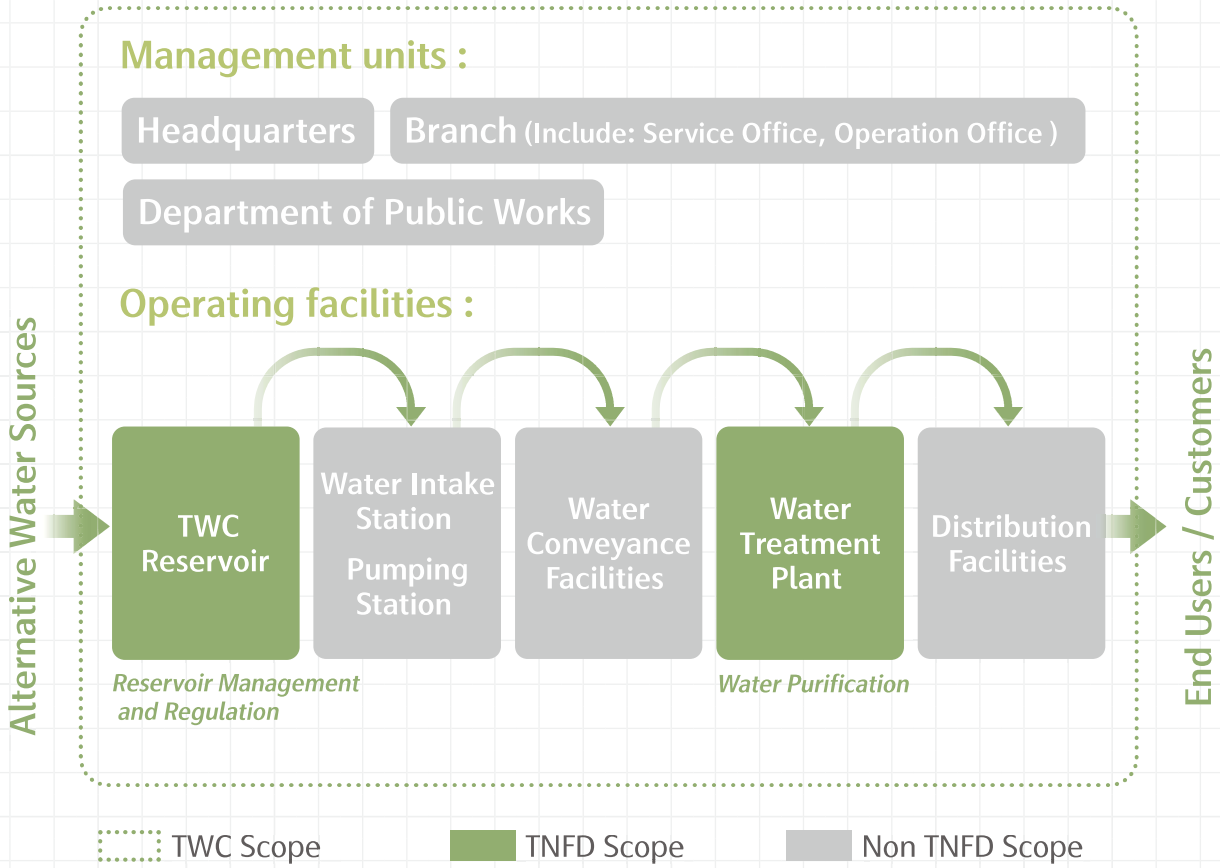
By adopting the TNFD framework, companies can gain a more holistic understanding of how nature influences financial performance and sustainable development, enabling them to proactively develop strategies that enhance resilience and long-term competitiveness. Although nature-related risks and biodiversity impacts are not currently classified as material issues for TWC, the company's operations are highly dependent on natural resources—particularly water—and the environmental conditions that support them. Public awareness and concern over these issues continue to grow. Building on previous disclosures related to environmental conservation and monitoring, this report adopts the TNFD's LEAP approach as a preliminary reference to disclose nature-related aspects of TWC's operations.

3.3.1 Nature-Related Operational Scope

(1) Definition of Operational Activities

TWC's water supply operations begin at the raw water source, which include reservoirs and storage facilities managed by TWC, the Taipei Water Department, the Irrigation Agency, and various re-gional Water Resources Bureaus. Raw water is extracted through TWC's intake structures or pump-ing stations and conveyed via transmission infrastructure to TWC's water treatment facilities for processing. Once treated, clean water is delivered through distribution infrastructure to municipal and industrial distribution reservoirs, where it is made available for end users. TWC's operational scope encompasses not only administrative units such as the Headquarters, Branches, and Engineering Offices, but also includes physical infrastructure such as reservoirs, intake facilities, transmission pipelines, water treatment facilities, and distribution networks, as illustrated in the diagram below.

TWC Jurisdictional Boundaries and Nature-Related Scope of Assessment



(2) Nature-Related Units and Facilities

This report provides a preliminary assessment of the interaction interfaces between TWC's operational units and facilities and the natural environment, as illustrated in figure below. TWC's operations include both administrative units and physical infrastructure. The nature-related impacts of these components are summarized in the table below. Based on the principle of materiality, this report focuses its analysis on reservoirs under TWC's jurisdiction and water treatment facilities with a daily output capacity of 200,000 cubic meters (CMD) or more. The locations included in this nature-related risk assessment are detailed below..

Locations Included in the Nature-Related Risk Assessment

Facility / Unit	Nature-Related Interface and Impact	Assessment Inclusion Criteria	Number of Sites Included
Reservoirs	Reservoirs and water treatment facilities involve high operational intensity and broad environmental impact. Reservoir operations include water level regulation, sediment removal, and watershed management. Some reservoirs also serve recreational and tourism functions. As freshwater ecosystems, reservoirs interact closely with surrounding forest and grassland environments. Water level fluctuations caused by reservoir operations may affect local ecosystems. During droughts or floods, reservoirs must maintain storage levels within design parameters, which may require flood discharge or sediment flushing, potentially impacting downstream ecology.	Reservoirs managed by TWC	21 reservoirs
Other Intake Facilities (e.g., intake structures, pumping stations)	These facilities are relatively small in scale and operate as closed systems, resulting in minimal environmental impact. For example, transmission pipe-lines located in mountainous areas may pass through ecologically sensitive upstream watersheds.	Not included in current assessment	-
Water Treatment Plants	The primary function of water treatment plants is to purify water for supply purposes. Although interaction with surrounding natural environments is limited, treatment processes consume energy and resources, which may indirectly impact the environment. This report focuses on facilities with higher treatment capacity.	Daily output capacity ≥ 200,000 CMD	17 water treatment plants
Distribution Network	Distribution pipelines are critical infrastructure for transporting water resources. Both transmission and distribution pipelines have relatively limited environmental impact. Once constructed, they operate as closed systems with minimal interaction with external natural resources.	Not included in current assessment	-
Administrative Units	These are primarily office-based operational sites located in urban areas or within reservoir and treatment plant campuses. Their impact on natural ecosystems is limited. Activities mainly involve administrative functions, with environmental impacts such as water and electricity consumption, fuel use for commuting, and air emissions being relatively minor.		-

3.3.2 Nature-Related Resources of TWC

(1) Biodiversity

Biodiversity refers to the variety of life forms within a given ecosystem, encompassing species diver-sity (such as plants, animals, and microorganisms), genetic diversity (genetic variation within a spe-cies), and ecosystem diversity (such as forests, grasslands, wetlands, etc.). Biodiversity is essential for maintaining the stability and functionality of ecosystems and has profound implications for hu-man survival and well-being.

This report evaluates the interaction between nature and two major categories of TWC operational sites—reservoirs and water treatment plants with a daily output capacity of 200,000 CMD or more—by overlaying publicly available environmental and biodiversity-related geospatial data. These in-clude legally designated environmentally sensitive areas, biodiversity maps with defined boundaries (e.g., potential species distribution maps), the National Ecological Green Network, and datasets pro-vided by NGOs. Figure below illustrates the overlap between TWC's operational sites and these areas of concern, while tables below detail the types of ecosystems and species potentially affected. The three categories of environment-tally protected or high-biodiversity-value areas overlapping with TWC's operational sites are de-scribed as follows:

A. **Biodiversity Areas:** These include biodiversity datasets published by competent authorities or NGOs, such as the Forestry and Nature Conservation Agency, the Taiwan Biodiversity Research Institute of the Ministry of Agriculture, and the Taiwan Amphibian Database. The datasets include clearly defined boundaries and cover areas such as Critical Habitats for Threatened Plant Species Listed in the Red List, Buffer Zones Around Threatened Plant Distribution Points, Potential Dis-tribution Ranges for 49 Protected Terrestrial Vertebrate Species, Potential Distribution Ranges for 379 Terrestrial Vertebrate Species, Taiwan Important Frog Area, Habitats and Distribution Areas of the Leopard Cat, Waterbird Hotspots, and Important Bird Habitats from the eBird database.

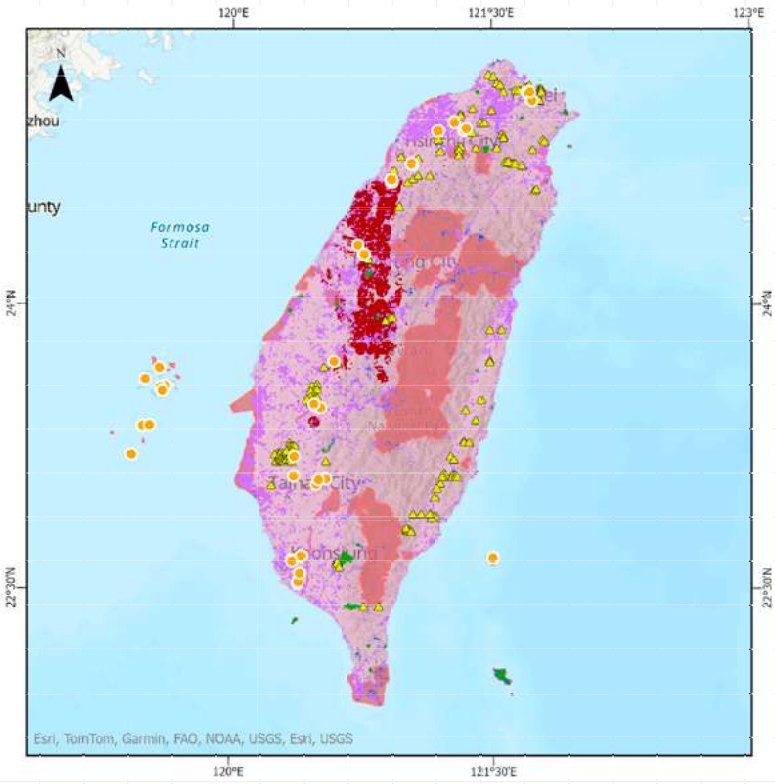
B. **Taiwan Ecological Network:** The "Taiwan Ecological Network Blueprint Planning and Devel-opment Project," implemented by the central authority for nature conservation—the Forestry and Nature Conservation Agency under the Ministry of Agriculture—has yielded significant outcomes. The project established biodiversity hotspots through species analysis models for both terrestrial and aquatic environments. These hotspots were further refined by integrating landscape features and existing ecological research to identify key areas of concern. Regional conservation corridors were then designated, taking into account habitat restoration and ecological connectivity. The cur-rent categories involved include: Areas of Concern, Rivers of Concern, Agricultural Irrigation Channels and Ponds of Concern Within the Taiwan Ecological Network, Key Satoyama Land-scapes, Biodiversity Hotspots, and Regional Conservation Corridors Within the Taiwan Ecological Network.

C. **Environmentally Sensitive Areas:** These areas are designated by various central competent authorities, such as the Forestry and Nature Conservation Agency and the Forestry Research Institute under the Ministry of Agriculture, the National Park Service under the Ministry of the Interior, and the Water Resources Agency under the Ministry of Economic Affairs. They are officially announced as zones subject to specific legal protections, restrictions, or management. The categories relevant to TWC sites include: National Scenic Areas, Geoparks, Geologically Sensitive Ground-water Recharge Zones, Drinking Water Source Protection Areas, and Reservoir Catchment Areas. Preliminary assessments indicate that the establishment or designation of these areas has relatively low relevance to biodiversity. Therefore, at this stage, they are only included in mapping data for reference purposes, with the potential for further identification and analysis of ecological risks in the future.

Using Geographic Information System (GIS) overlay analysis, the preliminary scope has identified that two major categories of TWC sites—21 reservoirs and 17 water treatment plants with an output exceeding 200,000 CMD—are associated with seven biodiversity-related mapping categories (A), six Taiwan Ecological Network categories (B), and seven environmentally sensitive area categories (C). Among these, reservoirs are typically located in upstream river areas or mountainous catchment zones, which are often rich in biodiversity and natural ecosystems. Due to their larger scale com-pared to water treatment plants, reservoirs are generally associated with a greater number and variety of relevant categories.

Site Locations Within Nature-Related Analytical Scope: Biodiversity (A) and Taiwan Ecological Network (B)

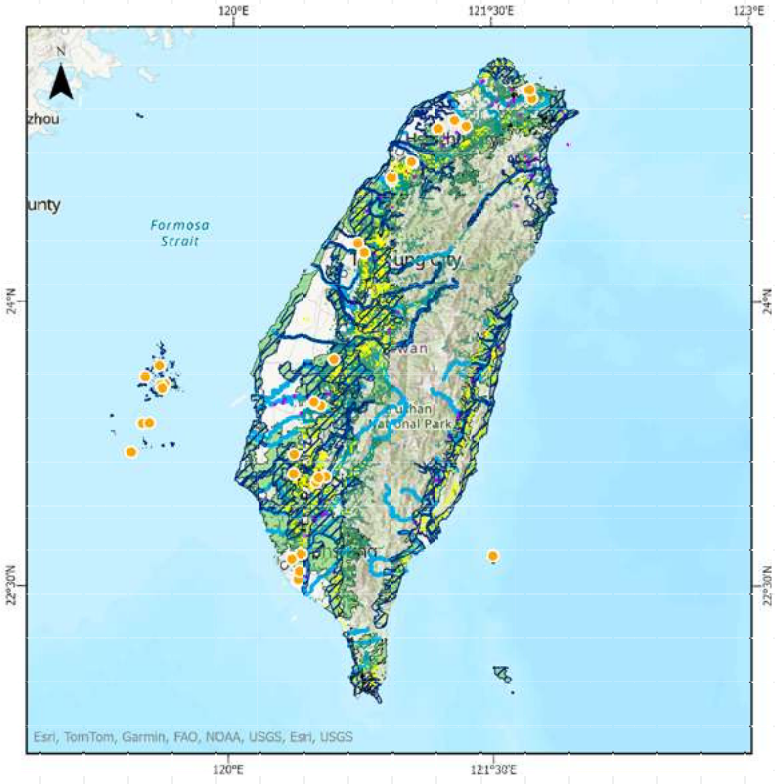
(A) Biodiversity



Legend

- TWC Sites
- Taiwan Important Frog Area
- Critical Habitats for Threatened Plant Species Listed in the Red List
- Buffer Zones Around Threatened Plant Distribution Points in the Red List
- Waterbird Hotspots from the eBird database
- Important Bird Area
- Habitats and Distribution Areas of the Leopard Cat
- Potential Distribution Ranges for 49 Protected Terrestrial Vertebrate Species

(B) Taiwan Ecological Network



Legend

- TWC Sites
- Areas of Concern within the Taiwan Ecological Network
- Rivers of Concern within the Taiwan Ecological Network
- Agricultural Irrigation Channels and Ponds of Concern within the Taiwan Ecological Network
- Key Satoyama Landscapes
- Regional Conservation Corridors Within the Taiwan Ecological Network
- Biodiversity Hotspots

Overall, reservoir areas are associated with a greater number of biodiversity-related zones, most of which are designated as buffer zones or broad habitats for protected species—such as Potential Distribution Areas for Terrestrial Vertebrate Species and Waterbird Hotspots. Notably, Lantan Reservoir in Chiayi overlaps with Critical Habitats for Threatened Plant Species Listed in the Red List, while Baoshan Reservoir in Hsinchu and Yongheshan Reservoir in Miaoli are located within Leopard Cat Conservation Areas.

In contrast, Water Treatment Plants are typically situated in developed areas and are enclosed, manmade facilities. As such, they are primarily associated with broader Species Distribution Zones rather than specific Biodiversity Hotspots. However, some exceptions exist: Fengyuan Water Treatment Plants I and II in Taichung are located within Leopard Cat Conservation Areas; Hushan Water Treatment Plant in Yunlin overlaps with Key Habitats for the Taiwan Important Frog Area; and Fengshan Water Treatment Plant in Kaohsiung is situated within an Important Bird Habitat.

The ecosystems associated with TWC sites include aquatic environments such as ponds and wetlands, and terrestrial environments such as broadleaf forests and low-elevation hills. In addition, all sites in the Penghu region are located within national scenic areas and are part of island ecosystems.

Furthermore, both reservoirs and water treatment plants intersect with various designated areas under the Taiwan Ecological Network, including Areas of Concern, Rivers and Ponds, Conservation Corridors, Satoyama Landscapes, and Biodiversity Hotspots. As for Environmentally Sensitive Areas designated by domestic authorities, these are mostly related to Water Quality Protection Zones around reservoirs, and may also include National Scenic Areas and Geoparks. TWC will align its ecological conservation and biodiversity initiatives with national policies and regional zoning plans, conducting assessments and collaborations to mitigate related risks and seize opportunities for nature-positive outcomes.

Environmental Types Potentially Involved or Affected Within the Nature-Related Analytical Scope

Protected or Biodiversity Areas	Reservoirs	Water Treatment Plants
Map Category : Biodiversity Mapping		
Critical Habitats for Threatened Plant Species Listed in the Red List	Lantan	-
Buffer Zones Around Threatened Plant Distribution Points in the Red List	Xinshan, Baoshan, Lantan, Nanhua, Chengqing Lake, Xingren, Chikan	Fengyuan No.1
Potential Distribution Ranges for 49 Protected Terrestrial Vertebrate Species	Xinshan, Xishi, Yuanshan Weir, Baoshan, Yongheshan, Lantan, Renyitan, Jingmian, Nanhua, Yufeng Weir, Fengshan, Chengqing Lake	Xinshan, Banxin, Pingzhen, Baoshan, Dongxing, Liyutan, Fengyuan No.1, Fengyuan No.2, Hushan, Gongyuan, Nanhua, Danan, Wusantou, Fengshan, Pingding, Chengqing Lake, Koutan
Potential Distribution Ranges for 379 Terrestrial Vertebrate Species	Xinshan, Xishi, Yuanshan Weir, Baoshan, Yongheshan, Lantan, Renyitan, Jingmian, Nanhua, Yufeng Weir, Fengshan, Chengqing Lake	Xinshan, Banxin, Pingzhen, Baoshan, Dongxing, Fengyuan No.1, Fengyuan No.2, Hushan, Gongyuan, Nanhua, Danan, Wusantou, Fengshan, Pingding, Chengqing Lake, Koutan
Important Bird Habitats	Fengshan	Fengshan
Waterbird Hotspots from the eBird database	Xinshan, Xishi, Yuanshan Weir, Yongheshan, Lantan, Renyitan, Nanhua, Fengshan, Chengqing Lake	Pingzhen, Liyutan, Gongyuan, Nanhua, Danan, Wusantou, Fengshan, Chengqing Lake, Koutan
Habitats and Distribution Areas of the Leopard Cat	Baoshan, Renyitan, Yongheshan	Fengyuan No.1, Fengyuan No.2
Taiwan Important Frog Area	-	Hushan

Protected or Biodiversity Areas	Reservoirs	Water Treatment Plants
Map Category : Taiwan Ecological Network		
Areas of Concern within the Taiwan Ecological Network	Baoshan, Yongheshan, Lantan, Nanhua, Yufeng Weir, Fengshan, Chengqing Lake, Chenggong, Xingren, Dongwei, Chikan, Xian, Xiaochi, Qimei, Wugou Pond, Chouqin	Pingzhen, Baoshan, Dongxing, Liyutan, Fengyuan No.1, Fengyuan No.2, Hushan, Gongyuan, Nanhua, Wusantou, Fengshan, Pingding, Chengqing Lake, Koutan
Rivers of Concern within the Taiwan Ecological Network	Yufeng Weir	-
Agricultural Irrigation Channels and Ponds of Concern within the Taiwan Ecological Network	Nanhua	-
Regional Conservation Corridors Within the Taiwan Ecological Network	Lantan, Yufeng Weir, Chenggong, Xingren, Dongwei, Chikan, Xian, Xiaochi, Qimei, Wugou Pond, Chouqin	Pingzhen, Liyutan, Fengyuan No.1, Fengyuan No.2, Gongyuan, Nanhua, Wusantou
Key Satoyama Landscapes	Baoshan, Yongheshan, Renyitan, Jingmian, Nanhua, Yufeng Weir	-
Biodiversity Hotspots	Baoshan, Nanhua, Yongheshan	Baoshan, Fengyuan No.1, Fengyuan No.2
Map Category : Other Environmentally Sensitive Areas		
Drinking Water-Related: Reservoir Catchment Areas, Reservoir Storage Zones, and Drinking Water Source Protection Zones	Xinshan, Yuanshan Weir, Baoshan, Lantan, Renyitan, Jingmian, Nanhua, Yufeng Weir, Fengshan, Chengqing Lake, Chenggong, Xingren, Dongwei, Chikan, Xian, Xiaochi, Qimei, Wugou Reservoir, Chouqin, Yongheshan	Nanhua, Fengshan, Chengqing Lake, Wusantou
Geologically Sensitive Areas for Groundwater Recharge	Yufeng Weir	Fengyuan No.1, Hushan
National Scenic Areas	Jingmian, Yufeng Weir, Chenggong, Xingren, Dongwei, Chikan, Xian, Xiaochi, Qimei, Wugou Pond, Chouqin	Wusantou
Geoparks	Chenggong, Xingren, Dongwei, Chikan, Xian, Xiaochi, Qimei, Wugou Reservoir	-
Protected Forests	Chikan	-

Environmental Types Potentially Involved or Affected Within the Nature-Related Analytical Scope

County	Reservoir	Ecosystems
Keelung City	Xinshan	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
Keelung City	Xishi	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
New Taipei City	Yuanshan Weir	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
Taitung County	Chouqin	**Freshwater Ecosystem:** Pond, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Island

County	Reservoir	Ecosystems
Hsinchu County	Baoshan	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
Miaoli County	Yongheshan	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
Chiayi County	Lantan Reservoir	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain
Chiayi County	Lantan Reservoir	**Freshwater Ecosystem:** Lake, Wetland **Terrestrial Ecosystem:** Broadleaf Forest, Low Mountain

County	Reservoir	Ecosystems
Tainan City	Jingmian	Freshwater Ecosystem: Lake, Wetland Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Tainan City	Nanhua	Freshwater Ecosystem: Lake, Wetland Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Tainan City	Yufeng Weir	Freshwater Ecosystem: Stream Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Fengshan	Freshwater Ecosystem: Lake, Wetland Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Chengqing Lake	Freshwater Ecosystem: Lake, Wetland Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Penghu County	Chenggong	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Xingren	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Dongwei	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Chikan	Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Xian	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Xiaochi	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Qimei	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island
Penghu County	Wugou Pond	Freshwater Ecosystem: Pond, Wetland Terrestrial Ecosystem: Coastal Forest, Island

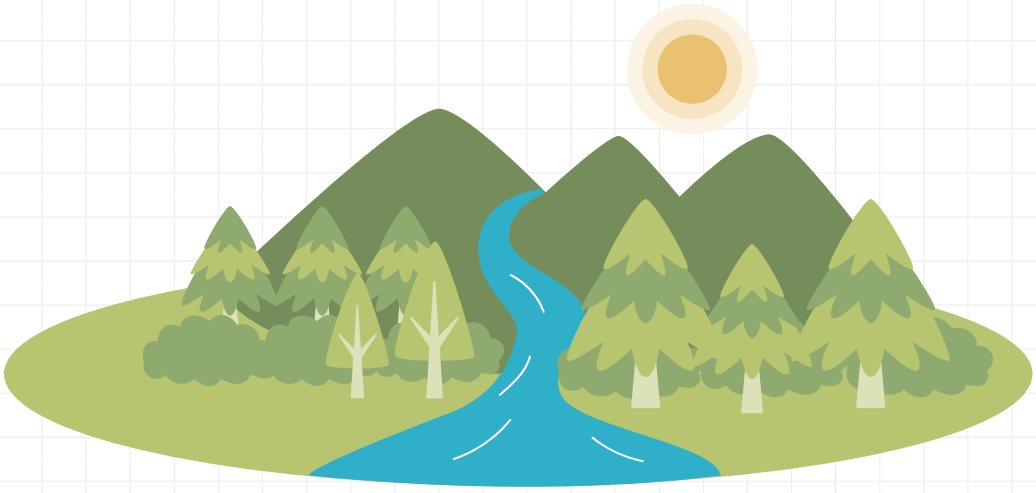
County	Water Treatment Plants	Ecosystems
Keelung City	Xinshan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
New Taipei City	Banxin	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Taoyuan City	Pingzhen	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Taoyuan City	Danan	Terrestrial Ecosystem: Low Mountain
Hsinchu County	Baoshan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Miaoli County	Dongxing	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Taichung City	Liyutan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Taichung City	Fengyuan No.1	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Taichung City	Fengyuan No.2	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Yunlin County	Hushan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Chiayi County	Gongyuan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Tainan City	Nanhua	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Tainan City	Wushantou	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Fengshan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Pingding	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Chengqing Lake	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain
Kaohsiung City	Kaotan	Terrestrial Ecosystem: Broadleaf Forest, Low Mountain

(2) Ecosystem Services

According to the Millennium Ecosystem Assessment (2003), ecosystem services refer to the benefits that humans obtain from ecosystems. This definition explicitly recognizes the value of nature, which can be measured and used to support environmental management decisions. These services are generally categorized into four main types. Economic activities such as water collection, treatment, and supply typically involve all four categories:

1. **Provisioning Services:** These include the supply of food, water, timber, and other raw materials. For example, crops, fisheries, and livestock provide essential food sources. Rivers and groundwater are critical sources of drinking water, while forests supply construction materials and fuel—resources that are indispensable to human life.
2. **Regulating Services:** These services include climate regulation, flood control, pest and disease regulation, noise reduction, and water purification. For instance, forests help mitigate greenhouse gases by absorbing carbon dioxide, thereby regulating the climate. Wetlands act as natural buffers by absorbing and reducing floodwaters. Additionally, natural predators such as birds and insects help control pest populations, reducing crop losses.
3. **Cultural Services:** These services provide recreational, spiritual, and educational benefits. Nature parks and protected areas offer opportunities for hiking, birdwatching, and other leisure activities, allowing people to enjoy the beauty of nature. Harmonious landscapes can offer peace of mind and spiritual enrichment. Moreover, natural environments provide valuable educational opportunities for learning and researching ecosystem functions.
4. **Supporting Services:** These include soil formation, nutrient cycling, and plant growth. Microorganisms and plant root systems contribute to the formation and maintenance of healthy soils, which are essential for agriculture. Decomposers such as bacteria and fungi break down organic matter, releasing nutrients and promoting nutrient cycling. Plants grow through photosynthesis, producing oxygen and food that support the survival of other organisms.

In the context of the two primary site categories identified in the scope—reservoirs and water treat-ment plants—it is observed that most reservoirs rely on stream water, with some utilizing groundwa-ter or surface water. Although water treatment facilities have limited interaction with surrounding natural environments, they may still draw water from reservoirs, streams, or groundwater sources. The ecosystem services affected by TWC's economic activities and the corresponding beneficiaries are summarized in the table below..



Ecosystem Services Potentially Affected by Activities within the Scope of Nature-Related Analysis (Reservoirs and Water Treatment Facilities) and Their Beneficiaries

County/City	Name (Water Source)	Affected Ecosystem Services	Beneficiaries
Reservoirs			
Keelung City	Xinshan (Xinshan River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Keelung City	Xishi (Xishi River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
New Taipei City	Yuanshan Weir (Dahan River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Hsinchu County	Baoshan (Shangping River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Miaoli County	Yongheshan (Zhonggang River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Chiayi County	Lantan (Bazhang River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Chiayi County	Renyitan (Bazhang River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Tainan City	Jingmian (Jingmian River)	Provisioning, Regulating, Supporting	Farmers, Community Residents
Tainan City	Nanhua (Houjue River, Qishan River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Tainan City	Yufeng Weir (Zengwen River)	Provisioning, Regulating, Supporting	Farmers, Community Residents
Kaohsiung City	Fengshan (Donggang River, Gaoping River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Kaohsiung City	Chengqing Lake (Gaoping River)	Provisioning, Regulating, Cultural, Supporting	Farmers, Community Residents, Tourists
Penghu County	Chenggong (Gangdi River)	Provisioning, Regulating, Cultural	Community Residents, Tourists
Penghu County	Xingren (Shuanggang River)	Provisioning, Regulating, Cultural	Farmers, Community Residents, Tourists
Penghu County	Dongwei (Natural Surface Water)	Provisioning, Regulating, Cultural	Community Residents, Tourists
Penghu County	Chikan (Groundwater)	Provisioning, Regulating	Community Residents
Penghu County	Xian (Natural Surface Water)	Provisioning, Regulating	Community Residents
Penghu County	Xiaochi (Natural Surface Water)	Provisioning, Regulating	Community Residents
Penghu County	Qimei (Natural Surface Water)	Provisioning, Regulating, Cultural	Community Residents, Tourists
Penghu County	Wugou Pond (Natural Surface Water)	Provisioning, Regulating	Community Residents
Taitung County	Chouqin (Liomagou Stream)	Provisioning, Regulating	Community Residents
Water Treatment Plants			
Keelung City	Xinshan Water Treatment Plant (Keelung River, Xinshan Reservoir, Dongshi River, Masu River)	Provisioning	Community Residents
New Taipei City	Banxin Water Treatment Plant (Shimen Reservoir)	Provisioning	Community Residents
Taoyuan City	Pingzhen Water Treatment Plant (Shimen Reservoir)	Provisioning	Community Residents
Hsinchu County	Baoshan Water Treatment Plant (Baoshan Reservoir, Baoshan No.2 Reservoir)	Provisioning	Community Residents

County/City	Name (Water Source)	Affected Ecosystem Services	Beneficiaries
Water Treatment Plants			
Miaoli County	Dongxing Water Treatment Plant (Yongheshan Reservoir)	Provisioning	Community Resi-dents
Taichung City	Liyutan Water Treatment Plant (Liyutan Reservoir)	Provisioning	Community Resi-dents
Taichung City	Fengyuan No.1 Water Treatment Plant (Groundwater)	Provisioning	Community Resi-dents
Taichung City	Fengyuan No.2 Water Treatment Plant (Groundwater)	Provisioning	Community Resi-dents
Yunlin County	Hushan Water Treatment Plant (Hushan Reservoir)	Provisioning	Community Resi-dents
Chiayi City	Gongyuan Water Treatment Plant (Bazhang River)	Provisioning	Community Resi-dents
Tainan City	Nanhua Water Treatment Plant (Nanhua Reservoir)	Provisioning	Community Resi-dents
Tainan City	Danan Water Treatment Plant (Shimen Reservoir)	Provisioning	Community Resi-dents
Tainan City	Wusantou Water Treatment Plant (Wusantou Reservoir)	Provisioning	Community Resi-dents
Kaohsiung City	Fengshan Water Treatment Plant (Donggang River)	Provisioning	Community Resi-dents
Kaohsiung City	Pingding Water Treatment Plant (Gaoping River Weir)	Provisioning	Community Resi-dents
Kaohsiung City	Chengqing Lake Water Treatment Plant (Gaoping River Weir)	Provisioning	Community Resi-dents
Kaohsiung City	Koutan Water Treatment Plant (Gaoping River Weir)	Provisioning	Community Resi-dents

3.3.3 Nature-Related Risks and Impacts

(1) Nature-Related Risks and Impacts

The Taskforce on Nature-related Financial Disclosures (TNFD) defines nature-related risks as poten-tial threats to an organization arising from its dependencies and impacts on nature, as well as those of broader society. These risks can be categorized as physical risks, transition risks, or systemic risks. TWC has referred to international TNFD guidance and conducted overlay analyses using relevant environmental spatial layers in Taiwan to identify nature-related risks specific to the water utility sector, as summarized in the table below.

Physical risks stem from the degradation of nature and the resulting loss of ecosystem services, which may pose immediate or long-term threats to the organization. Transition risks arise from misalignments between the actions of economic actors and stakeholder expectations regarding the protection, restoration, or reduction of negative impacts on nature. These include policy risks, market risks, technology risks, reputational risks, and liability risks. Systemic risks are not caused by the failure of individual components but by the collapse of entire systems. These risks are triggered by interconnected tipping points and the cascading interactions between physical and transition risks, potentially leading to widespread losses and reduced system resilience.

Nature-Related Risks Identified by TWC

Risk Type	Risk Categor	Risk Description	Materiality Indicator
Physical Risk	Immediate	Changes in source water quality.	→ Increased production costs may hinder achievement of production targets, potentially resulting in fines or investment challenges.
Physical Risk	Immediate	Extreme weather events such as heavy rainfall, flooding, landslides, or other natural disasters within the watershed pose operational risks to water infrastructure (e.g., infrastructure collapse or overflow).	→ Increased capital expenditures for infrastructure repair due to damage from extreme weather events. → Reputational damage due to aquatic ecosystem pollution and potential eutrophication.
Physical Risk	Immediate	Invasive alien species in infrastructure.	→ Invasive species reduce water intake efficiency, increase treatment time or complexity, and require the development of eradication and management plans, leading to higher direct costs.
Transition Risk	Policy	Stricter regulations on water quantity and/or quality.	→ Increased fines for failing to meet water use or quality standards. → Permit denials for not achieving statutory water reduction targets. → Required investments in water treatment infrastructure, increasing expenditures.
Transition Risk	Technology	Emerging substances of concern, such as PFAS (Per- and polyfluoroalkyl substances), microplastics, pharmaceuticals, and other pollutants.	→ Increased capital expenditures for new or additional water purification and desalination technologies. → Failure to respond promptly to new pollutants may result in customer harm and liability claims.
Transition Risk	Reputational	Changes in rainfall patterns and over-extraction of water resources in catchment areas leading to reputational damage.	→ Over-extraction may trigger reputational risks, as water scarcity is becoming a growing concern for consumers and society at large.

(2) Nature-Related Impacts

Referring to the TNFD Draft Sector Guidance for Water Utilities released in January 2025, 32 outlines the potential impacts of TWC's operational activities—such as water collection, treatment, and supply—on identified ecosystems, biodiversity, and ecosystem services. The current content represents a preliminary identification. Further analysis is required to determine how these impact drivers affect the natural condition of specific sites or biomes, as well as nature's ability to provide ecosystem services.

Pathways and Mechanisms of Potential Impacts on Nature from TWC's Operational Activities

Impact Driver (Pathway and Mechanism)	Potentially Affected Environmental Assets, Biodiversity, and Ecosystem Services	Description of Nature-Related Impacts
Land Use Area (H): Ecosystem degradation caused by activities across the value chain	Environmental Assets[16] Land, Terrestrial Ecosystems Biodiversity (primarily terrestrial) Distribution of threatened plant species (Red List), Potential distribution of terrestrial vertebrates, bird habitats, Leopard cat habitats and distribution, Taiwan Ecological Network, Key Satoyama landscapes, Biodiversity hotspots	Water collection, treatment, and supply may require large areas of land for infrastructure development. These activities can alter land use and directly impact terrestrial and freshwater ecosystems (and in some cases, coastal ecosystems).[17] The primary impacts are on terrestrial environments and ecosystems.
Freshwater Use Area (H) and Water Consumption (L): Overexploitation of water resources may degrade freshwater ecosystems and lead to water shortages beyond normal thresholds	Environmental Assets Water resources, freshwater resources, groundwater ecosystems Biodiversity (primarily aquatic) Bird habitats, Taiwan Ecological Network Ecosystem Services Provisioning Water Supply Regulating and Maintenance Flow Regulation, Water Purification	TWC relies on water resources, including surface water (rivers and lakes) and groundwater (aquifers). Over-abstraction may reduce water availability, dry up rivers, and lower groundwater levels[18], affecting both water supply and related ecosystem services such as flow regulation and water purification.[19] Infrastructure-related issues (e.g., pipe bursts, aging-related leaks) should also be identified, as they may lead to water loss and unnecessary demand on water resources.[20]
Disturbance (M): Noise pollution	Biodiversity (primarily fauna) Potential distribution of terrestrial vertebrates, bird habitats, leopard cat habitats and distribution, Taiwan Ecological Network, biodiversity hotspots Ecosystem Services Noise attenuation	Water collection, treatment, and supply may generate disturbances such as noise pollution from machinery at treatment plants and pumping stations, which can disrupt or negatively affect wildlife populations.

[16] Environmental assets refer to the resources and ecosystems within the natural environment that are essential to the survival and well-being of humans and other living organisms. [16] EEA (2021) Drivers of and pressures arising from selected key water management challenges.

[17] EEA (2021) Drivers of and pressures arising from selected key water management challenges.

[18] Foster, S. and Gogu, R. (2022) Groundwater Assessment and Management for sustainable water-supply and coordinated subsurface drainage: A Guidebook for Water Utilities and Municipal Authorities. IWA Publishing.

[19] EEA (2021) Drivers of and pressures arising from selected key water management challenges.

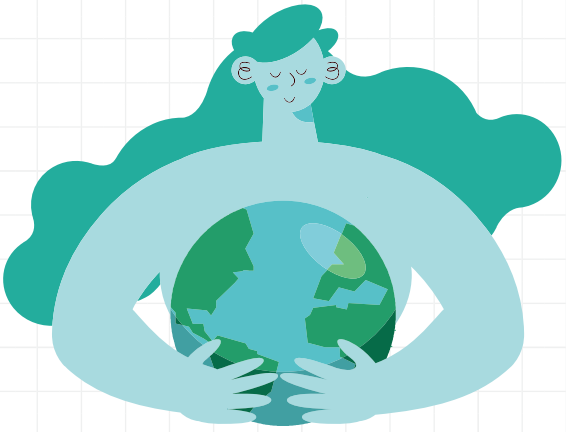
[20] Envirotechonline (n.d.) How Does the Water Industry Affect the Environment?

Impact Driver (Pathway and Mechanism)	Potentially Affected Environmental Assets, Biodiversity, and Ecosystem Services	Description of Nature-Related Impacts
Discharge of Toxic and Nutrient Pollutants into Soil and Water (M): Generation of solid and liquid waste leading to soil and water pollution	Environmental Assets Terrestrial ecosystems, water resources, freshwater resources Biodiversity (terrestrial and aquatic) Critical habitats and buffer zones for threatened plant species, potential distribution of terrestrial vertebrates, bird habitats, leopard cat habitats and distribution, Taiwan Ecological Network, biodiversity hotspots Ecosystem Services Regulating and Maintenance Habitat Maintenance, Solid Waste Remediation, Water Purification	Water collection, treatment, and supply may involve the use of chemicals and processes that generate solid and liquid waste, leading to soil and water pollution. Excessive toxic or waste discharge can degrade water quality, harm aquatic life and local environments (habitat maintenance), and impair the ecosystem's ability to provide water purification services.
Generation and Discharge of Solid Waste (L): Use of reagents may lead to water pollution	Environmental Assets Water resources Biodiversity (primarily aquatic) Bird habitats, Taiwan Ecological Network Ecosystem Services Regulating and Maintenance Solid Waste Remediation, Water Purification	The use of reagents in water treatment processes generates solid waste, which may lead to water pollution and other adverse environmental impacts.

TWC will evaluate and promote relevant measures to effectively assess nature-related operational and financial risks, impacts, and dependencies, and to establish appropriate governance mechanisms and action plans that foster positive impacts on the natural environment. Referring to the TNFD's Sector Guidance for Water Utilities released in January 2025, potential actions for water utilities may include:

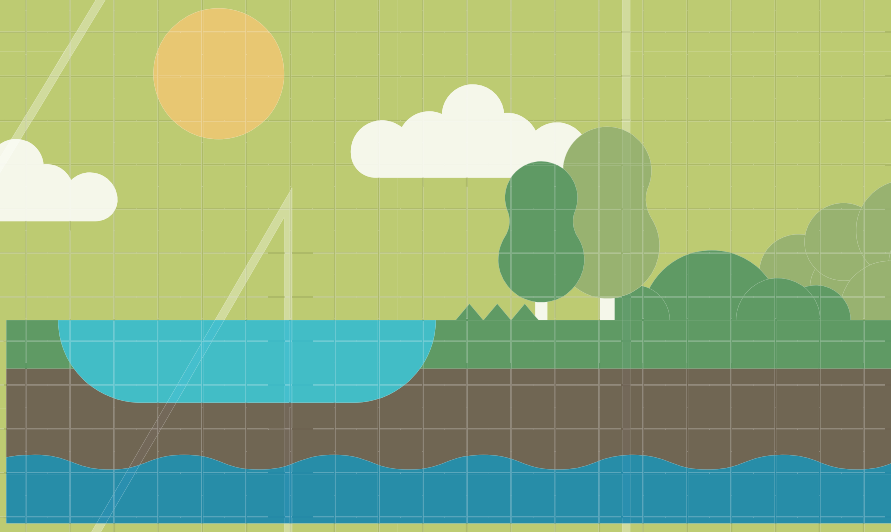
- **Utilizing water recycling and alternative water sources (such as seawater desalination) to reduce reliance on water resources;**
- **Conducting efficient water treatment activities to reduce nutrient loads and improve the quality of water discharged back into the environment, ideally operating with minimal energy demand;**
- **Adopting nature-based solutions, such as wetland conservation or upstream forest protection, to generate positive impacts on the natural environment.**[21]

Currently, TWC is participating in the government's diversified water source development programs to promote effective utilization of water resources. In response to climate change, TWC is also actively improving operational energy efficiency and reducing carbon-related environmental impacts.



[21] IWA (n.d.) Nature for Water and Sanitation.

04



Environment Performance

04 Environment Performance

Beyond financial performance, businesses, under the concept of the Triple Bottom Line, focus on creating holistic value across environmental, social, and economic dimensions, with environmental performance being a key manifestation of corporate value. Taiwan Water Corporation aims to reduce its environmental footprint and achieve environmental co-prosperity while ensuring financial stability and the quality of its water supply services. This chapter shows TWC's environmental performance, including energy, greenhouse gas emissions, waste, and effluent.

Energy Efficiency and Carbon Management

Optimizing energy management and implementing net-zero carbon emission plans, streamlining processes, and reducing carbon emissions.In 2024, TWC's unit water supply carbon emission intensity was:

0.150kg CO_2/m^3 CO_2 approximately **5.06%** decrease compared to 2023

Developing renewable energy, including cumulative solar photovoltaic and small hydropower generation with a cumulative installed capacity of:

Solar PV **86,362** kw

Small Hydropower **2,345** kw

Developing AI-assisted chemical dosing for optimal resource utilization, automatically assessing the required chemical dosage based on real-time water quality

Reducing chemical usage ≒ **41%**

Overall wastewater volume ≒ **2%**

Carbon emissions ≒ **2.745** mt CO_2e

Afforestation and Greening Initiatives

Total area **279.29** hectares (2024)

Estimated carbon reduction **2714.2** metric tons CO_2e

Water Resources and Waste Recycling

In 2024 :

Wastewater Recycling reaching **98,688,747 m^3**

Wastewater Recycling Rate reaching **80.5%**

Sludge cake and other waste from water purification are treated as resources and reprocessed into cement, red bricks, culture soil, high-pressure bricks, concrete aggregates, and sintering raw materials

100% Recycling & Reuse!

Totaling approximately **162,020.59 mt** of Recycled & reused material

Future outlook

Taiwan Water Corporation will continue to expand its renewable energy deployment, refine energy management, promote digital transformation, and strengthen resource recycling and utilization, comprehensively optimizing energy efficiency and reducing greenhouse gas emissions to achieve the 2050 net-zero target. Through the development of small hydropower and solar photovoltaics, and by implementing ESCO energy-saving improvements at 43 of its own high-energy-consuming sites. In terms of digitalization, actively promoting intelligence, unmanned operations, and AI integration across all aspects, such as AI leak detection and e-bill services, advancing simultaneously on both smart and low-carbon fronts. Simultaneously, the afforestation and carbon sequestration plan will continue to promote natural positive growth and fulfil environmental commitments, becoming an environmental value creator.

4.1 Energy Management and Greenhouse Gas Emissions

4.1.1 Energy and GHG

TWC continuously tracks its annual external electricity, gasoline, and diesel consumption within the organization, identifies potential for energy improvement, and comprehensively optimizes water supply processes to reduce carbon emissions. In 2024, external electricity consumption (approximately 1.015 billion kWh) showed a minimal increase of about 0.46% compared to 2023 (approximately 1.011 billion kWh). Energy intensity slightly decreased, with unit energy consumption falling to 0.3169 kWh/cubic meter (1,141 kJ/m^3). In terms of carbon emissions, unit carbon emission intensity decreased by approximately 5.06%, reaching 0.150 kg CO_2e per cubic meter in 2024. Detailed energy use and carbon emission information is summarized in the table below.

GHG management and strategy can be found in Chapter 3 of this report. TWC is not currently under the GHG inventory requirement by the Ministry of Environment. GHG emission information is derived from internal data inventory and estimation. Current estimations primarily include Scope 1 and Scope 2 emission data in CO_2e. TWC uses 2005 as the baseline year, and conducts autonomous inventory, evaluating only carbon emissions from electricity and fuel consumption. Calculations refer to carbon emission coefficients published by the Ministry of Environment and Taiwan Power Company's emission factors. In the future, TWC will continue to refine its carbon management practices to include comprehensive carbon inventory. Scope 1 emission estimations are based on emissions generated by activities owned or controlled by TWC, including water treatment processes, company vehicles, and the combustion of fossil fuels. Scope 2 emissions are our primary greenhouse gas emission source, mainly from electricity purchased from Taipower for operations. Taiwan Water Corporation did not use renewable energy in 2024.

Non-Renewable Energy Consumption and Greenhouse Gas Emissions

Item	2022	2023	2024
Purchased Electricity (kWh)	992,331,516	1,010,674,291	1,015,337,614
Heat Value of Purchased Electricity (GJ)	3,572,393.46	3,638,427.45	3,655,215.41
Gasoline Consumption (Liter)	950,830	891,564	836,699
Heat Value of Gasoline Consumption (GJ)	31,051.29	29,115.84	27,324.11
Diesel Consumption (Liter)	80,341	56,297	79,109
Heat Value of Diesel Consumption (GJ)	2,825.52	1,979.92	2,782.19
Total Energy Consumption Heat Value (GJ)	3,606,270.27	3,669,523.20	3,685,321.71
Annual Water Supply (m^3)	3,246,505,642	3,179,746,300	3,230,827,173
Annual Energy Intensity (GJ/m^3)	0.0011	0.0012	0.0011
Scope 1 GHG (kg CO_2e)	2,451,399.44	2,248,826.89	2,179,144.60
Scope 2 GHG (kg CO_2e)	491,204,100.42	499,273,100	481,270,029
Scope 1 &2 GHG (kg CO_2e)	493,655,500	501,521,926	483,449,173.636
Annual GHG emission intensity(kg CO_2e/m^3)	0.152	0.158	0.150

Note：

- Taiwan Water Corporation's annual energy consumption statistics include external electricity, gasoline, and diesel consumption within the organization, excluding external energy consumption. All statistical data are from billing records.
- Energy conversion factors refer to the heat value coefficients of various energies in version 6.0.4 of the Greenhouse Gas Emission Coefficient Management Table published by the Ministry of Environment: gasoline (7,800 kcal/L), diesel (8,400 kcal/L), purchased electricity (860 kcal/kWh). All three years of data in this report have been adjusted based on 1 kcal = 4.1868 KJ.
- The method for aggregating greenhouse gas emissions adopts the operational control approach. Direct (Scope 1) emission sources include gasoline and diesel used within the organization. Indirect (Scope 2) emission sources are purchased electricity used within the organization.
- The types of GHGs calculation are carbon dioxide, methane and nitrous oxide.
- The greenhouse gas emission coefficient of purchased electricity refers to the electricity emission coefficient announced by Energy Administration of the Ministry of Economic Affairs, 2022: 0.495 kg CO_2e/kWh; 2023: 0.494 kg CO_2e/kWh; 2024: 0.474 kg CO_2e/kWh.
- Annual energy use intensity, greenhouse gas emission intensity The organization-specific metric (denominator) for calculating this ratio is the annual water supply (m^3).
- The greenhouse gas inventory data is the company's own inventory data.
- Data Correction Note: During the preparation of this year's sustainability report, the company discovered that the data in the 2024 sustainability report on the total calorific value of energy use in 2022 and greenhouse gas emissions in 2023 (scope 1 greenhouse gas emissions, scope 2 greenhouse gas emissions, scope 1 + scope 2 greenhouse gas emissions, and annual greenhouse gas emission intensity) were incorrect. Taiwan Water has recalculated and verified, and this report presents the corrected data to ensure the accuracy of information disclosure.
- The base year for the company's greenhouse gas inventory is 2005.

4.1.2 Energy saving action and performance

Effective energy management is the core carbon management method for us. Through various measures promoted by each business unit, such as developing renewable energy for self-use (explore supply) and energy saving (reduce consumption), TWC continuously reviews its energy and GHG emission performance to achieve energy saving and carbon reduction goals. The performance related to Taiwan Water Corporation's five major strategies for energy saving and carbon reduction (refer to Chapter 3.2) is described below.

(1) Improving energy efficiency

In 2024, the energy intensity of Taiwan Water Corporation was 0.0011 GJ/m^3. According to the IWA publication "Water Services Performance Indicators: Third Edition," the energy intensity for general water treatment systems is between 0.00072 and 0.00216 GJ/m^3, and for water distribution systems, it is between 0.00144 and 0.00432 GJ/m^3, demonstrating Taiwan Water Corporation's international-level energy management effectiveness. The main reasons for the fluctuations in Taiwan Water Corporation's unit water supply electricity consumption in recent years include compliance with government drought prevention policies and water dispatching, as well as the establishment of more booster stations to ensure stable water supply and serve remote areas, leading to increased electricity consumption. Simultaneously, the company actively promotes various energy-saving measures to reduce electricity consumption and improve electricity efficiency. It is projected that by 2029, energy intensity will be reduced by 4% compared to 2005, reaching 0.00106 GJ/m^3 (0.2959 kWh/cubic meter).

"Management system optimization" and "equipment improvement" are the two main pillars for Taiwan Water Corporation to enhance energy efficiency. On the management side, Taiwan Water Corporation has formulated the "Guidelines for Energy Saving and Power Cost Reduction Operations," requiring each district office and facility to regularly provide concrete energy-saving measures and review their implementation. Each district office and facility is required to fill in the internally prescribed information based on Taipower's data in April and October each year, explaining the performance of energy saving and power cost reduction, and submit it to their respective regional management offices for record. Each district office must complete the compilation of relevant information by May 10 and November 10. Low-voltage station energy saving and power cost inspection records are controlled by the district offices themselves. For electricity meters above 100 kW, performance reports need to be compiled and submitted to the head office for record. The head office's responsible unit must review the previous year's data from each district office in February of the following year to urge the district offices to implement continuous review. Currently, the main management and promotion measures are as follows:

Adjusting Contract Capacity	Adjusting Contract Capacity	Adjusting Contract Capacity
Improving Power Factor	Improving Power Factor	Improving Power Factor
Improving and Selecting Appropriate Motors and Pumps	Improving and Selecting Appropriate Motors and Pumps	Improving and Selecting Appropriate Motors and Pumps
Adjusting Water Supply Operation Mode	Adjusting Water Supply Operation Mode	Adjusting Water Supply Operation Mode
Carefully Selecting Time-of-Use Electricity Billing Method	Carefully Selecting Time-of-Use Electricity Billing Method	Carefully Selecting Time-of-Use Electricity Billing Method

In hardware perspective, enhancing equipment technology and improving engineering design and processes can effectively reduce energy consumption and carbon emissions. In conjunction with the Ministry of Economic Affairs' policy, TWC has been promoting ESCO energy-saving improvements at 43 high-energy-consuming sites (defined as sites with a contract capacity exceeding 800 kW) since August 2024. The main improvement

items include replacing pumps, installing new inverters, and energy management systems. Between 2022 and 2024, 38 high-voltage stations have undergone management and control, and all are expected to complete their improvements and submit reports by the end of November 2025. Based on the diagnostic results from the current ESCO diagnostic reports for these high-energy-consuming sites, it is estimated that the annual electricity savings after all 43 sites complete improvements will be 23.972 million kWh (86,299.2 GJ). Comparing this to the 2023 electricity consumption of these 43 high-energy-consuming sites, which was 626,056,056 kWh, the estimated energy saving rate is 3.7%. Taiwan Water Corporation also seriously addresses the evaluation of ESCO improvement, energy-saving effectiveness, and integrated performance evaluation. It will refer to the relevant energy-saving performance verification standards proposed by the Taiwan Green Productivity Foundation and the spirit of the International Performance Measurement and Verification Protocol (IPMVP) as the calculation method for the benefits obtained from various energy-saving procurements. In the future, this will enable evidence-based evaluation of energy-saving investment benefits, which will contribute to quantitative and precise planning and evaluation of energy-saving and carbon reduction pathways.

Furthermore, promoting energy-efficient green buildings can also effectively improve energy efficiency. Through the integration of architectural design, material selection, and renewable energy management, energy consumption during building operation can be significantly reduced. The design phase incorporates the concept of utilizing natural environmental conditions to achieve building energy efficiency and comfort, using insulation materials and energy-saving doors and windows to significantly reduce heat transfer. This is complemented by real-time air conditioning, lighting, and socket energy-saving electrical equipment, while integrating renewable energy systems such as solar photovoltaics and rainwater harvesting facilities to reduce reliance on external resources and enhance overall building self-sufficiency and sustainability. Taiwan Water Corporation completed green building certifications for the Qimei Seawater Desalination Plant and Jibei Seawater Desalination Plant Management Center in 2024, which are expected to effectively reduce operating costs and carbon emissions.

(2) Develop Green Energy

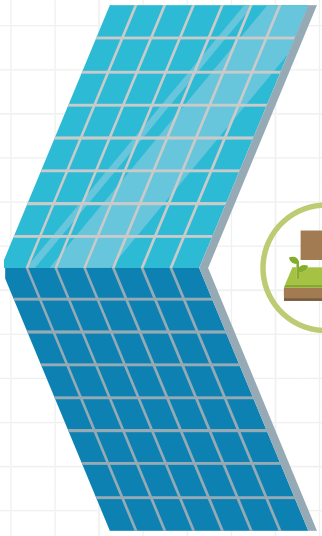
We actively promotes the development of renewable energy, with solar energy and small hydropower as key development targets. It inventories its own sites and develops them in phases. The cumulative renewable energy generation performance in recent years is shown in the table below. The overall renewable energy generation is close to 10% of the annual purchased electricity. In the future, the company will prioritize self-consumption of renewable energy generation and expand green power procurement to increase the proportion of renewable energy use.

Renewable energy development

Generation types	2022	2023	2024
Accumulated solar PV site	101 sites	120 sites	130 sites
Solar PV capacity (kW)	62,791	67,000	79,556
Solar revenue（Annual Rebate）	TWD 45.93 million	TWD 93.525 million	TWD 97.89 million
Small hydropower site	-	1 site	2 site
Small hydro power capacity (kW)	-	130	845
Solar generation (kWh)	77,135,199	82,728,259	96,934,754
Small hydropower generation (kWh)	-	650,000	650,000
Total (kWh)	77,135,199	83,378,259	97,584,754

a. Install Solar PV

We have facilities and lands across Taiwan, indicating potential for solar PV development. In the condition of without affecting future water supply system maintenance, operation, and office use, TWC actively study the feasibility of utilizing our reservoirs, water treatment plants, booster stations, water storage areas, office rooftops, and idle land. Solar PV power generation equipment is installed through self-generation and self-consumption or leasing, balancing environmental protection with economic development. Since 2017, bidding for solar photovoltaic equipment has been prioritized for sites with larger installed capacity and economic efficiency. As of the end of 2024, 130 sites have been completed, with a total installed capacity of 79,556 kW. In 2024, 96.93 million kWh were generated, equivalent to a reduction of 43,805 tons of carbon dioxide (calculated with an electricity carbon emission factor of 0.474). The cumulative performance of solar PV installations is shown in table above.



Water Treatment Plants, Pumping Stations, and Reservoir Spaces

Expand the tender for installing solar photovoltaic (PV) power generation equipment on structures at TWC's self-operated sites across various districts accelerating the deployment of renewable energy facilities.

Leasing of Idle Land

Inventory underutilized or idle land and install renewable energy facilities

Company Building Rooftops

Inventory TWC office building rooftops exceeding 100m^2 to expedite the installation of large-capacity equipment.

b. Promote Small Hydro Power

The principle of small hydropower is primarily utilizing the gravitational flow from differences in water levels, making it a renewable energy project with a developmental advantage for our company. By inventorying our raw water, water purification, and water supply systems, we initially identify potential sites with sufficient flow and head differences as candidate stations for small-scale hydropower generation feasibility assessments. Feasibility planning must consider factors such as the safety of water supply pipelines, the stability of water supply, and historical flow variations. Additionally, based on our company's expertise and to streamline operations, Taiwan Water Corporation provides land for vendors to plan and construct power generation facilities, inviting excellent private companies to participate through a solicitation process. TWC has studied potential small-scale hydropower projects within its district offices' jurisdictions and formulated the "Small Hydropower Generation Equipment Evaluation Operating Guidelines." Project operation models are divided into two types: leasing and self-generation for self-use. The former involves leasing the site to the winning bidder, who then installs power generation equipment and sells the renewable energy generated by this equipment to a power purchasing company. Our company collects a certain percentage of the vendor's electricity sales revenue as a royalty. The latter, self-generation for self-use, also involves leasing the site, but the company commissions a vendor to install power generation equipment. The green electricity and renewable energy certificates produced are acquired and owned by our company, and the company pays the cost of purchasing the green electricity.

The small hydropower of Taichung Shalu (台中沙鹿) Water Distribution Center completed in 2024, and the small hydropower generation of Taitung Lijia Water Treatment Plant bring a total installed capacity of 845KW. The small hydropower of Yunlin Hushan (雲林湖山) Water Treatment Plant and Tainan Nanhua (台南南化) Water Treatment Plant is expected to be completed in 2025, with a total installed capacity of 3,785KW.

Small hydropower development plan

Site	Status	Capacity	Rebate %	Annual generation	Annual GHG reduction
Lijia Water Treatment Plant	Connected to grid in January 2023	130kW	8%	650,000 kWh	321mt
Shalu Distribution Center	Connected to grid in December 2024	715kW	30%	2,790,000 kWh	1,381mt
Hushan Water Treatment Plant	Expect commission in June 2025	1,500kW	55%	5,850,000 kWh	2,895mt
Nanhua Water Treatment Plant	In planning	1,440kW	3.5%	7,200,000 kWh	3,564 mt
Shengou Water Treatment Plant	In planning	Est.125kW	-	-	-
Taitian Regulating Reservoir	In planning	Est. 86 kW	-	-	-
Niaozuitan Water Treatment Plant	In planning	Est. 824kW	-	-	-
Houyi Water Treatment Plant	In planning	Est. 570kW	-	-	-

c.Establish self-use green energy

In recent years, various industries have joined the RE100 initiative, following leading companies, committing to incrementally achieving 100% renewable energy use by 2050. This clearly indicates that the development and use of renewable energy is flourishing. To promote the development of renewable energy in Taiwan, the Energy Administration of the Ministry of Economic Affairs' "Regulations for Electricity Users with Certain Contract Capacity to Install Renewable Energy Generation Facilities" stipulates that electricity users with a contract capacity of 5,000kW or more must install a renewable energy generation capacity equivalent to 10% of their contract capacity by 2025. Taiwan Water Corporation's Kaohsiung Water Treatment Plant's Gaopingxi intake station has met the legal installation conditions and is estimated to require 1,769,040 kWh of renewable energy annually.

Since the Kaohsiung Water Treatment Plant's Gaopingxi station (高屏取水站) lacks space for self-generated, self-consumed solar photovoltaic equipment, the Fengshan (鳳山)Water Treatment Plant's clear water reservoir was selected as an alternative site for this equipment. Renewable energy generated at this site will be acquired through power wheeling. This not only meets regulatory requirements but is also a crucial step for Taiwan Water Corporation to incorporate more renewable energy. Currently, the solar photovoltaic project at Fengshan Water Treatment Plant began generating electricity on April 29, 2024. The company will apply for and transfer Green Electricity Certificates (T-REC). As this is still in the application phase, Taiwan Water Corporation did not have any self-used renewable energy consumption in 2024. It is estimated that from 2025 to 2030, a total carbon reduction of 4,096 metric tons of CO_2 equivalent. can be achieved.

(3) Promote green office

a. Office energy saving and carbon reduction

To promote employees to easy practice energy saving and carbon reduction in daily office work, TWC issued the "Promoting Green Office and Energy Conservation Implementation Plan" in 2024, providing practical action guidance for each unit from 9 major measures including "saving electricity", "saving oil", "saving water", "saving paper", "reducing plastic waste", "classification and recycling", "green procurement", "environmental beautification" and "advocacy and promotion", including maintaining the air-conditioning setting temperature at 27~28 degrees and adjusting the opening hours according to seasonal temperature changes, turning off the lights during lunch breaks, installing timer controllers to turn off the electricity consumption of water dispensers during non-working hours, promoting the use of online signing and online signing of official documents and meetings to reduce the printing of paper documents, and strengthening environmental planting. In addition, the budget is allocated every year to replace energy-saving air-conditioning equipment, lighting equipment, water-saving toilets, etc., to improve the efficiency of electricity and water use.

b. Adopting Low-Carbon Transportation

The company currently has a total of 1,449 official vehicles, predominantly comprising light trucks and motorcycles. Each year, vehicles will be replaced with low-carbon transportation options based on replacement standards and common expenditure budgeting criteria. Furthermore, a minimum passenger limit for official vehicles has been set, requiring more than 3 passengers for an official vehicle to be dispatched.

c. Strengthening IT Equipment Management

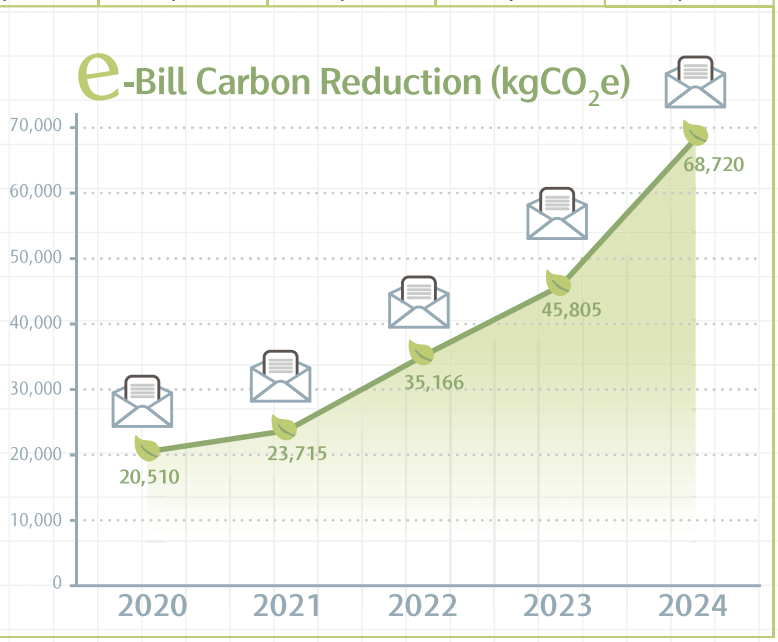
In response to technological advancements, various internal and external systems within the enterprise are continuously moving towards digitalization, leading to a sharp increase in demand for networks and servers, which in turn increases related energy consumption. Taiwan Water Corporation plans to convert physical servers to virtual servers in the future, using Virtualization technology to save space, achieve significant savings in electricity and cooling costs, and substantially reduce expenses by minimising the procurement of additional hardware. In addition to reducing resource consumption and electricity usage through virtual servers, most physical meetings will also be transitioned to electronic meetings, thereby reducing air conditioning and electricity consumption.

(4) Provide green service

TWC implements energy-saving and carbon reduction policies by introducing e-bill (electronic bill, SMS bill) services. In addition to actively promoting electronic bills (sending bills via email), the "SMS Bill Service" was launched in January 2021. Residents can choose to apply for either electronic or SMS bills according to their needs, making it more convenient to receive and view bills and pay water fees. This allows for easy water bill payment and access to bill information anytime, anywhere, reducing paper usage and supporting environmental protection.

To promote the use of e-bills among users, Taiwan Water Corporation actively utilizes print media, websites, promotional flyers, Facebook, and paper bill envelopes for publicity. Furthermore, each district office cooperates with local government activities to set up booths and promote e-bill services. According to the 2022 Environmental Protection Administration's Product Carbon Footprint Information Website - Carbon Label Product Information, calculating that each reduced physical bill can decrease approximately 7.6 grams of carbon dioxide emissions, 1,506,930 paper bills were not sent in 2024, which translates to a reduction of 68.72 metric tons of carbon dioxide equivalent in emissions.

TWC e-bill registration record					
Year	2020	2021	2022	2023	2024
e-bill application number	740,365	938,303	1,101,777	1,284,860	1,506,930
e-bill issued number	3,245,389	3,752,379	4,627,099	6,026,942	6,518,600
Carbon reduction ($kgCO_2e$)	20,510	23,715	35,166	45,805	68,720



(5) Green Production and Efficient Resource Utilization

a. Sludge Resource Recovery

To reduce sludge treatment costs and develop recycling pathways, Taiwan Water Corporation completed a "Feasibility Study on the Reuse of Water Purification Sludge Cake through Cold Solidification" in 2015. We also continue to conduct research on technologies for reusing water purification sludge cake products. Through the circular economy, we maintain the normalization of water purification sludge cake reuse, reducing landfilling and lowering carbon emissions.

b. AI Precision Dosing

Taiwan Water Corporation's introduction of intelligent operations starts with details and leverages the cumulative power of small improvements to bring multiple benefits. In the water purification process, traditional feedback-based dosing methods, which rely on manual adjustments when water quality changes rapidly under extreme weather conditions, often lead to chemical waste. Therefore, based on a large amount of historical water quality data and dosing records, we have implemented AI assistance for evaluation. This allows for automatic assessment of the required chemical dosage in response to real-time water quality conditions. Before implementation, the dosing amount was approximately 15 liters per hour; after implementation, it decreased to 8.9 liters, a reduction of about 41% in chemical usage. The overall wastewater volume decreased by approximately 2%, and carbon emissions were reduced by approximately 2.745 metric tons of CO_2e.

c. Afforestation for Carbon Sequestration

TWC actively promotes afforestation and greening at various facilities, management buildings, and service centers. As of 2023, 277.79 hectares had been afforested at various facilities, reservoirs, management buildings, and service centers; this reached 279.29 hectares in 2024, resulting in a carbon reduction of

approximately 2714.2 metric tons of CO_2e. This also enhances ecological sustainability, and continued afforestation in the future will promote national forest carbon sinks, representing a concrete step towards "Nature Positive" growth.

4.2 Waste, Wastewater Discharge and Air Pollution Management

To minimize our environmental footprint, managing the emission of various hazardous and polluting substances, as well as waste, is a task Taiwan Water Corporation takes seriously. Taiwan Water Corporation's operations are straightforward, and the types of emissions and waste generated are relatively controllable and low-impact. However, under the framework of "circular economy," our goal is no longer just to reduce emissions and waste generation. Instead, we are actively researching and investing in the circular utilization of resources, hoping to lessen the burden on the Earth. Much like the water cycle, we aim to promote the sustainable circulation of resources and minimize environmental impact as much as possible.

In general, tap water treatment selects clean water sources as raw water, such as rivers, reservoirs, infiltration water, or groundwater. These sources have low levels of pollution, and important water sources are often designated as water quality and quantity conservation areas for proactive management. This ensures raw water quality and reduces the burden of water purification treatment, also minimizing waste generated during the purification process. If waste and wastewater produced during water treatment are not properly managed, they could cause environmental impacts, such as affecting aquatic and terrestrial ecosystems or degrading environmental quality.

4.2.1 Status

(1) Solid waste treatment

It undergoes a series of water treatment procedures to remove trace organic pollutants, fine turbidity, and suspended solids from the water as the water offtake from sources. The treated liquid becomes tap water for people to use, and the solid part undergoes concentration, dehydration and drying to eventually form sludge cake. The total amount of water treatment sludge cake in 2024 is approximately 162,020.59 metric tons, comprising approximately 145,142.35 metric tons of water treatment sludge and approximately 16,878.24 metric tons of calcium carbonate crystals.

Waste type and amount

Waste Type	2022	2023	2024
Total waste (mt)	140,234.15	138,725.28	162,020.59
Water purification sludge (mt)	124,071.28	122,671.92	145,142.35
Calcium carbonate crystals (mt)	16,162.87	16,053.36	16,878.24

In the various treatment processes at tap water purification plants, sludge generated by gravity sedimentation in grit chambers is a useful earth and stone resource that does not cause secondary pollution. It can be managed in accordance with the Construction and Planning Agency's Surplus Earth and Stone Disposal Plan, becoming a reusable resource not subject to regulations such as the Waste Disposal Act. However, other coagulation-

sedimentation sludge, due to the presence of coagulants, flocculants, or polymer flocculants, may pose a risk of secondary pollution. Therefore, its treatment is carried out in accordance with relevant provisions of the Waste Disposal Act.

The amount of water treatment sludge is significantly affected by weather, especially during heavy rain when raw water turbidity increases sharply, leading to a noticeable increase in sludge volume. Currently, Taiwan Water Corporation annually produces and externally commissions mechanical dewatering of industrial waste (including sludge cake and calcium carbonate crystals), totaling approximately 130,000 to 160,000 metric tons (including advanced treatment plants operated by external parties, such as Chengcing Lake, Fengshan, and Kaotan Water Treatment Plants). The final disposal of our company's sludge cake, with the exception of Penghu outer islands, is handled through outsourced recycling and reuse. The qualifications of the commissioned vendors are strictly reviewed in accordance with relevant regulations such as the Waste Disposal Act and the Ministry of Economic Affairs' "Industrial Waste Reuse Management Regulations." The results of this reuse can be found in the circular economy section of this chapter.

(2) Wastewater Discharge

In 2024, the total wastewater discharge from our water purification plants was 18,586,802 m3, with an average daily discharge of 51,475 m^3. All discharged water met the effluent quality standards set by the Ministry of Environment.

Total Wastewater Discharge Over the Past Three Years

Year	2022	2023	2024
TWC Total Discharge (m^3) (including brine)	11,591,249	15,515,055	18,586,802

Effluent Water Quality Over the Past Three Years

Item	Standard (ppm)	Annual monitor value (ppm)		
		2022	2023	2024
Chemical Oxygen Demand (COD)	<100	7	10.1	11.4
Suspended Solids	<50	14	11.5	13.4
Total Residual Chlorine	<0.5	0.1	0.06	0.06

Note: All effluent water quality complies with national standards.

(3) Air Pollution and Gas Emissions

TWC's main process is water production, powered primarily by electricity from Taipower. The process does not emit nitrogen oxides, sulfur oxides, persistent organic pollutants (POPs), volatile organic compounds (VOCs), or hazardous air pollutants (HAPs). There is no high-temperature combustion, and use environmentally friendly refrigerants.

4.2.2 Waste management and circular economy strategy

Water treatment generates sludge, which TWC manages through a circular economy model. TWC is actively developing a circular economy model and has set relevant promotion and management targets through its corporate sustainability committee. In Taiwan Water Corporation's "2025Annual Sustainable Development Implementation Plan," the Water Supply Department has set circular economy targets and the following two KPIs, which are tracked every six months. In 2024, both the reuse rate of water treatment sludge and softening calcium carbonate crystals reached 100%.

- Sludge reuse rate ≥ 99.9%
- Calcium carbonate crystal reuse rate ≥ 99.9%

Taiwan Water Corporation, through its circular economy business model, treats waste such as sludge cake (including water purification sludge and calcium carbonate crystals) as resources, reintroducing them into production and consumption cycles. These are primarily used to produce cement, red bricks, potting soil, high-pressure bricks, concrete aggregates, and sintering raw materials, achieving 100% recycling and reuse. In 2024, the largest proportion of sludge cake recycling and reuse was for red brick raw material, totaling 105,469.88 metric tons; followed by potting soil raw material, totaling 39,232.53 metric tons.

2024 sludge cake recovery and reuse ratio

Method	Weight (tons)	Percentage (%)
Red Brick Material	105,469.88	65.10%
CLSM Material [22]	0	0%
Cement Material	483.18	0.30%
Soil Conditioner	39,232.53	24.21%
High-Pressure Brick	10,338.21	6.38%
Sintered Material	0	0%
Concrete Aggregate	6,496.79	4.01%

To manage the environmental impact of waste generation and to track reuse methods and proportions, our company has established the "Taiwan Water Corporation Guidance Management and Audit Guidelines for the Treatment or Reuse of Water Purification Sludge Cake." These guidelines effectively manage related resource utilization and disposal, with specific guidance and audit points formulated for different types of treatment vendors and reuse vendors. They also clearly define the audit frequency for plants, district offices, and the head office, implementing a tiered guidance and audit system to ensure there are no illegal dumping incidents.

Each of TWC water treatment plants manages and audits its operations according to the "Taiwan Water Corporation Guidance Management and Audit Guidelines for the Treatment or Reuse of Water Purification Sludge Cake." A summary of the relevant guidance, management and audit guidelines is as follows:

[22] Controlled Low-Strength Materials, CLSM

Taiwan Water Company's guidance, management and audit points for the treatment or reuse of water sludge cake

Treatment organization management

- **Basic information filing:** including unit name, address, person in charge, contact information, treatment method, approved quantity, etc.
- **Operation records:** record sludge cake quantity, moisture content, weighing documents, removal and treatment process.
- **Compliance with regulations:** handle the disposal plan, declaration and storage in accordance with the Waste Disposal Law and related standards.

Re-use organization management

- **File records:** including organization name, purpose, approved quantity, recycling method, product name, etc.
- **Operation and product records:** record sludge cake quantity, moisture content, weighing receipts, product sales information, etc.
- **Compliance with regulations:** handle disposal plans, declarations and storage in accordance with the Waste Disposal Act and related standards.
- **Quality control:** products should comply with national standards and establish a quality control mechanism.

Counseling and audit

- **Audit items:** including consistency between the removal vehicle and the receipt, consistency between the removal route and the plan, normal operation of the treatment agency, etc.
- **Audit frequency:** monthly guidance and audits should be conducted with the treatment agency and the recycling agency, and records should be kept.

File and record

- **Data preservation:** All relevant records should be filed for future reference and properly kept for five years.

4.2.3 Wastewater Recycling

Taiwan Water Corporation implements water recycling measures to fulfill its environmental protection responsibilities. In 2024, except for the high-concentration brine produced by the reverse osmosis (RO) equipment of the desalination plant and the advanced treatment plant, all wastewater generated by the water purification site will be recycled and reused first, and it is committed to reducing the discharge volume. The total amount of wastewater recycled throughout the year reached 98,688,747 cubic meters, and the recycling and reuse rate reached 80.5%, effectively improving the efficiency of water resource use and demonstrating the management efficiency of sustainable water use.

The wastewater recycling rate has continued to decline in recent years due to the gradual operation of the Penghu Desalination Plant, which began operations in 2023. The plant's wastewater cannot be recycled and reused, and its large output volume has led to a decrease in the overall wastewater recycling rate. Future increases in desalinated water use will continue to impact the overall recycling rate.

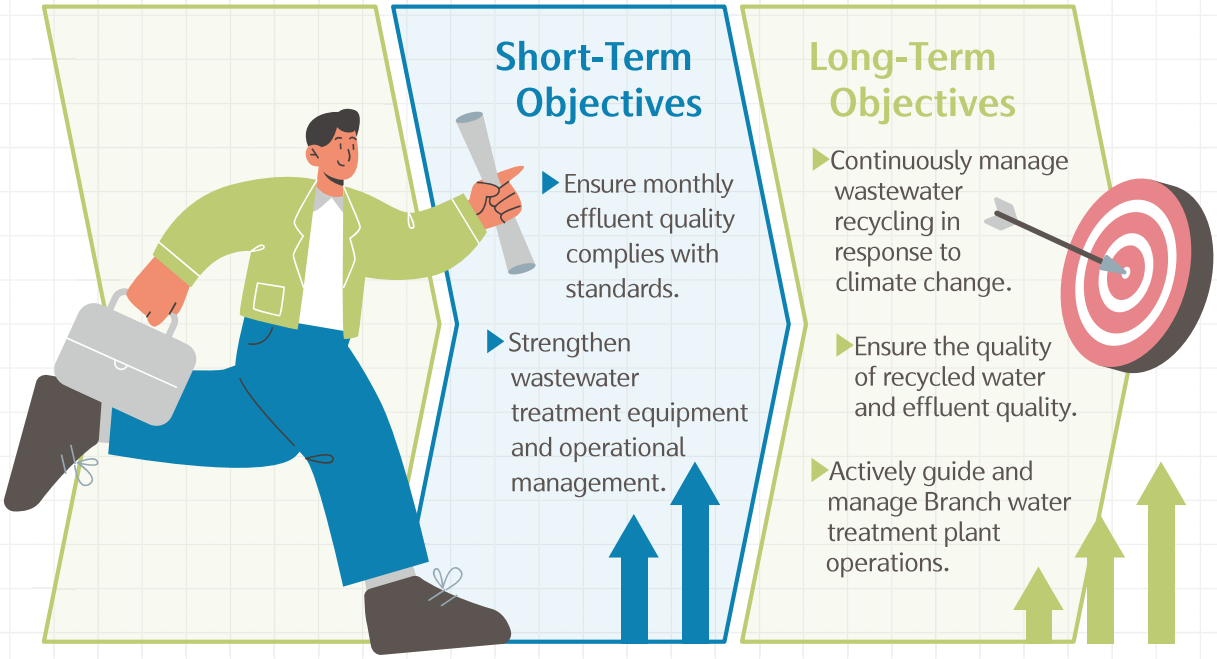
Wastewater Reuse Rate (2021–2024)

Year	2021	2022	2023	2024
Wastewater recycling rate	84.2%	85.9%	83.3%	80.5%

4.2.4 Effluent Quality Management

The impact of effluent quality on the company are primarily reflected in water resource utilization efficiency, environmental burden, and financial risks. To fulfill environmental protection responsibilities, ensure wastewater discharge complies with national environmental regulations, and enhance the effectiveness of sustainable management in operations, our company has established a systematic effluent quality management mechanism in accordance with the Water Pollution Control Act and related laws. Management measures cover aspects such as institutional regulations, equipment maintenance, testing and reporting, abnormal situation response, and continuous improvement. Through continuous water quality monitoring, increasing recycling and reuse rates, and actively participating in environmental regulation compliance, we aim to control potential negative environmental challenges.

TWC Effluent management target



To improve the quality and quantity of discharged water recycling, we has set relevant regulations for discharged water treatment facilities and equipment, and established a promotion team (as shown in figure below) to actively manage and develop improvement plans. In the 2015 Sustainable Development Implementation Plan, the company's Water Supply Department and Water Quality Department standardized the performance indicators for discharged water quality management, set the following two KPIs, and tracked the status every six months:

- Zero environmental protection fines for discharged water quality
- Discharged water at each water treatment plant is inspected at least once a quarter

General Rules for the Installation of Discharge Water Treatment Facilities and Goals of the Equipment Efficiency Improvement taskforce

General Principles for Wastewater Treatment Facility Setup and Application for Discharge or Recycled Water Measures

- Actively guide and manage Branch water treatment plant operations.
- Ensure the normalization of wastewater treatment at each Branch water treatment plant.
- Comply with relevant environmental regulations.
- Serve as a reference for applications concerning new construction, expansion, and improvements to existing wastewater treatment facilities.

Key Points for the Organization and Responsibilities of the Wastewater Treatment Facility Performance Improvement Task Force

- Review the authenticity and reasonableness of all wastewater data.
- Evaluate the quality and quantity of discharged and recycled wastewater.
- Assess the integrity and operational status of existing wastewater treatment facilities.
- Review the functionality of existing wastewater treatment facilities.
- Develop improvement plans.

Each TWC water treatment plant has a set of "Taiwan Water Corporation Wastewater Treatment Business Counselling Management and Audit Points". In addition to evaluating and adjusting the discharge volume of discharged water every year, it also actively promotes the effective use of water resources, formulates wastewater recycling and reuse policies, strengthens wastewater treatment equipment and operation management, ensures water quality safety, and fulfills water resources and environmental protection responsibilities. The relevant guidance management and audit points are summarized as follows:

Taiwan Water Corporation's wastewater treatment business guidance management and audit points

Governance and compliance

- **Regulatory basis:** Follow the "Water Pollution Prevention and Control Law" and related sub-laws, including the "Water Pollution Prevention and Control Measures and Testing and Reporting Management Measures", "Discharge Water Standards", etc., to ensure that wastewater treatment operations are legal and compliant.
- **Internal regulations:** Formulate the "Wastewater Treatment Business Guidance Management and Audit Points" to clearly regulate the responsibilities and operating procedures of each district and factory to improve management consistency.

Monitor and inspection mechanism

- **Water quality testing:** According to the company's water quality testing specifications, the hydrogen ion concentration index, water temperature, chemical oxygen demand, suspended solids and total residual chlorine of raw wastewater, recycled water and discharged water are regularly tested.
- **Outsourcing testing:** According to the prescribed frequency, a qualified environmental testing and measurement agency is commissioned to conduct water quality testing to ensure the objectivity and accuracy of the test results.

Facility management and efficiency improvement

- **Equipment maintenance:** Establish a "one machine three cards" system, namely record card, inspection and maintenance record card and repair record card, to ensure the normal operation and complete maintenance records of wastewater treatment equipment.
- **Performance review:** Write a wastewater treatment equipment performance improvement review report every year and submit it to the district department for review to continuously promote the improvement of equipment performance.

Taiwan Water Corporation's wastewater treatment business guidance management and audit points

Self-inspection and review

- **Self-inspection:** The main factory shall conduct self-inspection every quarter according to Appendix 1, and keep the file for five years for review.
- **District and office inspection:** Each district and office shall conduct guidance inspection every quarter or every six months, and report the inspection results and follow-up status to the headquarters for review.

Reporting and transparency

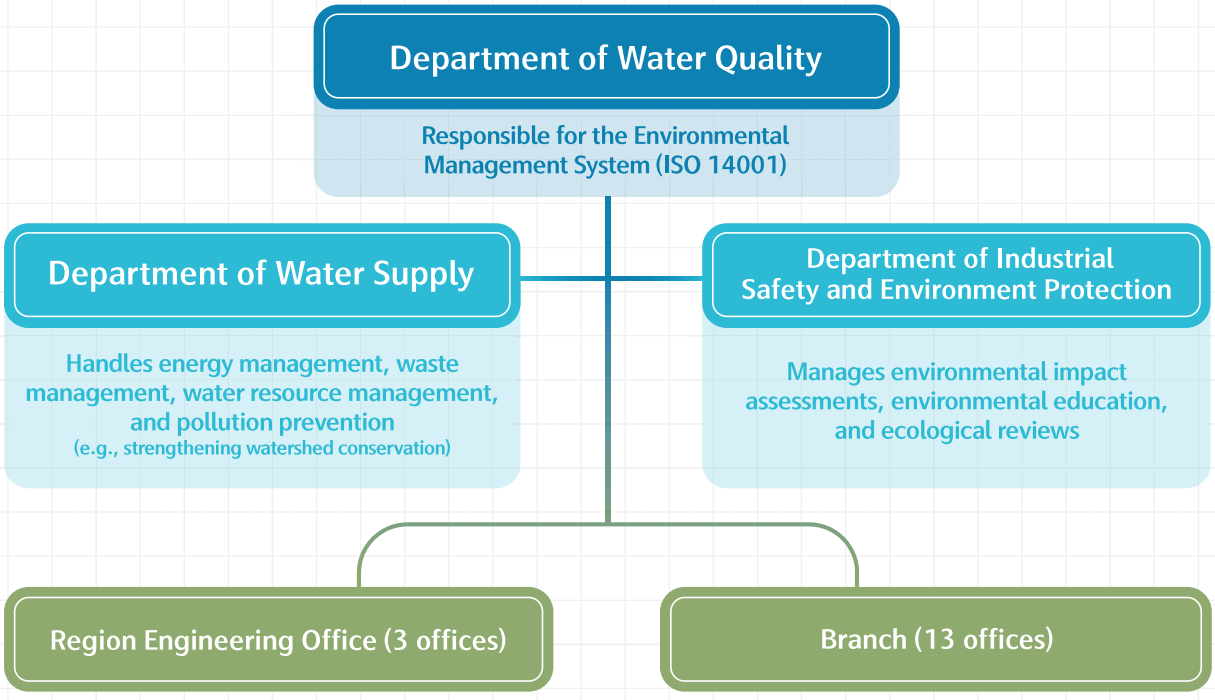
- **Regular reporting:** Report water pollution prevention and control measures and testing information online at the prescribed frequency to ensure the timeliness and transparency of information.
- **Data preservation:** Relevant testing and verification data will be archived and preserved for five years for internal management and external verification.

4.3 Environmental management

4.3.1 Environmental management structure

Taiwan Water Corporation continuously enhances its environmental management. The Water Quality Department serves as the primary responsible unit for environmental management. The Industrial Safety and Environmental Protection Department, Water Supply Department, and various management districts, according to their respective responsibilities, formulate management strategies for energy management, waste management, water resource management, pollution prevention, environmental management systems, environmental impact assessment management, environmental education, and ecological inspection. The regional management offices then execute these strategies under their jurisdiction to ensure the implementation of environmental management.

TWC environmental management structure



TWC introduced ISO Environmental Management System (EMS) in 2006, aiming to integrate the environmental management practices of its water treatment plants with international standards (ISO 14001). This was a step-by-step approach to fulfilling the corporation's environmental social responsibility. Drawing on domestic and international experience, an "Environmental Policy" was established to serve as the highest guiding principle for promoting the environmental management system. The ISO 14001 environmental management system was implemented in water purification plants and is continuously being rolled out to various district offices. Through the establishment, maintenance, and continuous improvement of this environmental management system, Taiwan Water Corporation seeks to enhance the operational integrity of its water treatment plants and improve their water purification capabilities. Furthermore, verification by an impartial third-party organization ensures a more objective approach to fostering environmental friendliness.

We aims to supply sufficient quantities of high-quality tap water, promote national tap water infrastructure to improve citizens' quality of life and foster economic development, and address global water scarcity by fulfilling its environmental protection responsibilities. By establishing an environmental management system, we continuously improve environmental performance to achieve sustainable operation goals, and we strive to meet the following commitments:

Environmental Policy Commitments

1. Legal compliance
2. Pollution prevention
3. Resource reuse
4. Employee engagement
5. Community harmony
6. Continuous improvement

Taichung Liyutan Water Treatment Plant is the priority demonstration target and obtained ISO 14001 certification in 2008. Based on this successful experience, we have successively promoted the ISO 14001:2015 new version certification for related large-scale water treatment plants. Currently, 34 water treatment plants have been certified, including Liyutan, Chengching Lake, Nanhua, Kaotan, Weng Park, Donsin, Shengou, Fongshan, Gonyuan, Changhua Third, Bansin, Sapotang, Leichia, Sinshan, Longtan, Baoshan, Moodan, Pingjen, Gongliao, Wushantou, Qingzhou, Jiji, Luzhu, Danan, Shueishang, Tanting, Hsinchu Second, Pingding, Linnei, Fongyuan, Nuannuan, Pingtung, Hwushan, Lingkou, and continue to maintain the validity of the certificates.

4.3.2 Environmental Accounting Management

Environmental accounting management is a method that integrates environmental costs into a company's financial statements, aiming to quantify and report the company's environmental impact. Through this

method, companies can gain a more comprehensive understanding of their operations' environmental effects and formulate corresponding strategies to reduce their environmental footprint. This will also be an important basis for Taiwan Water Corporation to balance environmental protection with operational performance in the future. Taiwan Water Corporation will continue to optimize environmental accounting, review relevant performance, and link it with other quantitative sustainable evaluation needs to achieve effective management and disclosure.

According to our company's principles for identifying and executing environmental expenditures, annual environmental expenditures are categorized into two main types: recurring expenses and capital expenditures. Recurring expenses include costs for commissioned surveys and research, legal affairs, equipment repair and maintenance, education and training, and environmental testing. Capital expenditures, on the other hand, encompass capital investments during both the operational and construction phases, such as improvements to wastewater treatment facilities and "pollution prevention fees" during the construction phase (including air pollution control, water pollution prevention, noise control, and construction waste). All related expenditures are meticulously recorded and statistically compiled by our company's accounting system according to procedure, ensuring that environmental expenditure data is complete and accurately reflects actual spending.

Environmental Expenditures (in billions NTD)

Year	2022	2023	2024
Expenditure	6.72	9.52	8.00

05

5 Relationship Enhancement

05 Relationship Enhancement

This chapter explains TWC's human resources status and policies, occupational safety and health, diversity and inclusion, and the results of projects related to environmental education and social relations, showcasing its efforts to achieve shared prosperity for its diverse stakeholders.

Creating an Equal and Inclusive Workplace

TWC is committed to fostering an **Equal and Inclusive Work Environment** through both policy development and practical implementation.

The company maintains a comprehensive remuneration system to ensure fair treatment of employees.

In 2024, the ratio of the highest to median total annual compensation remained at **4.16** times

In 2024 A total of **40** training seminars were held with cumulative training hours exceeding **100**

The sessions covered a wide range of topics, including healthcare, mental wellness, stress relief, motivation, financial planning, gender equality, and legal awareness.

Each employee is entitled to up to **4** free counseling sessions per year

Monthly mental **Health Newsletters** are distributed to promote psychological well-being

To strengthen gender equality awareness **32** training sessions were conducted in2024
Engaging **1,674** employees
Accumulating a total of **4,793** training hours

The TWC also offers a parental leave policy that exceeds legal requirements
Compared to the statutory 2 years
allowing up to **3** years of unpaid leave

In 2024
The return-to-work rate after parental leave reached **100%**
The retention rate after returning stood at **84%**

Occupational Health and Safety

TWC has fully implemented an occupational health and safety management system.
Since 2022, the headquarters, 13 district management offices, and 3 district engineering offices have all obtained dual **Certifications Under ISO 45001 & TOSHMS**
Achieving **100% Coverage**

In 2024
A total of **8,654** participants attended occupational health and safety training programs with total investment reaching **NTD3,952,008**

Workplace Bullying Prevention Training was delivered to **416** supervisors (section-level and above) while **5,262** other employees completed the same training through online learning platforms

TWC was honored by the Health Promotion Administration, Ministry of Health and Welfare (HPA) with the 2024 Gender-Friendly Healthy Workplace Award for Outstanding Performance and Personnel

Employee satisfaction with their work and supervisors reached **65.41%**
Marking a **5.03%** improvement compared to 2023

Significant Achievements in Environmental Education and Promotion

TWC actively promotes water resource conservation awareness through three major environmental education centers, achieving remarkable results

Shengou Ecological Park conducted 342 environmental interpretation sessions in 2024, attracting 11,168 participants. Additionally, with a special grant from the Ministry of Education, 13 water resource education courses were held, engaging 243 participants

The Hushan Tap Water Environmental Education Center hosted 55 water resource education activities in 2024, with a total attendance of 2,854. The center also trained 20 environmental educators and 5 "Net Zero Green Living" instructors

The Chengqing Lake High-Quality Water Environmental Education Center organized 26 environmental interpretation sessions and weekend thematic activities, attracting 896 participants in total during 2024. Moreover, 8 environmental education courses were conducted, with 239 participants.

In 2024, The Magong Seawater Desalination Plant Environmental Education Center hosted a total of 12 environmental education sessions, with a cumulative attendance of 265 participants. In 2025, TWC plans to sign letters of intent with nearby schools and communities to jointly promote water resource environmental education on offshore islands.

Awards：

In 2024, the Ministry of Environment (MoE) held the awards ceremony for the performance evaluation of the "National Environmental Education Action Plan" for the previous year (2023). Among over 40 evaluated sites nationwide by the National Academy for Environmental Research, the Shenggou Ecological Park stood out and was honored with the "Outstanding Evaluation" award. This recognition highlights TWC's professional performance and significant social contributions in the field of environmental education.

5.1 Diversity and Inclusion in the Workplace

5.1.1 Employee Composition and Diversity

(1) Overall Workforce Structure and Trends

All employees of TWC are hired locally from within Taiwan, with no foreign nationals employed. Except for senior executives such as the Chairperson, President, and Vice Presidents—who are appointed by the competent authority (Ministry of Economic Affairs, MoEA)—all high-level management positions ,at headquarters regional management offices, and engineering offices are filled through internal promotion based on merit and selection by the Board of Directors (or its Chairperson). As of the end of 2024, the total number of employees reached 5,801, representing an increase of 22 employees (or 0.38%) compared to 5,779 employees at the end of 2023.

Trends in the total number of Taiwan Water employees in 2024			
Year	2022	2023	2024
Total Number of Employees (persons)	5,717	5,779	5,801

Employee Type and Gender Statistics of TWC in 2024			
Employee Type	Female	Male	Total
Number of Permanent Employees (persons)	1,809	3,992	5,801
Number of Temporary Employees (persons)	0	0	0
Total Number of Employees (persons)	1,809	3,992	5,801

Note：

- Number of Permanent Employees: Includes staff, technician and clerk, contract employees and tourism industry workers.
- The company does not employ any workers under zero-hour contracts.
- As of 2024, TWC engaged a total of 242.5 non-employee workers, categorized as follows:
  - Security personnel: 130 persons
  - Environmental cleaning staff: 57.5 persons
  - Customer service representatives: 55 persons
  - Routine operations and maintenance staff: 225 persons in total, including:
    - 1 on-site document system support staff
    - 44 on-site geographic information system (GIS) support staff
    - 11 on-site information system (IT) support staff
    - 169 outsourced operations personnel

Employee Age and Position Distribution					
Reporting year			2022	2023	2024
Items	Gender	Age	Number of people	Number of people	Number of people
Management	Male	≤ 30 years old	8	6	8
		31-49 years old	194	204	231
		≥ 50 years old	265	262	247
	Female	≤ 30 years old	2	2	0
		31-49 years old	61	63	69
		≥ 50 years old	107	111	109
Total number of supervisors			637	648	664

Non-Management	Male	≤ 30 years old	544	510	459
		31-49 years old	2,139	2,230	2,297
		≥ 50 years old	864	796	750
	Female	≤ 30 years old	273	286	262
		31-49 years old	781	854	948
		≥ 50 years old	479	455	421
Total number of non-management Personnel			5,080	5,131	5,137
Total Number of Employees			5,717	5,779	5,801

Note：

1. Managerial personnel include the following categories:
   - Senior Management: Chairperson, President, senior executives, high-level managers and high-level deputy managers.
   - Middle level Management: Second-level managers.
   - First-Line Management: Third-level managers.
2. This table does not include acting managers.

(2) Gender Equality Policies and Practices

TWC's gender equality policy is based on the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and aligns with the Gender Equality Policy Guidelines issued by the Executive Yuan, the Gender Equality Employment Act, and the MoEA's Gender Equality Promotion Plan. The company actively implements various measures to promote gender equality.

To ensure the effective execution of gender equality policies, Taiwan Water has established a dedicated Gender Equality Working Group, comprised of 11 members, including one external member who provides diverse perspectives and professional advice. This working group convenes twice annually to discuss multiple key aspects related to gender equality.

- **Review the handling of sexual harassment and other gender equality-related complaints received during the year.**
- **Assess the gender composition of members within the company and its various committees (working groups).**
- **Identify work areas with low proportions of female employees and female managers, and develop improvement plans.**
- **Review the allocation and utilization of budgets related to gender equality initiatives.**

Through these regular reviews and discussions, TWC is able to monitor the actual progress of its gender equality initiatives and adjust strategic directions in a timely manner. This ensures that gender equality policies are effectively integrated into daily operations, fostering a more inclusive workplace environment.

To safeguard gender equality in the workplace, uphold the right to work without discrimination, promote substantive gender equality, and prevent sexual harassment while protecting the rights of victims, Taiwan Water has established the "Sexual Harassment Prevention, Complaint Investigation, and Disciplinary Measures Guidelines." These guidelines detail types of sexual harassment, appropriate measures the company should take, and the establishment of a Sexual Harassment Complaint Review Committee. A dedicated complaint hotline, phone line, and email address (HQCPMB@mail.water.gov.tw) have been set up to ensure employees' rights are protected without retaliation or adverse effects from filing complaints.

In 2024, Taiwan Water recorded one sexual harassment case. Following an investigation by the local labor bureau, part of the alleged workplace sexual harassment was confirmed. The bureau requested disciplinary

action against the perpetrator within 30 days. Subsequently, the company's appraisal committee convened and issued a formal reprimand to the individual involved.

In recent years, TWC has been proactively promoting workplace gender equality by increasing opportunities and channels for women's participation in decision-making and actively implementing gender equality policies. Continuous attention is given to the gender distribution in managerial positions to ensure fairness in talent recruitment and promotion processes. Data from 2022 to 2024 show that the proportion of female managers has remained stable between 26% and 27%. The number of female managers has steadily increased, reaching 178 in 2024 (26.81%), representing an increase of eight female managers over three years. Taiwan Water will continue to implement various measures to create a more diverse and inclusive work environment.

Number and Proportion of Female Managers (2022–2024)			
	2022	2023	2024
Total Number of Female Managers	170	176	178
Total Number of Managers	637	648	664
Proportion of Female Managers	26.69%	27.16%	26.81%

(3) Diversity and Inclusive Employment Practices

TWC, in accordance with Article 5 of the Act of the Employment Service for Indigenous Peoples, employed 67 indigenous people, accounting for 1.2% of the total workforce, including 46 males and 21 females.

Additionally, pursuant to Article 38 of the Act for the Protection of Rights and Interests of Persons with Disabilities, the company employed 173 persons with disabilities, representing 3% of the total employees, comprising 116 males and 57 females.

These employment practices demonstrate Taiwan Water's commitment to ensuring equal employment opportunities for vulnerable and minority groups. There have been no instances of underemployment requiring the payment of substitute fees.

Item	Gender	Age	Number of people in 2023	Number of people in 2024
Minorities or vulnerable groups	Male	≤ 30 years old	24	24
		30-50 years old	98	94
		≥ 50 years old	46	44
	Female	≤ 30 years old	9	14
		30-50 years old	44	48
		≥ 50 years old	20	16
Total			241	240

(4) Employee Turnover and Stability

TWC has consistently conducted external recruitment without any gender restrictions or discriminatory treatment. All hiring processes comply with the Act of Gender Equality in Employment and the Employment Service Act. The company is also committed to fostering a high-quality, safe, and stable working environment.

As of the end of 2024, the statistics on new hires (those who passed examinations and completed onboarding procedures) and employee separations (those who completed resignation procedures) are analyzed by age, gender, and region as shown in the table below. The total new hire rate in 2024 was 6.88%, a slight decrease of

0.1 percentage points compared to 6.97% in 2023. The total number of separations in 2024 increased by 0.34% compared to 2023, which remains within a reasonable range.

Reporting year	2022				2023				2024			
Gender	Male		Female		Male		Female		Male		Female	
Age / Category	Number of Employees	New Hire Rate (%)	Number of Employees	New Hire Rate (%)	Number of Employees	New Hire Rate (%)	Number of Employees	New Hire Rate (%)	Number of Employees	New Hire Rate (%)	Number of Employees	New Hire Rate (%)
≤ 30 years old	154	2.69%	84	1.47%	109	1.89%	63	1.09%	96	1.65%	67	1.15%
30-50 years old	196	3.43%	64	1.12%	135	2.34%	86	1.49%	138	2.38%	85	1.47%
≥ 51 years old	11	0.19%	1	0.02%	8	0.14%	1	0.02%	7	0.12%	6	0.1%
Total of new hire rate	8.92%				6.97%				6.88%			
Total New Hires	510				402				399			
Total Number of Employees	5,717				5,779				5,801			

Note：

1.The number of new hires does not exclude employees who resign mid-year.

2.The new hire rate for male (female) employees within an age group = Number of new male (female) hires in that age group during the year ÷ Total number of employees at operating sites at year-end.

3.The overall new hire rate = Total number of new hires during the year ÷ Total number of employees at operating sites at year-end.

Reporting year	2022				2023				2024			
Gender	Male		Female		Male		Female		Male		Female	
Age / Category	Number of Employees	Turnover rate (%)	Number of Employees	Turnover rate (%)	Number of Employees	Turnover rate (%)	Number of Employees	Turnover rate (%)	Number of Employees	Turnover rate (%)	Number of Employees	Turnover rate (%)
≤ 30 years old	23	0.4%	23	0.4%	10	0.17%	31	0.54%	10	0.17%	30	0.52%
30-50 years old	54	0.94%	54	0.94%	18	0.31%	78	1.35%	30	0.52%	88	1.52%
≥ 51 years old	139	2.43%	139	2.43%	42	0.73%	154	2.66%	47	0.81%	134	2.31%
Total resignation	286				350				371			
Total Number of Employees	5,717				5,779				5,801			
Total turnover rate	5%				6.06%				6.4%			

Note：

1.Define the categories of employees considered as separated from the company: the number of separations includes retirees and ethical official, but excludes the number of employees who died on the job.

2.The turnover rate for male (female) employees within an age group = Number of male (female) separations in that age group during the year ÷ Total number of male (female) employees in that age group at year-end.

3.The overall turnover rate = Total number of separations during the year ÷ Total number of employees at operating sites at year-end.

5.1.2 Management Mechanisms and Protections for Other Workers

The company not only values the rights and interests of its own employees but also actively promotes the overall working environment and welfare of other workers related to Taiwan Water's operations. Through an audit and supervision system, it ensures that the labor rights of contractors, and stationed employees are protected, demonstrating a concrete practice of corporate social responsibility. Taiwan Water has established a multi-tiered audit and supervision mechanism as follows:

Audit Mechanism
→ To safeguard the labor rights of contractors' workers, Taiwan Water requires, as part of its contracting agreements, that contractors insure their workers under labor insurance and occupational accident insurance, and provide safety and health training for their employees. During supervisory activities conducted by various Taiwan Water units, relevant documents and records are periodically reviewed to ensure the protection of workers' rights.
Non-compliance Investigation and Handling Mechanism
→ When a contractor is found to have violated relevant labor laws or the Act of Gender Equality in Employment, Taiwan Water will compile concrete evidence and proactively notify the local labor authorities, Labor Insurance Bureau, or other relevant regulatory agencies for lawful investigation and enforcement. This demonstrates Taiwan Water's proactive stance in safeguarding labor rights.
Contractual Penalty System
→ If it is confirmed that a contractor has failed to fulfill its contractual obligations to protect labor rights, except in cases of force majeure or reasons not attributable to the contractor, Taiwan Water will calculate and impose liquidated damages in accordance with the contract. Any cost savings or improper benefits obtained will be deducted from or reclaimed against the contract payment. Furthermore, if personnel executing tasks on behalf of the contractor accept gifts or favors related to the business interests, Taiwan Water reserves the right to terminate the contract or withhold payments based on the severity of the violation.
Grievance Channels and Follow-up Procedures
→ When stationed workers experience sexual harassment by personnel affiliated with the organization, they may file a complaint with Taiwan Water via email (HQCPMB@mail.water.gov.tw). Upon verification of the complaint, the organization will take disciplinary action against the responsible personnel and inform both the contractor and the complainant of the outcome.

5.1.3 Human Resource Management and Planning

(1)Workforce Allocation and Planning Strategy

TWC is committed to establishing a comprehensive human resource management system to ensure organizational operational efficiency and service quality. Based on business strategies and development needs, the company implements systematic workforce planning and allocation.

To achieve reasonable staffing, the company has established clear headcount standards, which are regularly reviewed and adjusted. In response to medium- and long-term business developments—such as facility consolidations, organizational restructuring, and various water supply engineering projects—a comprehensive review of these standards is conducted every three years. The most recent review was completed in 2023, upon which workforce adjustments and allocations across departments are based.

(2) Workforce Inventory and Headcount Management

In accordance with the "Workforce Inventory Implementation Plan for Regional Offices of TWC," the company has established a fair and reasonable headcount allocation standard to assess the current manpower utilization of each unit and allocate budgeted headcount to departments with the most urgent staffing needs. This plan follows a three-year cycle and aims to gradually achieve optimal workforce distribution aligned with actual business demands.

Each year, the company evaluates and strictly monitors the headcount requirements of all units. When vacancies arise due to business needs, retirements, deaths, or resignations, each unit must first assess

whether the existing workforce can be reallocated to address the gap. If internal adjustment is not feasible, the unit must submit a manpower requisition plan. Upon evaluation by relevant management departments, new personnel are recruited through competitive selection within the limits of the approved budgeted headcount.

(3) Recruitment and Performance Evaluation

To ensure the quality of talent selection, the Recruitment Committee for evaluated positions conducts a review each year following the completion of the recruitment examinations. This review assesses the academic and practical test components to identify areas for adjustment, aiming to more accurately meet the frontline workforce needs.

TWC and its affiliated units organize Performance Evaluation Committees in accordance with the Guidelines for Employee Performance Evaluation, Rewards, and Penalties. Each committee consists of 5 to 23 members, depending on the unit size. For every four members, two are elected by the employees subject to evaluation, and at least one-third of the total committee members must be of each gender.

Employee evaluation and rewards/penalties are based on performance records, carried out fairly and prudently according to principles of merit recognition and accountability. The company conducts year-end evaluations for both classified position employees (civil servants with labor status) and evaluated position employees (labor-only positions). The assessments are strictly implemented in accordance with the internal performance evaluation guidelines and ongoing performance record sheets.

The evaluation process includes scoring by item, and the number of employees rated as "Grade A" must fall within the approved quota range to ensure fairness and impartiality. No gender-based differences are allowed. In 2024, a total of 5,229 employees participated in the evaluation. Except for those who were retired, on unpaid parental leave, or newly hired with less than six months of service (thus ineligible for evaluation), 100% of eligible employees completed the evaluation process.

Employee rewards and disciplinary actions are based on the merits and demerits recorded in their regular performance evaluations. These are handled fairly and prudently in accordance with the principles of recognizing achievements and addressing misconduct, ensuring consistency between assessment results and actual performance.

Taiwan Water has established the “Reporting Procedure for Major Misconduct Cases at Subordinate Units” to monitor the handling of serious violations and personnel involvement across its departments. In line with the “Guidelines on Administrative Accountability for Personnel Suspected of Malfeasance within the Ministry of Economic Affairs and Its Affiliated Agencies,” the company ensures proper notification and accountability procedures are followed. Once a public prosecutor formally indicts an individual, administrative responsibilities are reviewed accordingly.

For second-level supervisors and above, the relevant district office’s performance evaluation committee conducts the initial review and submits its findings to the Head Office for final resolution. For non-supervisory staff, the case is handled directly by the district office in accordance with its delegated authority.

In 2024, there was one case involving a major misconduct allegation, and the case is currently under prosecution.

5.1.4 Fair Compensation and Retirement Benefit System

TWC is committed to establishing a fair and reasonable compensation system as well as a comprehensive retirement benefit mechanism to ensure equitable and transparent remuneration. The following provides an overview of TWC's policies and structure regarding compensation, decision-making processes, pay ratios, and retirement planning.

(1) Executive Compensation Policy

a. Compensation Standards for Board Members

Please refer to chapter 2.1, Section 4: Board Remuneration System

b. Executive Compensation Standards

The annual remuneration of the Chairperson and General Manager of the company is determined in accordance with the Guidelines for the Management of Personnel Expenses in Enterprises Affiliated with the Ministry of Economic Affairs:

- **Salary Range:** Shall not exceed the annual salary of the Minister of Economic Affairs.
- **Salary Determination Factors:** Evaluated by the Ministry of Economic Affairs based on enterprise scale, achievement of business objectives, and operational performance.
- **Approval Procedure:** Salary is assessed and approved by the Ministry of Economic Affairs and reported to the Executive Yuan for record.
- **Retirement Policy:** Retirement and severance of the Chairperson and General Manager are handled in accordance with the Principles of Retirement and Severance and Survivor Benefits for Executives and Managers of State-Owned Enterprises.

(2) Employee Compensation Determination Process

TWC's employee compensation consists of three main components, each with clearly defined criteria and procedures. This comprehensive compensation system complies with regulations for state-owned enterprises and objectively reflects employees' performance and contributions.

Basic Salary	Remote Area Allowance	Performance Bonus System
Basic Salary serves as the primary source of income. In accordance with Point 2 of the "Guidelines for the Management of Personnel Expenses and Salaries in Enterprises Affiliated with the Ministry of Economic Affairs", TWC formulates basic salary standards based on the company's specific characteristics, productivity, and operational performance. These standards are approved by the Board of Directors and submitted to the Ministry of Economic Affairs for record, ensuring fairness and reasonableness.	Remote Area Allowance is provided to employees working in remote regions or outlying islands, in accordance with the government-issued "Regional Allowance Table for Civil Servants in Public Institutions and Schools" and the "Rationalization Adjustment Plan for Regional Allowances for Civil Servants in Public Institutions and Schools. This policy reflects the company's recognition of employees who serve in challenging and remote environments.	Performance Bonus System is implemented in accordance with the "Guidelines for the Implementation of Performance Bonuses in Enterprises Affiliated with the Ministry of Economic Affairs" and the "TWC Notes on Issuing Performance Bonuses". Bonuses are fairly allocated based on the overall performance of each unit, individual annual performance, and personal contributions—serving as an incentive to promote outstanding achievement.

(3) Internal Pay Equity

In accordance with Article 31 of the Act Governing the Administration of State-Owned Enterprises, TWC recruits new employees through a fair, impartial, and open examination process. The company strictly prohibits the employment of child labor and upholds a non-discrimination policy based on race, class, language, ideology, religion, political affiliation, place of origin, birthplace, gender, sexual orientation, age, marital status, appearance, or disability. All employees are compensated according to the same salary standards.

As of 2024, the starting monthly salary for clerical employees is NTD44,780 and for technicians and clerks is NTD31,330, which corresponds to 1.63:1 and 1.14:1 ratios respectively, compared to the national minimum wage of NTD27,470.

Based on compensation statistics as of December 31, 2024, differences in remuneration between male and female managers and non-managers are attributed to variations in job positions, years of service, and performance.

To ensure fair compensation, the company regularly monitors internal pay gaps to verify the reasonableness of salary distribution. In 2024, the ratio of the total annual compensation of the highest-paid individual to the median total annual compensation of all other employees was 4.16, representing a slight increase of 0.34 points (approximately 8.9%) compared to 3.82 in 2023. However, the ratio between the percentage increase in total annual compensation of the highest-paid individual and the median percentage increase for all other employees was -27.41 (compared to 1.64 in the previous year).

Female-to-Male Ratio of Base Salary and Total Remuneration

2024 Gender Pay Ratio by Job Category						
Pay Ratio by Employment Category	Number		Total Remuneration (NTD)		Pay Ratio	
	Female	Male	Female	Male	Female	Male
Management	178	486	304,042,673	751,563,961	1.10	1
Non-Management	1631	3506	1,314,260,621	2,716,927,117	1.04	1

Note：

- Female-to-Male Total Remuneration Ratio (Annual Salary Ratio): Defined as the average annual salary of females in a given category divided by the average annual salary of males in the same category.
- The higher total remuneration ratio of female managers at Taiwan Water is primarily due to female managers generally being more senior than their male counterparts, resulting in a higher average salary ratio.
- However, the overall number of female managers and non-management positions at Taiwan Water is far lower than that of their male counterparts. Moving forward, Taiwan Water remains committed to promoting pay equity and equal employment opportunities.

(4) Employee Retirement Pension Plans and Benefits

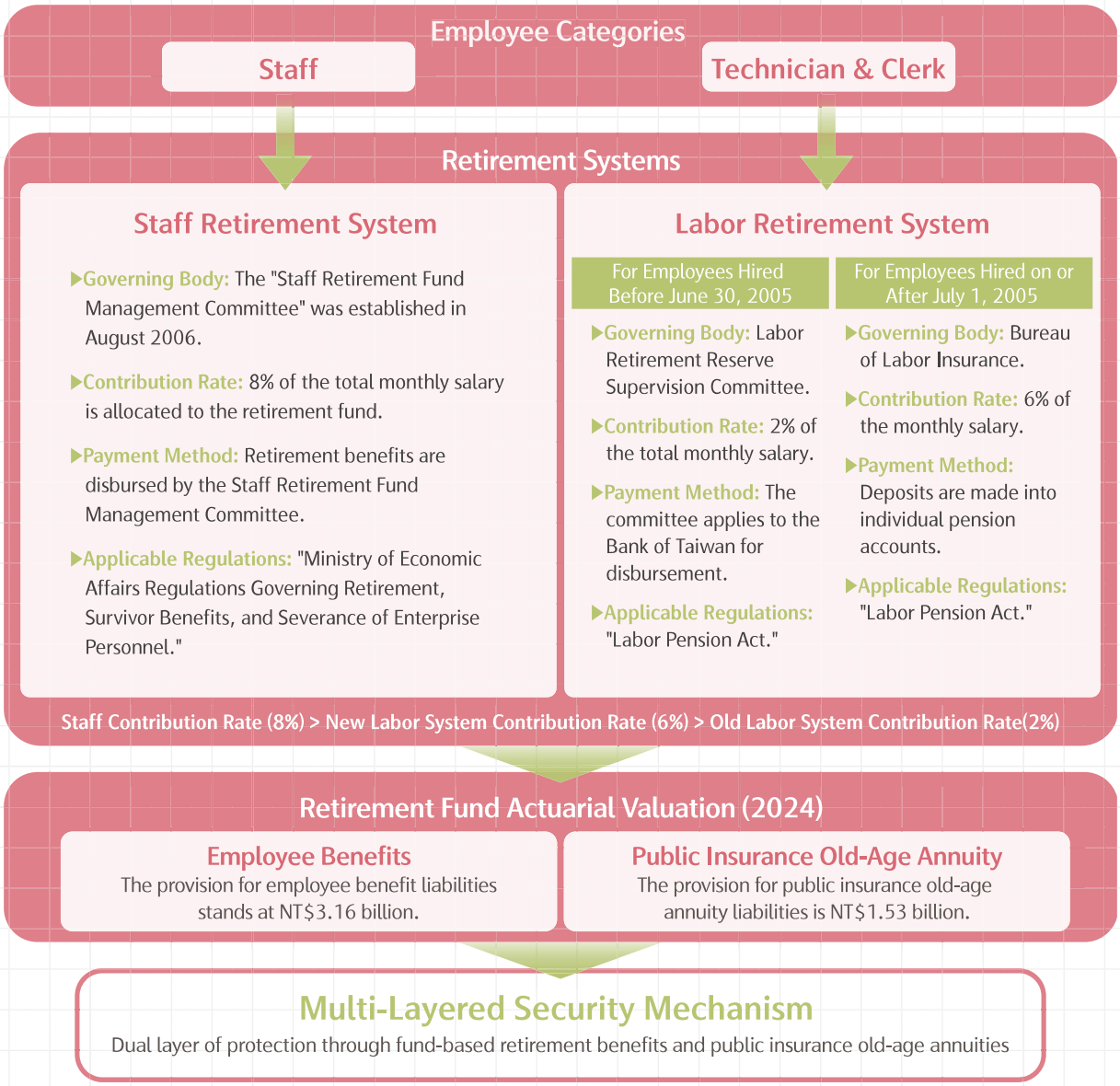
TWC has established a comprehensive retirement system in accordance with legal requirements to provide basic security for employees' post-retirement lives. The company has set up a dedicated Retirement Pension Management Committee that strictly allocates appropriate pension contributions as mandated by relevant regulations. Through rigorous accounting practices and actuarial evaluations, Taiwan Water ensures transparency in pension liabilities, safeguarding employees' retirement rights while maintaining financial sustainability. This system also assists employees in planning for their retirement life.

a. Retirement System

The company administers employee retirement in accordance with the "Retirement, Pension, and Severance Regulations for Employees of Enterprises under the Ministry of Economic Affairs." Employees are categorized into two groups—administrative staff and labor workers—and different retirement management systems apply based on their employment classification:

Description of Retirement Pension Contribution Classifications		
Employment Status		Description
Staff (Employees with dual status as civil servants and laborers)		A monthly pension contribution equivalent to 8% of the total salaries of clerical staff is allocated to the Labor Retirement Fund Management Committee. The committee deposits the contributions monthly into a dedicated pension fund account held by the company at the Bank of Taiwan. At the end of each fiscal year, according to the actuarial pension report's recognized pension expenses, any unpaid remaining amounts are fully transferred to the Labor Retirement Fund account. As of the end of 2024, the balance of the Labor Retirement Fund account stood at NTD320,301,936.
Technician and clerk (Employees with pure labor status)	Workers with Seniority under the Old Pension Scheme	The new Labor Pension Scheme was implemented on July 1, 2005. Employees hired before this date retain pension years under the old system. Under the old scheme, a monthly pension contribution of 2% of the total monthly salary of employees with old system seniority is allocated to the Labor Retirement Reserve Supervisory Committee. The committee deposits the contributions monthly into a dedicated Labor Retirement Reserve account held by the company at the Bank of Taiwan. In accordance with Article 56 of the Labor Standards Act, Taiwan Water made a one-time full payment of the account deficit amounting to NTD1,632,704,355 in 2016. Subsequently, the company continues to allocate 2% of the total monthly salaries each month. At year-end, actuarial pension reports estimate the employee benefit liabilities to ensure sufficient funding. This practice safeguards employees' future pension rights. As of the end of 2024, the balance in the Labor Retirement Reserve account was NTD2,070,261,847, with no deficits requiring additional provisioning during the year.
	Workers with Seniority under the New Pension Scheme	For employees hired after July 1, 2005, as well as those hired before June 30, 2005 who opted to participate in the new pension scheme, Taiwan Water makes monthly contributions equal to 6% of their salaries to individual accounts managed by the Bureau of Labor Insurance, in accordance with the Defined Contribution system under the Labor Pension Act. Employees may also voluntarily choose to allocate up to an additional 6% of their salary to their personal retirement accounts.

Taiwan Water Retirement Protection System



b. Pension Actuarial Evaluation and Financial Disclosure

In 2024, Taiwan Water completed the actuarial evaluation in accordance with International Accounting Standard (IAS) 19, "Employee Benefits." The company recognized an "Provisions for Employee Benefits" of NTD3,163,484,273 on the balance sheet and recorded a post-tax net gain of NTD596,327,002 under "Gains (losses) on remeasurements of defined benefit plan" in other comprehensive income on the income statement.

c. Civil Servant Retirement Pension

In response to the amendment of Article 48 of the Public Service Insurance Act, which came into effect on June 19, 2015, company employees were included under the scope of the Public Insurance Old-Age Pension benefits, retroactively applied from June 1, 2014. The actuarial evaluation for 2024 has been completed, recognizing an "Provisions for Employee Benefits" of NTD1,525,264,862 on the balance sheet, and recording a post-tax net gain of NTD121,534,124 under "Gains (losses) on remeasurements of defined benefit plan" in other comprehensive income on the income statement.

5.1.5 Employee Benefits and Work-Life Balance

(1) Basic Welfare Protection

TWC provides statutory insurance and leave entitlements in accordance with relevant labor regulations, including paid annual leave, maternity/parental leave, marriage leave, bereavement leave, and menstrual leave. Retirement benefits are granted in accordance with applicable laws.

In 2024, TWC allocated NTD42,359,111 to the Employee Welfare Fund, which is administered by the Employee Welfare Committee. The fund is used to support a range of welfare programs, including: Bereavement donations for families of deceased employees, Employee recreational and cultural activities, Scholarships for employees' children with outstanding academic performance, Newborn subsidies, Marriage subsidies, Group insurance for members. These benefits are fully utilized for the well-being of employees, and all eligible staff may apply for subsidies in accordance with the relevant policies. In addition, the Employee Welfare Committee has signed preferential agreements with various partner retailers to offer exclusive discounts for employees.

Life Insurance	Health Insurance	Disability Insurance	Other Benefits
The Company provides group term life insurance coverage of NTD500,000 for all employees. In addition, in accordance with the "Guidelines for the Disbursement of Condolence Payments for Employees' Accidental Deaths During Duty Execution", if an employee suffers a fatal accident while performing official duties, the Company will grant a condolence payment ranging from NTD6 million to NTD10 million, demonstrating care and support for employees and their families.	In addition to statutory labor and national health insurance coverage, the Company provides comprehensive group medical insurance for employees, covering major burn injuries, cancer hospitalization, and cancer-related death, with a maximum insured amount of NTD500,000. Pursuant to the "Guidelines for the Disbursement of Condolence Payments for Employees' Accidental Injuries During Duty Execution", if an employee is injured while performing official duties, the Company will issue a condolence payment ranging from NTD3,000 to NTD200,000 depending on the severity of the injury.	The Company provides group personal accident insurance for all employees, with an insured amount of NTD500,000. Compensation is provided based on the degree of disability. The insurance also includes a range of additional benefits, such as daily hospital indemnity and actual reimbursement for accident-related medical expenses. In accordance with the "Guidelines for the Disbursement of Condolence Payments for Employees' Accidental Injuries During Duty Execution", if an employee becomes disabled due to an accident occurring while performing official duties, a condolence payment ranging from NTD1.6 million to NTD10 million will be issued.	→ Festival Bonus (bonuses issued during traditional holidays such as Lunar New Year, Dragon Boat Festival, and Mid-Autumn Festival) → Employee Children's Education Scholarships → Employee Marriage Subsidy → Employee Newborn Subsidy → Employee Retirement and Severance Benefits

(2) Promoting Work-Life Balance

a. Flexible Working Hours System

To alleviate the burden of commuting during peak hours and support employees in balancing their professional and personal lives, TWC has established Guidelines for the Implementation of Flexible Working Hours. Under the principle of ensuring uninterrupted public services and administrative efficiency, employees are allowed flexible start and end times between 8:00 to 8:30 a.m. and 5:00 to 5:30 p.m. This initiative aims to boost employee morale while enhancing operational efficiency and service quality.

b. Employee Wellbeing and Working Hours Management

TWC complies with the Labor Standards Act and explicitly outlines regulations on working hours, rest periods, and leave entitlements in its "Work Rules." When it is necessary for employees to work beyond regular hours, such arrangements are made only with the consent of both the labor union and the individual employee. Employees may subsequently claim overtime pay or compensatory leave in accordance with the law. All employment conditions are handled in line with the relevant provisions of the Labor Standards Act. In 2024, TWC underwent three labor inspections related to employment conditions, all of which confirmed full compliance with regulatory requirements.

(3) Family-Friendly Measures

a. Enhanced Parental and Childcare Support Beyond Legal Requirements

TWC promotes gender workplace equality by ensuring employee benefits such as menstrual leave, prenatal checkup leave, pregnancy checkup accompaniment and paternity leave, and maternity leave fully comply with the Labor Standards Act and other relevant laws. Furthermore, in active support of government policies, TWC implements the parental leave without pay system in accordance with the Gender Equality in Employment Act. Employees who have worked for at least six months are eligible for a childcare leave system that exceeds statutory standards:

- Employees may apply for a one-hour daily reduction in working hours with full pay to care for children under the age of three—an enhanced benefit exceeding the statutory provision, which does not mandate paid leave.
- Employees may apply for unpaid parental leave for up to three years to care for children under the age of three, surpassing the statutory maximum of two years.

Statistics on Parental Leave Applications, Returns, and Retention Rates Over the Past Three Years

Items	2022			2023			2024		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Eligible employees for parental leave	311	142	453	277	141	418	181	114	295
Number of parental leave applications	9	21	30	13	15	28	12	30	42
Number of employees expected to reinstate from Parental Leave	10	32	42	11	7	18	12	19	31
Number of employees who applied for reinstatement	10	32	42	10	7	17	12	19	31
Reinstatement rate	100%	100%	100%	90.91%	100%	94.44%	100%	100%	100%
Returnees from parental leave	4	15	19	10	32	42	13	19	32
Returnees Retained for at Least One Year	4	15	19	8	29	37	11	16	27
Parental leave retention rate	100%	100%	100%	80%	91%	88%	85%	84%	84%

Note：The 2024 count of employees eligible to apply for parental leave is based on the statistics of TWC personnel who took maternity (or prenatal) leave and paternity (or prenatal) leave between January 1, 2022, and December 31, 2024.

b. Childcare and Elder Care Support

To foster a family-friendly workplace, TWC ensures that employees can effectively balance work and family responsibilities. All regional branches of TWC have signed preferential childcare agreements with nearby daycare centers, offering benefits such as registration fee discounts, complimentary school supplies (e.g., backpacks, indoor shoes, or lunchboxes), and extended childcare service hours. In alignment with government policies, the First District Management Office has also established a workplace mutual-aid education and care center, providing accessible, high-quality, and affordable childcare services not only for employees but also for staff of nearby government agencies and community residents.

In addition to childcare support, TWC recognizes the growing demand for elder care among employees and proactively engages with adult day care centers to offer resources for employees' reference. These initiatives are designed to help employees focus on their work without concerns for dependent care.

- **In 2024, TWC signed childcare preferential agreements with 59 public and private kindergartens and infant care centers to support employees' children.**
- **The crude birth rate of employees[23] (aged under 40) at TWC in 2024 was 4.15%;**
- **By the end of 2024, 20 employees entrusted their children to TWC's contracted childcare institutions, with a total of 20 childcare instances.**
- **Additionally, TWC's First District Management Office established a workplace mutual-aid education and care center in August 2022, currently accommodating 40 children, including 4 children of internal employees.**

c. Breastfeeding-Friendly Workplace Environment

TWC recognizes the importance of fostering a breastfeeding-friendly workplace and is committed to supporting female employees in balancing childcare and professional responsibilities. In accordance with the Act of Gender Equality in Employment and the Public Breastfeeding Act, the Company has established dedicated breastfeeding rooms at all regional service locations and office premises.

These facilities are equipped with essential amenities, including refrigeration for breast milk storage, and are designed to offer a warm, private, and hygienic environment. This ensures that female employees and visitors in need of breastfeeding accommodations are provided with sufficient time and a comfortable space to do so.

In compliance with relevant regulations, TWC also grants legally mandated breastfeeding breaks to eligible female employees, demonstrating a strong commitment to creating a diverse, inclusive, and supportive workplace culture that encourages childbirth and parenting.

(4) Physical and Mental Well-being and Quality of Life Enhancement

TWC adheres to the philosophy of "helping the individual is helping the organization" by establishing an Employee Assistance Program (EAP). This program is dedicated to fostering a healthy and supportive workplace environment. Through diverse support measures, TWC assists employees in resolving issues that may affect their work performance, while simultaneously enhancing organizational cohesion to jointly cultivate a positive and interactive work atmosphere.

a. Institutional Foundation of the Employee Assistance Program (EAP)

TWC has established the "Taiwan Water Corporation Employee Assistance Program Implementation Plan" as the foundational framework for promoting employee care initiatives. This plan is formulated in accordance

[23] Crude birth rate = Number of children for whom birth subsidies were applied in 2024 ÷ Number of employees under age 40 as of December 31, 2024 (2,580), then multiplied by 1,000%.

with higher-level policies, including the Employee Assistance Programs for central and local government agencies and the Ministry of Economic Affairs and its affiliated agencies, ensuring alignment with national policy directives. Each year, TWC reviews the previous year's implementation outcomes and conducts needs assessments to develop its annual action plan—such as the "2025 Employee Assistance Program Work Plan of Taiwan Water Corporation". This annual plan clearly outlines the work items, content, and proposed timelines, enabling a systematic and institutionalized approach to delivering various EAP services and ensuring the effective implementation of employee care mechanisms.

b. Scope and Content of the Employee Assistance Program (EAP)

The Company's EAP is centered on fostering a "healthy and friendly workplace," offering support across various dimensions, including psychological, legal, financial, and health-related services. By integrating available internal and external resources, we have established a practical care network to assist employees in addressing challenges related to work, life, and well-being.

c. Diverse Support Measures

Psychological Counselling Services	Health Promotion Activities
Each employee is entitled to up to four free psychological counseling sessions per year, delivered confidentially by professional counselors. Employees can access mental health support through various channels, including in-person sessions, telephone, and email, to address issues such as stress management, interpersonal relationships, emotional regulation, and family communication. In 2024, the Employee Assistance Program (EAP) recorded 22 counseling appointments, with 22 cases opened and 22 individuals (7 men and 15 women) utilizing the service, totaling 62 counseling sessions.	Focusing on employees' physical and mental health, regular health check-ups are conducted and activities promoting physical wellness are planned. TWC also regularly disseminates health promotion information via email to enhance employees' health knowledge and encourage the development of good health habits.
Mental Wellness Column and Health Information	**Legal and Financial Consultation**
To support employees' mental health, TWC publishes a monthly Mental Wellness Column offering information on personal growth and self-care. Additionally, external resources such as mental health centers and psychological health learning platform are utilized to enhance employees' mental health literacy and promote positive attitudes towards work and life.	Provides employees with legal and financial consultation services, assisting in resolving legal issues such as traffic accidents, debts, inheritance, and marriage, as well as financial matters including investment planning and insurance, thereby alleviating the difficulties employees may face when dealing with these concerns.

d. Workplace Care Measures

New Employee Care Mechanism	Overwork Early Warning and Care System	Care for Employees with Disabilities
To assist new employees in integrating into the company, a care mechanism has been established, including surveys, interviews, and newcomer meetings, to understand their needs and provide appropriate support, thereby enhancing their adaptability.	Focusing on employees' workload, an overwork early warning and care system has been established. For employees who work more than 20 hours of overtime per month, a care letter is proactively sent and the relevant supervisors are notified. This serves to remind employees to monitor their health and to inform supervisors of their team members' overtime status. When necessary, workload or work processes are adjusted to protect employee health.	The company pays attention to the needs of employees with disabilities. Through surveys or other methods, the company assesses their work adaptation status and provides appropriate resources or psychological support to ensure employees receive proper assistance in the workplace.

e. Education, Training, and Awareness Promotion

Specialized Forums

Based on employee needs assessments, Taiwan Water Corporation plans and conducts specialized forums covering diverse topics such as healthcare, personal financial planning, and gender equality. In 2024, a total of 40 lectures were held, accumulating over 100 training hours. Through expert speakers' presentations, employees' knowledge and skills across various fields are enhanced, promoting a healthy workplace environment.

Suicide Prevention Education

TWC places great importance on employees' mental health and crisis prevention by conducting suicide prevention awareness training. This education enhances employees' ability to recognize suicide warning signs and respond appropriately, fostering a supportive workplace culture.

f. Leisure and Cultural Activities

Labor Education and Environmental Education Activities

In 2024, TWC organized 39 sessions of labor education and environmental education activities at venues including Tainan Ten Drum Culture Park, Shei-Pa National Park, and Sun Moon Lake in Nantou, with a total participation of 3,328 attendees. These activities enriched employees' knowledge and promoted interaction among colleagues.

Club Activities and Sports Events

TWC actively supports employee participation in diverse club activities such as table tennis, badminton, and aerobics, providing facilities like a table tennis court for club members. In 2024, employees also took part in sports competitions including the Water Resources Festival Table Tennis Tournament and the Taiwan Water Association Slow Pitch Softball Tournament. These clubs and sports events not only enhance employees' physical health but also foster teamwork, helping staff relieve stress and strengthen camaraderie outside of work.

EAP Workshop

2024 Table Tennis Game

2024 Water Works Association Slow Pitch Softball Game

Badminton Club Activities

g. Effectiveness Evaluation

TWC evaluates the effectiveness of its EAP by collecting employee feedback through awareness, satisfaction, and needs surveys. Based on the survey results, the company conducts analyses, proposes concrete improvement measures, and uses these findings as key references for planning the following year's work plan. Additionally, TWC compiles performance review reports to ensure the EAP effectively addresses employees' actual needs, thereby enhancing overall work efficiency. This cyclical evaluation and improvement process enables continuous optimization of employee support measures, fostering a healthier workplace environment.

Through diverse service content and caring initiatives, TWC's Employee Assistance Program embodies the concept of a "healthy and friendly workplace," supporting employees in balancing work and life, and thus strengthening organizational development capacity.

5.1.6 Training and Career Development

(1) Talent Development and Objectives

TWC places great emphasis on talent development. From foundational technical training for new hires to the enhancement of specialized skills and leadership development, the company continuously invests resources to help employees refine their professional capabilities. This ensures effective knowledge transfer of excellent skills and allows talent to fully leverage their strengths to provide the public with higher quality water services.

(2) Annual Training Plan and Diverse Training Programs

To strengthen professional knowledge and enhance competitiveness, TWC systematically formulates annual training plans based on management, technical, and administrative categories, implementing various training activities accordingly. The training content addresses the professional needs of employees at different levels, forming a comprehensive talent development system that ensures continuous improvement and updating of professional skills.

A diversified approach to training is adopted, including engaging experienced internal colleagues and external experts as instructors to conduct skill transfer, experience sharing, case studies, group discussions, and practical visits. To overcome limitations of time and location, TWC produces standard operating procedure videos or animations for key operations and records digital learning courses for convenient online access.

TWC also actively promotes gender equality training. In 2024, a total of 32 classes were held, with 1,674 participants (41.28% female, 58.72% male), representing a training participation rate of 28.86%. This ensures equitable training opportunities for employees of different genders. The Professional Training Center regularly collects trainee satisfaction surveys to continuously adjust course content and maintain the improvement of training quality.

Gender Equality Course

2024 Gender Equality Training Courses

Number of Sessions	Total Participants	Female	Female Percentage	Male	Male Percentage	Total Training Hours	Training Participation Rate
32	1674	691	41.28%	983	58.72%	4793	28.86%

Note: As of December 2024, there were 1,809 female employees and 3,992 male employees.

2024 Training Hours Statistics					
Training Category / Job Level	Managerial Staff		Non-Managerial Staff		Total
	Male	Female	Male	Female	-
Total Number of Employees	486	178	3,506	1,631	5,801
Total Training Hours	8,228	2,663	53,139	25,167	89,197
Average Training Hours	16.93	14.96	15.16	15.43	-
Training Fee	$11,881,784	$3,845,551	$76,736,279	$36,342,836	$128,806,449

Note: The training hours statistics exclude external training and internally conducted training sessions by individual departments.

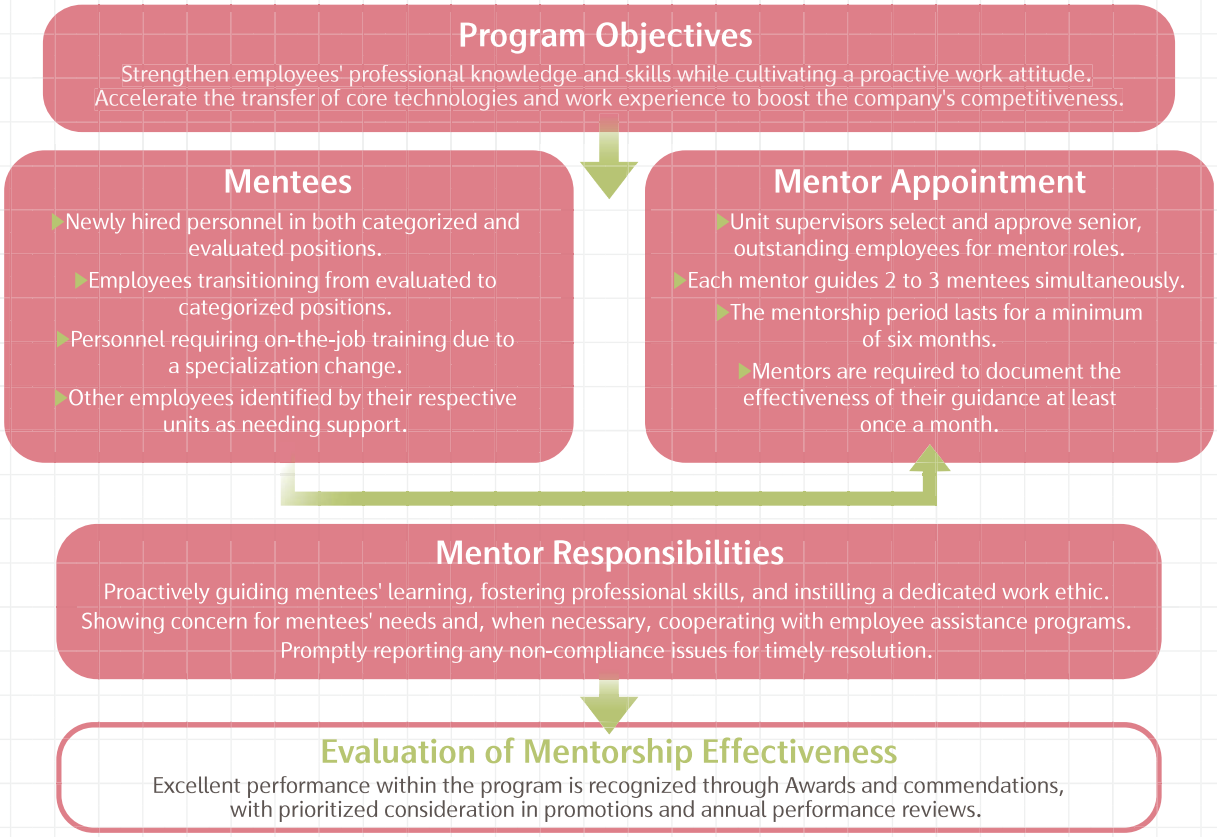
(3) Mentorship Program and Technical Knowledge Transfer

To enhance the transfer of core technical expertise, TWC has established a "Mentorship Program Guidelines" to implement a structured mentorship system. Under this system, department heads appoint experienced, high-performing, and enthusiastic employees as mentors to guide newly hired personnel or those transitioning to new specializations. The mentorship period lasts at least six months.

Mentors are required to proactively monitor learning progress and provide necessary support, recording mentoring activities and outcomes at least once per month. These records are reviewed by the immediate supervisor for documentation. Department heads are responsible for overseeing the overall learning status, reviewing program implementation as needed, and proposing improvement measures.

Through close mentor-mentee collaboration, this program effectively bridges talent gaps and sustains the Company's innovation capacity and market competitiveness.

TWC Mentor program



5.1.7 Labor Relations and Communication Mechanism

(1) Labor Management Communication and Collective Bargaining Mechanisms

a. Labor-management relations and communication channels

TWC values harmonious and constructive labor-management relations. According to Article 35 of the Statute for the Management of State-Owned Enterprises, the labor union nominates three labor directors appointed by the competent authority. These labor directors regularly attend the company's board meetings and participate in corporate governance committees and other business coordination activities, assisting in the development of the water supply enterprise and the implementation of related regulations and policies. TWC provides multiple communication channels and proposal mechanisms, including:

- Employee suggestion system (annually collecting employees' ideas and opinions through this system)
- Integrity Mailbox (hqiai1@mail.water.gov.tw)
- Newcomer communication forums
- Grievance Telephone (04-22220900)
- Grievance Fax (04-22290687)
- Grievance Email (HQCPMB@mail.water.gov.tw)

b. Labor-management meetings and union activities

TWC and its affiliated district offices and engineering offices, to promote labor-management harmony, hold labor-management meetings every three months in accordance with the Regulations on the Implementation of Labor-Management Meetings, with union representatives invited to participate as required by law. In 2024, TWC convened four labor-management meetings, with representatives from both labor and management jointly participating. The meetings focused on communication regarding personnel systems, labor conditions, welfare matters, and employee safety. For example, discussions included revising the guidelines for attendance allowance payments to staff assigned to construction sites by various district engineering offices, adjusting night shift allowances, and discontinuing reimbursement for transportation expenses when employees use private vehicles for domestic business trips to areas inaccessible by public transport.

Labor-Management Meeting

In addition to regular meetings, TWC also engages in timely communication and negotiation with the enterprise union on major policies related to employee promotion, labor conditions, and welfare to reach consensus. In 2024, the TWC enterprise union held one general assembly of members and four board meetings. The company sent representatives to attend these meetings to understand union demands and provide timely responses.

c. Collective agreements and protection of labor rights

TWC respects employees'freedom of association and their rights to collective bargaining, and has established an enterprise union. Both parties have signed collective agreements to safeguard mutual rights, enhance member welfare, promote business development, and foster harmonious labor-management relations. The collective agreements include provisions related to personnel and labor conditions, occupational injury compensation and relief, welfare and occupational health and safety, as well as labor dispute resolution. The proportion of employees covered by the collective agreements is 100% (excluding managerial personnel who represent the employer in exercising managerial authority).

d. Minimum notice period for significant operational changes

Regarding the minimum notice period for significant operational changes, TWC complies with Article 16 of the Labor Standards Act and clearly stipulates the notice period for termination of employment contracts within its work rules:

- Employees who have worked continuously for more than three months but less than one year shall be given at least ten days' notice.
- Employees who have worked continuously for more than one year but less than three years shall be given at least twenty days' notice
- Employees who have worked continuously for more than three years shall be given at least thirty days' notice.

After the notice period mentioned above, employees seeking other employment may take leave during working hours to attend to such matters, with salary (wages) paid as usual during the leave period. If the contract is terminated without the prescribed notice period, payment equivalent to the notice period's salary (wages) shall be made.

TWC's collective agreement does not currently specify a notice period for significant operational changes; such provisions are separately stipulated in the company's work regulations.

(2) Employee Rights Protection Mechanisms

a. Sexual harassment prevention

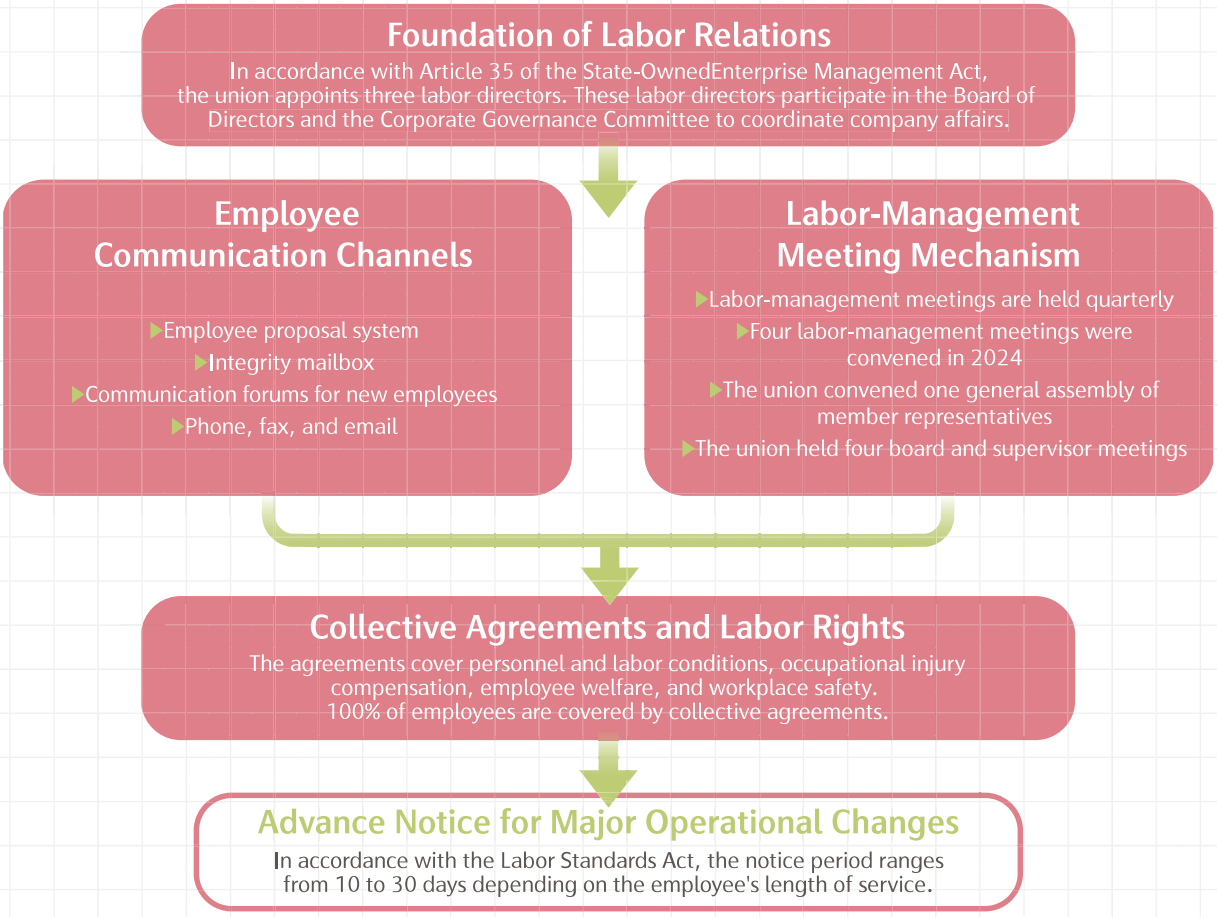
TWC places great importance on gender equality and has established a "Sexual Harassment Grievance Review Committee" responsible for investigating and handling sexual harassment complaints. Each unit provides dedicated phone lines, fax numbers, and email addresses, and a "Standard Operating Procedure (SOP) for Handling Sexual Harassment Complaints" is in place to guide complainants through the process. Further details are available in Section 5.1 Gender Equality Policies and Practices.

b. Employee grievance mechanism

To support employees in resolving difficulties, safeguarding their legal rights, and promoting unity and harmony, TWC has formulated the "Guidelines for Handling Employee Grievance Cases." In accordance with these guidelines, TWC has established both an "Employee Grievance Handling Committee" and an "Employee Grievance Handling Task Force." Employees may submit grievances related to dissatisfaction with disciplinary appeal results, inappropriate policies or administrative measures, or other issues affecting their legal rights.

The Headquarters and all subordinate units appoint 11 committee members, including 6 from various department heads and 5 appointed by the TWC Enterprise Union (and its local branches). To ensure effectiveness and inclusiveness, at least one-third of the committee members must be of either gender.

TWC labor-management communication framework



(3) Employee Satisfaction Survey

Since 2014, TWC has implemented the "TWC Employee Satisfaction Survey Implementation Plan," which was revised in 2018 to the "TWC Internal Service Quality Satisfaction Survey Implementation Plan." This initiative aims to gather comprehensive feedback on internal customer satisfaction and related opinions to serve as a reference for management. The insights gained help improve internal service quality, thereby enhancing external customer satisfaction and achieving higher service standards.

Starting from 2020, TWC has also conducted annual surveys on job satisfaction and supervisor satisfaction. The overall satisfaction rates for each year are presented in the table below:

Reporting Year	2020	2021	2022	2023	2024
Percentage of Positive Responses	46.31%	52.55%	61.75%	60.38%	65.41%

Except for a slight decline of 1.37% in overall satisfaction in 2023, employee satisfaction levels increased in all other years, demonstrating TWC's ongoing efforts to enhance employee satisfaction.

To better understand employee perceptions and evaluate whether identified issues have been effectively addressed, TWC conducts a follow-up survey targeting respondents from the previous year, one year after the respective unit has implemented its improvement measures. Additionally, during the same period of the following year, a company-wide satisfaction survey is conducted to assess whether satisfaction levels in the targeted units have improved.

5.2 Occupational Safety and Health

TWC focuses on providing an adequate supply of high-quality tap water as its core business, while prioritizing intrinsic safety of environmental facilities and source control management. TWC values life, cares for health, and promotes well-being, dedicating efforts to fostering labor-management coordination and harmony, thereby enhancing employees' work-life quality. To achieve these goals, TWC has established an occupational safety and health management system, conducts risk assessments, and continuously improve s safety and health performance to fulfill its sustainable operation objectives.

5.2.1 Occupational safety and health management policy

(1) Management policy and commitment

TWC regards employees as its most valuable asset and is dedicated to creating a safe and healthy workplace environment. TWC's occupational safety and health policy centers on five core principles, demonstrating a strong commitment to employee health and safety:

01 Compliance with Regulations
Strictly adhere to occupational safety and health laws to enhance corporate image.

02 Prevention First
Implement measures to eliminate hazards and reduce safety and health risks.

03 Full Participation
Engage in consultation, communication, and dissemination to raise awareness of individual responsibilities.

04 Continuous Improvement
enhance safety and health performance to ensure sustainable operations.

05 Friendly Environment
Maintain a safe and healthy workplace to prevent injuries and illnesses.

(2) Management objectives

TWC has established "creating a workplace free of major occupational accidents" as its core objective, with clearly defined short-term and medium-to-long-term goals:

Short-term Goals	Medium- and Long-term Goals
→ Maintain zero cases of employee deaths or serious injuries caused by occupational hazards; and strengthen the implementation of occupational safety and health management measures and plans for non-employee workers. → Ensure that over 70% of on-site personnel performing engineering duties hold Taiwan Occupational Safety Cards.	→ Strictly comply with occupational safety and health regulations, fully implement safety and health systems; continuously improve operational processes to maintain zero major occupational accidents involving employees and contractors annually. → Ensure that over 80% of on-site personnel performing engineering duties hold Taiwan Occupational Safety Cards.

(3) Occupational safety and health impact assessment

TWC identifies and addresses the impacts of occupational safety and health (OSH) activities on economic, environmental, and social aspects:

- **Positive impacts:** Enhancing employee health awareness, reducing workplace safety risks, and improving corporate reputation.
- **Potential negative impacts:** If construction or operational processes are not properly managed, occupational injuries or chemical spills may occur, affecting the environment and personnel health.

TWC's operations and those of its contractors may pose risks at work sites; therefore, TWC implements Occupational Safety and Health (OSH) systems that cover both the company and contractors to minimize negative impacts. Concurrently, institutionalized management and training are promoted to enhance the overall safety culture.

(4) Management system and certification

TWC has fully implemented an occupational health and safety management system, establishing and promoting the international Occupational Health and Safety Management System (ISO 45001:2018) and Taiwan Occupational Safety and Health Management System (TOSHMS, compliant with CNS 45001:2018). As of the end of 2022, the headquarters, 13 regional offices, and 3 engineering offices have all passed dual certification of ISO 45001 and TOSHMS, achieving a coverage rate of 100%.

The management system covers all operational sites (headquarters, 13 regional offices, 3 engineering offices, and various water treatment plants), including all regular employees, contract staff, interns, and non-employee workers (contractors, outsourced personnel, dispatched workers, and partner vendors). For non-routine short-term vendors, such as equipment maintenance personnel, they are still required to sign a "Safety Commitment Letter," undergo basic education and training, and be fully supervised on site to ensure safe operations.

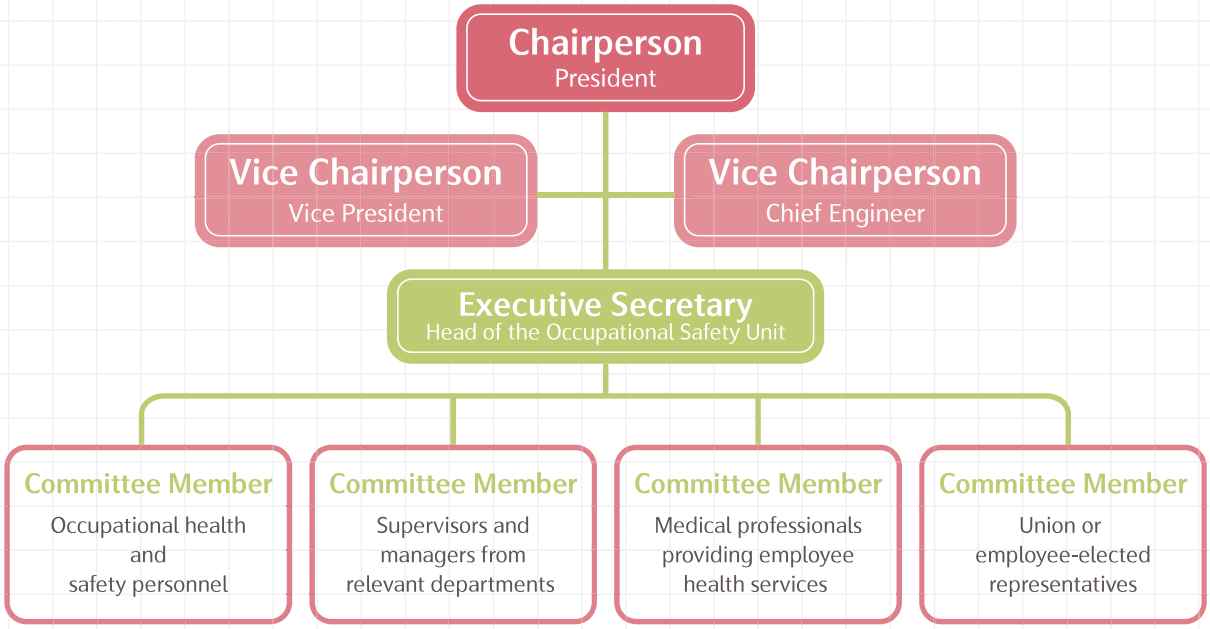
The system operates through the following measures:

- Conducting annual internal audits and external inspections to ensure all sites continuously meet standard requirements
- Implementing risk assessment procedures, incident reporting protocols, health service programs, and performance indicator tracking
- Establishing an Occupational Safety and Health Committee covering the entire company, holding regular meetings to review implementation effectiveness
- Requiring all personnel to receive occupational safety training and participate in annual health examinations (including special operation health checks)

Category	Under the OSHMS	Note
Regular employees (including headquarters and regional offices)	Yes	Fully included within the scope of ISO 45001 certification
Contract staff and interns	Yes	Subject to the same management system and training programs
Contractors and outsourced personnel (e.g., cleaning, security, construction)	Yes	Integrated through contract management and on-site audits
Dispatched personnel or subcontractors	Yes	Required to participate in construction site safety education and comply with operational regulations

TWC has established occupational safety and health management responsibilities and authorities as shown in the following diagram, ensuring thorough implementation of safety and health management across all organizational levels.

TWC Occupational Safety and Health Organization Chart



5.2.2 Safety and health risk management

(1) Hazard Identification and Risk Assessment Mechanism

TWC follows the TOSHMS process to conduct hazard identification and risk assessment, implementing the "Hazard Identification and Risk Assessment Procedure" and the "Incident Reporting and Investigation Procedure." After confirming risk levels, these are incorporated into improvement targets and tracking. Hazard identification and risk assessment form the foundation for preventing occupational accidents. The company continuously identifies potential risks in the work environment through systematic management methods.

TWC has established reporting channels (internal website/telephone), allowing employees to refuse unsafe work on safety grounds without fear of disciplinary action for reporting or halting operations.

(2) Incident Reporting and Investigation Procedure

When an occupational accident occurs, TWC initiates a comprehensive reporting and investigation mechanism:

- Upon occurrence, the responsible unit reports to the local competent authority or inspection agency within the legally prescribed time limit.
- For major occupational accidents, immediately prepare a news release (quick report or press release) detailing the incident and response measures; after approval by the Deputy General Manager of Operations, send it via email or SMS to all board members (including independent directors) and supervisors for awareness.
- Report the handling status at the monthly board meeting; concurrently, the operations management unit will conduct on-site inspections and supervision.
- Within one week after the incident unit submits the "Occupational Accident Investigation Report," convene a "Major Occupational Accident Investigation Review Meeting," chaired by the General Manager

with the Deputy General Manager of Safety as deputy chair. The Safety and Environmental Protection Office acts as secretary, inviting representatives from the responsible unit and the corporate union, with the unit involved in the major accident attending to provide explanations.

Through this mechanism, the company can thoroughly analyze the causes of accidents and implement effective corrective actions to prevent recurrence.

(3) Contractor Safety Management

TWC recognizes that ensuring the safety of workers within its business relationships is a crucial component of sustainable corporate operations. For contractors and outsourced personnel (such as construction workers, equipment technicians, cleaning, and security staff), the company has established a comprehensive occupational safety and health management system. This system incorporates labor risks related to business relationships into its management framework and implements the following mechanisms:

a. Contractual System and Construction Safety Requirements

- **Contractual Standardization and Control:** All construction contracts incorporate OSH clauses, stipulating that contractors must comply with the Occupational Safety and Health Act, the Taiwan Occupational Safety Card system, and other relevant regulations. Prior to commencing work on-site, contractors are required to submit a safety plan and training certification, which must be approved before construction can begin.
- **Enhanced Certification and Qualification Requirements:** Starting in 2024, all personnel entering the site must possess a "General Safety and Health Training Certificate." From 2025 onward, construction workers are further required to hold the "Taiwan Occupational Safety Card." Failure to comply will result in a contractual penalty of NTD5,000 per person per occurrence.
- **High-risk work conditions:** for specific high-risk tasks (such as scaffolding, open excavation, formwork support, steel structure assembly, oxygen-deficient operations, etc.), contractors are required to assign qualified supervisors to direct work on-site, and conduct daily inspections and signed checklists for tools and equipment.

b. Risk identification and inspection supervision

- **Establish contractor risk assessment system:** prior to construction, contractors must complete risk identification and hazard assessment reports listing potential hazards, corresponding control measures, and personal protective equipment requirements, subject to approval by the responsible uni.
- **On-site safety inspections and supervision:** besides routine supervision by affiliated units, the TWC headquarters also promotes a safety supervision system, where the safety supervision team regularly or irregularly inspects various district engineering sites, with inspection results included in performance evaluations.
- **Immediate correction mechanism for non-compliance:** if inspections reveal major deficiencies (e.g., no on-site supervisor, lack of required permits), work is immediately halted and contractors are required to rectify within a deadline; failure to comply results in classification as a non-compliant contractor.

c. Education and capacity building

- **Contractor pre-entry training:** contractors must provide hazard briefings to personnel before entering the site, explaining potential hazards, including those of high-risk tasks, prevention measures, work standards, and emergency response procedures.
- **Specialized re-training system:** for specific tasks (such as working at heights, electrical hazards, confined spaces), TWC units regularly hold specialized contractor training sessions and encourage contractors to participate.

(4) Incident reporting and continuous improvement

- **Occupational accident immediate reporting system:** contractors must promptly report occupational accidents to TWC and cooperate with investigations. Major accidents require reporting to the board of directors and convening the "major occupational accident investigation review meeting," chaired by the general manager, involving the labor union and relevant departments to review corrective actions.
- **Incident analysis and feedback:** after investigation closure, corrective measures are compiled into training materials or revised guidelines, and concurrently implemented across units to strengthen prevention.

5.2.3 Safety Performance and Statistics

(1) Occupational Injury Statistics and Analysis

TWC continuously monitors and compiles occupational injury data for both employees and non-employees (e.g., contractors) in accordance with the TOSHMS. Injury rates are calculated and used as a basis for risk control and improvement measures. In 2024, TWC recorded no cases of occupational disease. The occupational injury statistics for employees and non-employee workers (contractors) are as follows:

Occupational Safety Performance Statistics for Employees in the Past Three Years:				
Category	Item	2022	2023	2024
Total working hours	Female total working hours	3,411,908	3,486,029	3,505,335
	Male total working hours	8,041,924	7,889,331	7,735,377
	Total working hours	11,453,832	11,375,360	11,240,712
Fatality number due to Occupational Injury	Number of female fatalities (cases)	0	0	0
	Number of male fatalities (cases)	0	0	0
	Total number of fatalities (cases)	0	0	0
Fatality Rate due to Occupational Injury	Female fatality rate due to occupational injury (cases)	0	0	0
	Male fatality rate due to occupational injury (cases)	0	0	0
	Total fatality rate due to occupational injury (cases)	0	0	0
Number of serious occupational injuries (excluding fatalities)	Female total number of serious occupational injuries (cases)	0	0	0
	Male total number of serious occupational injuries (cases)	0	0	0
	Total number of serious occupational injuries (cases)	0	0	0
Serious occupational injury rate (excluding fatalities)	Serious occupational injury rate of female	0	0	0
	Serious occupational injury rate of male	0	0	0
	Total of serious occupational injury rate	0	0	0
Recordable occupational injuries (including fatalities and serious occupational injuries)	Total number of occupational injuries of female (cases)	0	0	0
	Total number of occupational injuries of male (cases)	0	2	0
	Total number of occupational injuries (cases)	0	2	0
Recordable occupational injuries rate (including fatalities and serious occupational injuries)	Total number of occupational injuries rate of female (cases)	0	0	0
	Total number of occupational injuries rate of male (cases)	0	1	0
	Total number of occupational injuries rate (cases)	0	1	0
Types of occupational injuries	Each type of occupational injury case	NA	Fall – 1 case Electric shock – 1 case	NA

Occupational safety performance statistics of non-employee workers over the past three years				
Category	Item	2022	2023	2024
Total working hours	Total working hours of female employees	551,900	646,142	745,300
	Total working hours of male employees	4,967,100	5,815,275	6,707,700
	Total working hours	5,519,000	6,461,417	7,453,000
Fatality numbers due to occupational injury	Number of female fatalities (cases)	0	0	0
	Number of male fatalities (cases)	1	0	0
	Number fatalities (cases)	1	0	0
Fatality rate due to occupational injury	Fatality rate due to occupational injury of female	0	0	0
	Fatality rate due to occupational injury of male	0 .20	0	0
	Total fatality rate due to occupational injury	0.18	0	0
Number of serious occupational injuries (excluding fatalities)	Total number of serious occupational injuries of female (cases)	0	0	0
	Total number of serious occupational injuries of male (cases)	2	0	0
	Total number of serious occupational injuries (cases)	2	0	0
Serious occupational injuries rate (excluding fatalities)	Total of serious occupational injury rate of female	0	0	0
	Total of serious occupational injury rate of male	0.40	0	0
	Total of serious occupational injury rate	0.36	0	0
Number of recordable occupational injuries (including fatalities and serious occupational injuries)	Total number of occupational injuries of female (cases)	1	0	0
	Total number of occupational injuries of male (cases)	4	3	6
	Total number of occupational injuries (cases)	5	3	6
Recordable occupational injuries rate (including fatalities and serious occupational injuries)	Occupational injury rate of female	0 .18	0	0
	Occupational injury rate of male	0.72	0 .46	0.80
	Total occupational injury rate	0.90	0.46	0.80
Types of occupational injuries	Each type of occupational injury case	Fall – 5 cases	Fall – 1 case, Electric shock – 1 case Caught in/ caught between – 1 case	Caught between – 3 cases Collapse – 1 case Fall – 1 case Struck by – 1 case

(2) Improvement Measures and Effectiveness

TWC has developed and implemented a series of improvement measures based on the analysis of occupational injury results:

- **Strengthening High-Risk Operation Inspection System:** Enhanced on-site supervision and verification of work permits for high-risk areas, including scaffolding work, hoisting, and excavation activities.
- **Immediate Reporting and Investigation System for Occupational Injuries:** All recordable injury incidents must be initially reported within 30 minutes. Major occupational accidents require a full investigation to be completed within 2 weeks, followed by a review meeting convened by the headquarters to examine causes and preventive measures.
- **Occupational Accident Review and Parallel Implementation:** In addition to the mandatory accident investigation, a thorough root cause analysis is conducted to develop specific and feasible improvement measures. These improvements are immediately applied at the incident unit and concurrently promoted across all affiliated units to strengthen prevention efforts and reduce similar risk.
- **Contractor Safety Management System:** Contractors without proper licenses are prohibited from entering worksites. Based on inspection results, penalties such as fines or work suspension are enforced. Simultaneously, construction laborers are required to obtain the "Taiwan Occupational Safety Card."

Additionally, the company has increased on-site inspection frequency for common injury types, installed additional guardrails and warning devices, and updated training materials to reduce the likelihood of similar incidents.

(3) Internal and External Safety Communication Mechanisms

TWC conducts occupational safety and health meetings chaired by the General Manager, with labor representatives comprising at least one-third of the committee members. These meetings are held quarterly to discuss occupational safety issues and continuously monitor the effectiveness of improvement measures.

Internal communication	External communication
Communication among internal departments and hierarchical levels is conducted through meetings, surveys, internal websites, emails, fax, telephone, announcements, and official documents, with the responsible management unit handling the process. The management unit reviews opinions or proposals, notifies relevant departments for assessment, and provides feedback. When necessary, discussions may be held via meetings, and written responses are given to the proposers.	Communication with external stakeholders is conducted through email, fax, telephone, or official documents to receive and respond to external messages, as well as to convey matters related to occupational safety and health. The Occupational Safety unit is responsible for handling any related suggestions or concerns. Received messages shall be documented and addressed by the relevant responsible units. If the issue cannot be resolved promptly, the handling status should be reported to the original proposing unit or individual as appropriate.

All good-faith recommendations from internal and external individuals and groups are thoroughly evaluated and addressed. Any necessary amendments to internal documents are promptly implemented. In the event of a major occupational accident resulting from an unforeseen incident, the responsible unit shall report the case to the local competent authority or inspection agency within the legally mandated timeframe.

5.2.4 Occupational Safety and Health Training

(1) Training System

TWC has established a comprehensive occupational safety and health training system to ensure that both employees and non-employee workers possess the necessary safety knowledge and skills. The training covers general safety topics as well as targeted instruction addressing specific occupational hazards and dangerous situations.

For special occupational hazards, the company provides specialized safety training, including operation of high-pressure gas equipment, forklift operation, safety and health education for personnel handling or using hazardous chemicals, and supervisory training for high-risk operations involving harmful substances (such as organic compounds, special chemicals, lead, and tetraethyl lead). Additionally, TWC conducts mental health-related courses, such as "Workplace Bullying Prevention and Management," taught by professional legal experts, to strengthen the protection of employees' physical and mental well-being.

(2) Training Implementation Results

The 2024 occupational safety and health training statistics of TWC demonstrate significant achievements:

2024 Occupational Safety and Health Training Hours					
Training Topics / Job Levels	Management personnel		Non-management personnel		Contractor
	Male	Female	Male	Female	-
Total Number of Trainees	1,050	331	4,532	1,554	1,187
Total Training Hours	5,395	1,470	24,598	7,334	4,320

The 2024 occupational safety and health training statistics indicate that a total of 8,654 trainees participated throughout the year, with a total investment of NTD 3,952,008. This reflects the company's strong commitment and investment in employee safety education.

5.2.5 Health Services and Promotion

(1) Health Examinations and Special Operation Medical Checks

TWC implements a comprehensive annual health examination system to regularly monitor employees' health status. General health examinations are conducted in accordance with Schedule 9 of the Labor Health Protection Regulations, covering comprehensive assessments of various body systems, chest X-rays, and blood biochemical tests to ensure basic health monitoring for employees. Special health examinations follow Schedule 10 of the same regulations and are targeted at employees working in environments with specific health hazards, including noise, dust, lead exposure, and other chemical substances, to assess the health impacts of these potential risks.

Heath check

The health examination statistics for 2024 are as follows:

General Health Examination			
Examination items	1. Survey of work history, past medical history, lifestyle habits, and subjective symptoms. 2. Measurement and physical examination of height, weight, waist circumference, vision, color discrimination, hearing, blood pressure, and examination of various body systems or parts including medical interviews. 3. Chest X-ray (large film) examination. 4. Urine protein and occult blood tests. 5. Hemoglobin and white blood cell count tests. 6.Tests for blood glucose, serum alanine aminotransferase (ALT), creatinine, cholesterol, triglycerides, high-density lipoprotein cholesterol (HDL-C), and low-density lipoprotein cholesterol (LDL-C). 7.Other examinations designated by the central competent authority.		
Number of examinees (persons)	3,523	Examination costs (thousand NTD)	9,087

Special Health Examination			
Examination items	Special health examinations are conducted based on the type of operations in each unit, covering exposure to noise, dust, lead operations, n-hexane operations, manganese and its inorganic compounds, formaldehyde, mercury and its inorganic or organic compounds, chromic acid, dichromate compounds, ethyl mercury compounds, vinyl chloride, and ionizing radiation.		
Number of examinees (persons)	248	Examination costs (thousand NTD)	238

TWC places great importance on protecting employee health information privacy. Health examination data are managed and securely stored by occupational health nursing staff or designated personnel, with physical records kept under lock and electronic files encrypted. Access to complete data is restricted to authorized personnel only. Furthermore, employees' participation in health services and their health information are used solely for assessment, personalized health guidance, and health management purposes, and do not affect their employment conditions or performance evaluations.

(2) Health Promotion Activities

TWC fosters a healthy work environment and promotes employees' physical and mental well-being through systematic health promotion policies, abundant health resources, and diverse health activities. By integrating environmental monitoring data, TWC identifies potential health hazard risks, monitors employee health status, and provides a basis for self-health management—emphasizing prevention over treatment to create a safe and worry-free workplace.

a. Implementation of Professional Health Services

As a second-category enterprise engaged in water supply within the electric, gas, and water industry, TWC operates under an overall management and regional responsibility center model. Each regional management (engineering) office formulates its labor health management program based on the nature of workplace hazards, work types, distribution, and health examination results of high-risk employee groups. Accordingly, labor health services are provided. In 2024, contracted occupational health physicians conducted 85 on-site service sessions, and 4 full-time nurses were employed, with an additional 93 on-site service sessions provided by contracted occupational health nursing staff, offering employees health guidance, assessments, recommendations, and consultation services.

TWC 2024 Health Service Implementation Statistics by Unit

Unit	Number of On-site Physician Service Sessions (Unit: sessions)	Number of On-site Nursing Service Sessions (Unit: sessions)	Number of Health Consultation Recipients (Unit: persons)
Head Office	6	6	48
1st District Management Office	6	6	39
2nd District Management Office	6	6	44
3rd District Management Office	6	6	51
4th District Management Office	6	6	51
5th District Management Office	6	6	58
6th District Management Office	6	12	51
7th District Management Office	6	6	45
8th District Management Office	6	4	25
9th District Management Office	3	4	7
10th District Management Office	3	4	20
11th District Management Office	6	6	80
12th District Management Office	6	6	38
Pingtung District Management Office	4	4	25
Northern Engineering Office	3	3	15
Central Engineering Office	3	4	30
Southern Engineering Office	3	4	12
Total	85	93	639

Note:
The number of health consultation recipients includes those who received services related to ergonomic hazard assessments and health guidance, maternal health protection, prevention of workplace violence, abnormal health examination follow-ups, special health examination counseling, health education, hygiene guidance, and recommendations for physical and mental health protection measures.
A total of four full-time nurses were employed, with one stationed at each of the following units: the Head Office, 2nd District Management Office, 4th District Management Office, and 7th District Management Office.

b. Workplace Physical and Mental Health Promotion Activities

In response to continued media coverage of workplace bullying incidents, and in alignment with Article 6, Paragraph 2 of the Occupational Safety and Health Act regarding the protection of workers'physical and mental health, TWC invited Attorney Yi-Ting Lin to deliver a two-hour course titled "Prevention and Management of Workplace Bullying." A total of 416 managerial personnel at level two and above participated in the training, which was delivered both in person and via live video conferencing.

For non-managerial staff and employees who did not attend the live session, an online version of the course was made available through the "e-Civil Servant" platform, with a total of 5,262 participants completing the training.

TWC 2024 Health Promotion Activities and Health Seminars Implementation Statistics by Unit

Unit	Health Promotion Activities	Health Forum
Head Office	Four Major Cancer Screenings, Vaccination Services, Health Bulletin Promotion	1. Workplace Bullying Seminar 2.Office Exercises Every Employee Should Know
1st District Management Office	Health Monthly Bulletin, Four Major Cancer Screenings, Promotion of Vaccination, and Labor Education Activity – Outdoor Hiking at Heping Island (Keelung Islet)	Workplace Bullying Seminar
2nd District Management Office	Happy Weight Loss Competition, Four Major Cancer Screenings, Vaccination Services, and Health Monthly Bulletin	1.Human Factors Hazard Prevention Education and Training 2.Happy Weight Loss Promotion Seminar
3rd District Management Office	-	1.Three Highs Harm Kidneys – The Golden Rules to Help You Maintain Kidney Health
4th District Management Office	Four Major Cancer Screenings, Vaccination Services	1.Chronic Disease Risks for Cardiovascular Disease, Myths about Fatty Liver, and Prevention Methods for Workplace Harassment 2.Prevention of Human Factors Hazards in Office Work and Common Sports Injuries
5th District Management Office	Four Major Cancer Screenings, Vaccination Services, Health Bulletin Promotion, Outdoor Smoking Area Setup and Awareness Campaign	1.Understanding Metabolic Syndrome 2.Assistance Program for Occupational Injury Workers Returning to Work and Overview of Workplace Harassment 3.Anti-Drug Awareness Campaign
6th District Management Office	1.Coordinated with the Ministry of Education to conduct fitness and physical ability tests — 84 participants 2.Provided free influenza vaccinations — 18 recipients, and COVID-19 vaccinations — 11 recipients 3.Conducted visits to the Materials Warehouse and Water Quality Section to perform KIM LHC (Lift, Hold, and Carry Operation Assessment) — 4 employees assessed 4.Distributed health promotion messages via email — 5 times	1.Health Seminar – Employee Heat Stress Prevention – 84 participants 2.Health Seminar – Human Factors Hazard Prevention and Asian Giant Hornet Sting Prevention & First Aid Techniques – 36 participants
7th District Management Office	Four Major Cancer Screenings, Vaccination Services, Monthly Health Promotion, and Physical Fitness Assessments	1.Workplace Bullying Seminar 2.Prevention Seminar on Metabolic Syndrome and Overload
8th District Management Office	Four Major Cancer Screenings, Vaccination Services, Health Bulletin Promotion, and Health Exercise Classes	1.Workplace Bullying Seminar、 2.Metabolic Syndrome Awareness Campaign

9th District Management Office	Influenza, High Temperature Hazards, and Monthly Health Bulletin Promotion	1. Workplace Bullying Seminar 2. First Aid and Trauma Bandaging Seminar
10th District Management Office	Health Check Hospitals Coordinated with Four Major Cancer Screenings and Health Bulletin Promotion	1.Technology-Based Physical Fitness Assessment 2.Workplace Health Promotion Seminar – Exercise for a Healthy Life
11th District Management Office	Tumor Marker Screening: 1. Alpha-Fetoprotein (AFP) 2. Carcinoembryonic Antigen (CEA) 3. Breast Cancer Antigen CA-153 (female) 4. Prostate-Specific Antigen (PSA) Index (male) Health Information Promotion, Healthy Workplace Certification – Health Activation Mark	1.Post-Pandemic Wellness Seminar 2.Mindful Slow Living Exercise 3.CPR & AED Training
12th District Management Office	Monthly Health Bulletin Promotion, Heat Hazard Awareness Promotion, and Public Influenza Vaccination Promotion	Health Promotion Seminars – Enterovirus Prevention and Healthy Weight Loss Starting with Diet
Pingtung District Management Office	Four Major Cancer Screenings, Health Promotion Campaign, and Outdoor Smoking Area Setup and Awareness	1.Workplace Bullying Seminar 2.Technology-Based Physical Fitness Assessment
Pingtung District Management Office	Four Major Cancer Screenings, Vaccination Services, Health Monthly Bulletin Promotion, and Outdoor Smoking Area Setup and Awareness	"Prevention of Workplace Harassment Hazards" and "Prevention of Human Factors Hazards" Education and Training Seminar
Central Engineering Office	Four Major Cancer Screenings, Vaccination Services, Health Monthly Bulletin Promotion, and Outdoor Smoking Area Setup and	1. Psychological Stress Relief Seminar 2. Weight Loss Diet Guidelines Seminar
Southern Engineering Office	Workplace Tobacco Control and Health Promotion	-

Workplace Bullying Education and Trainin

TWC won the 2024 Outstanding Healthy Workplace and Excellent Promoter - Gender Health and Friendly Award

c. Health Promotion Achievements and Honors

Notably, TWC was honored with the "2024 Outstanding Healthy Workplace and Excellent Promoter – Gender Health Friendly Award by the Health Promotion Administration, Ministry of Health and Welfare". This recognition highlights the company's proactive implementation of smoke-free workplace measures and the promotion of various health initiatives, demonstrating its commitment to establishing a healthy work environment and fostering healthy lifestyle habits among employees.

5.3 Social Collaboration

5.3.1 Environmental Education Promotion and Achievements

TWC recognizes the importance of protecting and sustainable water resources management for society. Actively promoting environmental education, TWC aims to raise public awareness and appreciation of water resources. Through the establishment of environmental education parks, TWC not only highlights the significance of protecting water sources but also integrates practical knowledge of water quality treatment and ecological conservation, allowing visitors to experience and learn firsthand.

During implementation, guided tours, interactive experiences, and various courses are arranged to help participants understand the origins of water, treatment processes, and their environmental impacts. These activities enhance environmental awareness and provide a concrete understanding of the importance of water resource management. Through these environmental education efforts, TWC hopes to improve public knowledge on water use and environmental protection behaviors, while stimulating broader societal concern for water resource conservation, ultimately contributing to the sustainable management of water resources.

TWC was awarded the 2024 Excellence Award in the National Environmental Education Action Plan Performance Evaluation by the Ministry of Environment, recognizing our efforts and achievements in environmental education. The following summarizes the 2024 environmental education outcomes across various venues:

Magong Seawater Desalination Plant Environmental Education Center

- On October 1, 2024, the center officially received certification as an environmental education site. Currently, two staff members have obtained environmental educator certification and are responsible for managing administrative tasks, teaching, and guided tours at the center. In 2025, TWC plans to sign letters of intent with nearby schools and communities to jointly promote water resource environmental education on offshore islands.
- In 2024, the center hosted 12 environmental education sessions, with a total of 265 participants. Tailored to different age groups, the center offers two approved thematic courses—Water in Penghu and The Mystery of Desalination—along with a guided tour program titled Desalination Designers, which helps participants understand the operational process and functions of the seawater desalination plant. These programs aim to raise awareness of the value of water resources on offshore islands and reinforce water conservation practices.

Desalination Designers course – in collaboration with Taoyuan City Government Water Resources Department

Water in Penghu course – water resource education camp hosted with Dingze Technology

Shengou Ecological Park

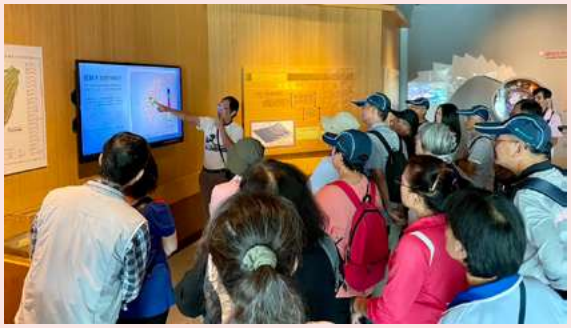
Professional Development and Learning for Relevant Personnel:

- Visits were organized to environmental education and cultural sites such as Shanlinxi Ecological Garden, Chelungpu Fault Preservation Park, Taiwan Oil Field Exhibition Hall, and Taiwan Ceramic Museum. These visits facilitated exchanges and mutual learning with other environmental education venues to enhance environmental education quality.

Environmental Interpretation, Education Courses, and Environmental Communication Practices:

- In 2024, a total of 342 environmental interpretation sessions were conducted, with 11,168 participants.
- Government agencies, organizations, and school teachers and students were invited to apply for on-site environmental education courses focusing on water resource topics. Six sessions were held with 92 participants, followed by discussion forums. Additionally, TWC received a project subsidy from the Ministry of Education's Environmental Learning Center Off-Campus Teaching Promotion Program to conduct seven sessions for elementary school students, totaling 151 participants in water resource education experiential courses.
- A total of 13 environmental education courses were held in 2024, with 243 participants.
- The park was interviewed by CommonWealth Magazine for the Smiling Taiwan 2024 Spring Issue, increasing visibility and enhancing environmental education outreach, while raising public awareness about the importance of water source preservation.
- The park also appeared on Sanlih Television's program Linking 368 Taiwan, further boosting environmental education communication and public understanding of water resources.
- The park was evaluated by the National Environmental Research Institute of the Ministry of Environment. Among over 40 sites nationwide assessed, it stood out and received the "Excellent Evaluation" award.

Shengou Water Source Ecological Park - Volunteer Team Capacity Building and Off-site Training



Shengou Water Source Ecological Park - promoted by the Ministry of Education's off-campus teaching subsidy program

Shengou Water Source Ecological Park-Environmental Education Course-Unraveling the Mystery of Tap Water

Shengou Water Source Ecological Park-Excellent Evaluation Award

Hushan Water Supply Environmental Education Park

Professional Knowledge and Skills Development and Learning for Relevant Personnel

- In 2024, a total of four self-development courses were conducted, integrating extensive knowledge and practical skills related to water resource education along with environmental protection topics, enhancing volunteers' awareness and understanding of environmental sustainability. A total of 28 T (TWC employees and 136 volunteers participated.
- Environmental education off-site training was held at various venues including TSMC Southern Taiwan Science Park Reclaimed Water Plant Environmental Education Learning Park, Taiwan Southern Meteorological Center, Shanlinxi Forest Ecological Resort, and Dayeh University's Green Sustainable Natural and Cultural Environmental Education Facility. These trainings deepened participants' experience in water resource education, environmental protection, and green energy.
- As of 2024, a total of 20 personnel (6 TWC employees and 14 volunteers) obtained the Ministry of Environment's Environmental Educator Certification, supporting future curriculum development and promotion. Additionally, five personnel (4 TWC employees and 1 volunteer) received certification as Net-Zero Green Lifestyle Seed Instructors from the Ministry of Environment, assisting in advancing the 2050 net-zero carbon emission policy.

Environmental Interpretation, Environmental Education Courses, and Environmental Communication Practices

- In response to applications from government agencies, community residents, schools at various levels, and organizations, the park arranged water resource environmental education promotion, interpretation, and course delivery. In 2024, a total of 55 sessions were conducted, with 2,854 participants.
- Campus environmental education courses were promoted by engaging high school and university teachers and students to raise awareness about water resource conservation. In 2024, three sessions were held, with a total of 250 participants.

Other Achievements

- Received project funding from the Ministry of Education's Environmental Learning Center Off-Campus Teaching Promotion Program to conduct 8 sessions of water resource education experiential courses for elementary school students at the park, with a total of 353 participants, and 2 sessions of water resource education camp activities in remote areas, with 113 participants in total.

Hushan Water Environmental Education Park-Taiwan Water invites partners to set up stalls on 113 Arbor Day

Hushan Water Environmental Education Park-Taiwan Water invites partners to set up stalls on 113 Arbor Day

Hushan Water Environment Education Park - Ministry of Education Off-campus Teaching Subsidy Program Promotion - Send Love to Rural Primary School Camp Activities

Hushan Water Environment Education Park - Ministry of Education Off-campus Teaching Subsidy Program Promotion - Send Love to Rural Primary School Camp Activities

Chengcing Lake High-Quality Water Environmental Education Park

Professional Knowledge and Skills Development and Learning for Relevant Personnel

- In 2024, a total of 12 self-development courses were conducted, with 94 TWC employees and 380 volunteers participating. The courses covered topics including water resource education, common outdoor snakes and bees ecology, tree risk assessment, and net-zero emissions, enhancing volunteers' awareness and understanding of environmental sustainability. ◦
- Four staff members from the park participated in four sessions of external environmental education training in 2024, organized jointly by institutions such as the Aerosol Science Research Center of National Sun Yat-sen University, the Taiwan Environmental Protection Union, and the National Institute of Environmental Research.

Exchange and Collaboration with Environmental Education Facilities and Organizations in Southern Taiwan

- In November 13, 2024, the park collaborated with Ho Chun Cultural and Educational Foundation, local senior high and vocational schools in Kaohsiung, and the Linyuan Mangrove Conservation Society to hold the event "Environmental Sustainability — Chengcing Lake Ecological Maintenance and Post-Disaster Reconstruction" at Chengcing Lake Scenic Area.

Environmental Interpretation and Environmental Education Course Implementation

- In 2024, a total of 26 sessions were conducted, with 896 participants experiencing the park's water source ecological tours, "Tap Water Is Not Just Water" environmental interpretation services, and various themed weekend activities.
- Eight environmental education courses were held in 2024, with 239 participants in total.
- The park was invited to set up booths for water resource conservation promotion at four events in 2024: the Linyuan Mangrove Ecological Carnival, Meinong Liugui Tourism and Arts Festival, Dahu Bitter Melon Festival, and the 71st Anniversary Celebration of Dahua Elementary School, raising awareness on the importance of water conservation.

Chengcing Lake High Quality Water Environment Education Park - Volunteer Team Capacity Building and Off-site Training

Chengcing Lake High Quality Water Environment Education Park - Yougou Awesome DIY Activities - Weekend Theme Activities

Chengcing Lake High Quality Water Environment Education Park - Zhidahua Elementary School 71st Anniversary - Setting up a booth for promotion

Chengcing Lake High Quality Water Environment Education Park - Zhidahua Elementary School 71st Anniversary - Setting up a booth for promotion

5.3.2 Chengcing Lake High Quality Water Environment Education Park - Zhidahua Elementary School 71st Anniversary - Setting up a booth for promotion

While providing stable and high-quality water supply services, TWC actively fulfills its corporate social responsibility by supporting local infrastructure development and strengthening partnerships with communities through various initiatives. In 2024, TWC invested NTD78,529,000 in neighborhood support funds, which were allocated to subsidize local construction projects and support activities of public welfare organizations, demonstrating the company's concrete contributions and commitment to regional development.

(1) Subsidies for Local Infrastructure Development

TWC provides construction subsidies based on local water intake conditions and regional development needs to promote balanced regional growth. The main subsidy items in 2024 include:

- Dashu District, Kaohsiung City: Allocated NTD5,000,000 for local water intake infrastructure development. Additionally, due to the Navy transferring the Shikou deep well to the company, an extra NTD5,000,000 was granted, totaling NTD10,000,000 to support local infrastructure development in the district.
- Daliao District, Kaohsiung City: Allocated NTD5,840,000 for local water intake infrastructure, supporting public facility improvements and community development. ◦
- Xinyuan Area, Pingtung County: Allocated NTD30,000,000 for water pipeline facility infrastructure development.
- Nanhua District, Tainan City: Allocated NTD15,000,000 for local water intake infrastructure to meet Nanhua Reservoir water intake demands, promoting industrial development and welfare facilities within the district.
- Qishan District, Kaohsiung City: Allocated NTD678,000 to assist local infrastructure promotion.
- Sanxia District, New Taipei City: Allocated NTD13,000,000 for local water intake infrastructure to support district infrastructure development.

(2) Support for Charitable Organization Activities

In addition to subsidies for local infrastructure projects, TWC also contributed approximately NTD4 million to support the activities of charitable organizations. By supporting various public welfare initiatives, the company promotes social well-being and strengthens its connections and collaborative relationships with local communities.

Through systematic investment in neighborhood engagement and development, TWC not only fulfills its responsibility to give back to water source regions but also actively participates in local development. This helps establish strong partnerships with communities and fosters mutual growth and sustainable development for both the company and society.

Subsidy Item	Amount (NTD1,000)	Description
Local Infrastructure Funding for Nanhua District Office, Tainan City	15,000	Water intake from Nanhua Reservoir to enhance local industrial development and promote welfare infrastructure within the district
Water Pipeline Installation in Xinyuan Area, Pingtung County	30,000	Assist in the construction of water supply facilities and support local development
Infrastructure Development in Water Intake Area, Sanxia District, New Taipei City	13,000	Support the development of basic infrastructure in the district
Infrastructure Development in Water Intake Area, Dashu District, Kaohsiung City	10,000	Includes general water intake subsidies and subsidies for the transfer of naval deep wells
Infrastructure Development in Water Intake Area, Daliao District, Kaohsiung City	5,840	Support improvements to public facilities and community development in the district
Infrastructure Development in Water Intake Area, Qishan District, Kaohsiung City	678	Assist in promoting local infrastructure projects in the district
Shared Funding for Charitable Organization Activities	4,011	Support the implementation of various charitable activities
Total	78,529	-

Special Feature on Social Collaboration and Contribution

NT$1 invested→ NT$5.79 in return

Faced with long-standing water leakage issues in aging highland communities, Taiwan Water Corporation empathized with residents and proactively took responsibility for resolving problems that were originally the users' own to address. Upholding the service philosophy of "people-centered care," the First Management District Office actively promoted public-private partnerships, working closely with government agencies and elected representatives to engage directly with communities and listen to local needs.

From a practical standpoint, based on the cases of Xingfu Huacheng Community in Keelung City and Zhuanguan Taipei Community, the estimated internal return on investment (ROI) for Taiwan Water's upgrades to pressurized water supply facilities was -66.28, indicating that the project would not be financially beneficial from a business perspective. However, in terms of social impact, the company adopted the SROI methodology to assess how the aging highland community improvement project influenced residents' well-being.

As a measurement tool for "policy happiness," the evaluation yielded an SROI of 4.36, meaning that every one dollar invested brings a return of 4.36 dollars in value to Taiwanese society. This demonstrates that the aging highland community improvement project generates positive social benefits and continually reminds us of Taiwan Water Corporation's significant responsibility and sustainable value to Taiwanese society.

Through a comprehensive assessment, we identified that improving the aging water supply system not only ensures stable water access for residents but also reduces leakage, lowers maintenance frequency, and minimizes road excavation that disrupts traffic, thus delivering multifaceted value.

By leveraging a diverse collaboration mechanism—from policy advocacy and technical support to cost-sharing adjustments—Taiwan Water not only provides professional maintenance and replacement services but also employs innovative approaches such as smart management systems and environmental education to strengthen partnerships with communities. When residents of Xingfu Huacheng happily share, "After Taiwan Water's improvements, our water bills dropped significantly, and water supply has become more stable," this genuine feedback fuels Taiwan Water's ongoing commitment to sustainable water supply for Taiwanese society.

External Benefits

- Reduced total shared cost
- Lower public water fee burden
- Increased social engagement
- Enhanced water conservation awareness
- Abnormal water usage notifications
- Infrastructure renewal and local revitalization

From reducing total cost-sharing amounts to replacing outdated infrastructure, from water-saving competitions to abnormal water usage alerts, every service reflects Taiwan Water's commitment to community well-being. The replacement of aging ductile iron pipes combined with 24-hour remote monitoring to enhance supply stability exemplifies best practices in sustainable development.

Taiwan Water takes concrete actions, working hand-in-hand with communities nationwide for a better future. We do not overlook any corner of Taiwan that requires water resources. Through practical engineering planning and a passionate commitment to social responsibility, Taiwan Water provides not only water supply but also spreads care and sustainability values.

Positive Feedback

Xingfu Huacheng Resident

Over the past decades, the most impactful and commendable action by the government has been assisting our community in replacing aging pipelines.

Since TWC took over, our community no longer has to deal with complex water supply issues. We leave the technical matters to the professionals at TWC.

Guo Shucheng, Village Chief

壯觀台北

Zhuanguan Taipei Management Committee

After the improvement project, residents no longer frequently call the committee, village chief, or council members to report water outages.

The aging high-elevation water supply improvement project has been a major blessing for our residents—we no longer suffer from water outages.

Feng Ruizhi, Village Chief

壯觀台北

Zhuanguan Taipei Resident

Due to improvements in water supply, property values in our community have nearly doubled.

TWC's bold decision to implement the aging high-elevation water supply project has been a tremendous help for residents in elevated areas. After completion, the burden on village chiefs has eased significantly, and both residents and management committees rarely call to report leaks or outages. There's no longer a need to rush around delivering water.

Lien Endian, Former Village Chief

06

Appendix

GRI index

GRI Standards	Serial NO.	Disclosures	Corresponding Section	Page	Remarks
GRI 2	2-1	Disclosure 2-1 Organizational details	1.1 Our value and mission	26	
GRI 2	2-2	Entities included in the organization's sustainability reporting	1.1 Our value and mission	26	
GRI 2	2-3	Reporting period, frequency and contact point	0 About the report, Report Publication Date, Contact Information	2	
GRI 2	2-4	Restatements of information	0 Reporting Scope and Calculation Basis	2	
GRI 2	2-5	External assurance	0 External Assurance of the Report	2	
GRI 2	2-6	Activities, value chain and other business relationships	1.1 Our value and mission	26	
GRI 2	2-7	Employees	5.1 Inclusive workplace	160	
GRI 2	2-8	Workers who are not employees	5.1 Inclusive workplace	160	
GRI 2	2-9	Governance structure and composition	2.1 TWC Governance	56	
GRI 2	2-10	Nomination and selection of the highest governance body	2.1 TWC Governance	56	
GRI 2	2-11	Chair of the highest governance body	2.1 TWC Governance	56	
GRI 2	2-12	Role of the highest governance body in overseeing the management of impacts	3.1 TWC Sustainable Development	96	
GRI 2	2-13	Delegation of responsibility for managing impacts	3.1 TWC Sustainable Development	96	
GRI 2	2-14	Role of the highest governance body in sustainability reporting	0 About the report	2	
GRI 2	2-15	Conflicts of interest	2.1 TWC Governance	56	
GRI 2	2-16	Communication of critical concerns	3.1 TWC Sustainable Development	96	
GRI 2	2-17	Collective knowledge of the highest governance body	2.1 TWC Governance	56	
GRI 2	2-18	Evaluation of the performance of the highest governance body	2.1 TWC Governance	56	
GRI 2	2-19	Remuneration policies	2.1 TWC Governance, 5.1 Inclusive workplace	56,160	
GRI 2	2-20	Process to determine remuneration	2.1 TWC Governance, 5.1 Inclusive workplace	56,160	
GRI 2	2-21	Annual total compensation ratio	5.1 Inclusive workplace	160	
GRI 2	2-22	Statement on sustainable development strategy	0 Message from the Chairperson	2	
GRI 2	2-23	Policy commitments	2.3 Risk management, 3.1 TWC Sustainable Development, 5.1 Inclusive workplace	88, 96, 160	
GRI 2	2-24	Embedding policy commitments	2.3 Risk management, 3.1 TWC Sustainable Development	88, 96	
GRI 2	2-25	Processes to remediate negative impacts	2.1 TWC Governance, 5.1 Inclusive workplace	56,160	
GRI 2	2-26	Mechanisms for seeking advice and raising concerns	2.1 TWC Governance	56	
GRI 2	2-27	Compliance with laws and regulations	2.1 TWC Governance	56	
GRI 2	2-28	Membership associations	1.1 Our value and mission	26	
GRI 2	2-29	Approach to stakeholder engagement	0 Stakeholder Engagement	2	
GRI 2	2-30	Collective bargaining agreements	5.1 Inclusive workplace	160	
GRI 3	3-1	Process to determine material topics	0 Materiality Analysis	2	
GRI 3	3-2	List of material topics	0 Materiality Analysis	2	

GRI Standards	Serial NO.	Disclosures	Corresponding Section	Page	Remarks
GRI 3	3-3	Management of material topics: Water Supply Management	1.2 TWC Water Resources Management	33	
GRI 3	3-3	Management of material topics: Drinking Water Quality	1.2 TWC Water Resources Management	33	
GRI 3	3-3	Management of material topics: Distribution Network Efficiency & Network Resiliency & Impacts of Climate Change	1.2 TWC Water Resources Management	33	
GRI 3	3-3	Management of material topics: End-Use Efficeincy	1.2 TWC Water Resources Management	33	
GRI 3	3-3	Management of material topics	1.3 Our operation and service	48	
GRI 3	3-3	Management of material topics	1.3 Our operation and service	48	
GRI 3	3-3	Management of material topics: Corporate Governance	2.1 TWC Governance	56	
GRI 3	3-3	Management of material topics:Anti-corruption	2.1 TWC Governance	56	
GRI 3	3-3	Management of material topics: Operational Performance and Risk Management	2.2 Operation performance and outlook	76	
GRI 3	3-3	Management of material topics: Water Affordability & Access	2.2 Operation performance and outlook	76	
GRI 3	3-3	Management of material topics: Technological and Innovative Development	2.2 Operation performance and outlook	76	
GRI 3	3-3	Management of material topics: Operational Performance and Risk Management	2.3 Risk management	88	
GRI 3	3-3	Management of material topics: Energy Management & Net Zero Emissions	3.2 Net-zero governance and climate risk, 4.1 Energy and GHG emissions	109, 139	
GRI 3	3-3	Management of material topics: Circular Economy and Waste Management	4.2 Waste, and water effluents, and air pollution	147	
GRI 3	3-3	Management of material topics: Effluent Quality Management	4.2 Waste, and water effluents, and air pollution	147	
GRI 3	3-3	Management of material topics: Labor/ Management Relations	5.1 Inclusive workplace	160	
GRI 3	3-3	Management of material topics: Occupational Health and Safety	5.2 Occupational health and safety	180	
GRI 201	201-1	Direct economic value generated and distributed	2.2 Operation performance and outlook	76	
GRI 201	201-2	Financial implications and other risks and opportunities due to climate change	2.2 Operation performance and outlook, 3.2 Net-zero governance and climate risk, 3.3 Nature risk and action	76, 109, 122	
GRI 201	201 -3	Defined benefit plan obligations and other retirement plans	5.1 Inclusive workplace	160	
GRI 201	201-4	Financial assistance received from government	2.2 Operation performance and outlook	76	
GRI 205	205-1	Operations assessed for risks related to corruption	2.1 TWC Governance	56	
GRI 205	205-2	Communication and training about anti-corruption policies and procedures	2.1 TWC Governance	56	
GRI 205	205-3	Confirmed incidents of corruption and actions taken	2.1 TWC Governance	56	
GRI 207	207-1	Approach to tax	2.2 Operation performance and outlook	76	
GRI 207	207-2	Tax governance, control, and risk management	2.2 Operation performance and outlook	76	
GRI 302	302-1	Energy consumption within the organization	4.1 Energy and GHG emissions	139	
GRI 302	302-3	Energy intensity	4.1 Energy and GHG emissions	139	
GRI 302	302-4	Reduction of energy consumption	4.1 Energy and GHG emissions	139	
GRI 302	302-5	Reductions in energy requirements of products and services	4.1 Energy and GHG emissions	139	

GRI Standards	Serial NO.	Disclosures	Corresponding Section	Page	Remarks
GRI 303	303-1	Interactions with water as a shared resource	1.2 TWC Water Resources Management	33	
GRI 303	303-2	Management of water discharge- related impacts	4.2 Waste, and water effluents, and air pollution	147	
GRI 303	303-3	Water withdrawal	1.2 TWC Water Resources Management	33	
GRI 305	305-1	Direct (Scope 1) GHG emissions	4.1 Energy and GHG emis-sions	139	
GRI 305	305-2	Energy indirect (Scope 2) GHG emissions	4.1 Energy and GHG emis-sions	139	
GRI 305	305-4	GHG emissions intensity	4.1 Energy and GHG emis-sions	139	
GRI 305	305-5	Reduction of GHG emissions	4.1 Energy and GHG emis-sions	139	
GRI 305	305-6	Emissions of ozone-depleting substances (ODS)	4.2 Waste, and water effluents, and air pollution	147	
GRI 305	305-7	Nitrogen oxides (NOx), sulfur oxides(SOx), and other significant air emissions	4.2 Waste, and water effluents, and air pollution	147	
GRI 306	306-1	Waste generation and significant waste-related impacts	4.2 Waste, and water effluents, and air pollution	147	
GRI 306	306-2	Management of significant waste- related impacts	4.2 Waste, and water effluents, and air pollution	147	
GRI 306	306-3	Waste generated	4.2 Waste, and water effluents, and air pollution	147	
GRI 306	306-4	Waste diverted from disposal	4.2 Waste, and water effluents, and air pollution	147	
GRI 306	306-5	Waste directed to disposal	4.2 Waste, and water effluents, and air pollution	147	
GRI 401	401-1	New employee hires and employee turnover	5.1 Inclusive workplace	160	
GRI 401	401-2	Benefits provided to full-time employees that are not provided to temporary or part- time employees	5.1 Inclusive workplace	160	
GRI 401	401-3	Parental leave	5.1 Inclusive workplace	160	
GRI 403	403-1	Occupational health and safety management system	5.2 Occupational health and safety	180	
GRI 403	403-2	Hazard identification, risk assessment, and incident investigation	5.2 Occupational health and safety	180	
GRI 403	403-3	Occupational health services	5.2 Occupational health and safety	180	
GRI 403	403-4	Worker participation, consultation, and communication on occupational health and safety	5.2 Occupational health and safety	180	
GRI 403	403-5	Worker training on occupational health and safety	5.2 Occupational health and safety	180	
GRI 403	403-6	Promotion of worker health	5.2 Occupational health and safety	180	
GRI 403	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	5.2 Occupational health and safety	180	
GRI 403	403-8	Workers covered by an occupational health and safety management system	5.2 Occupational health and safety	180	
GRI 403	403-9	Work-related injuries	5.2 Occupational health and safety	180	
GRI 403	403-10	Work-related ill health	5.2 Occupational health and safety	180	
GRI 405	405-1	Diversity of governance bodies and employees	2.1 TWC Governance	56	
GRI 405	405-2	Ratio of basic salary and remuneration of women to men	5.1 Inclusive workplace	160	
GRI 416	416-1	Assessment of the health and safety impacts of product and service categories	1.2 TWC Water Resources Management	33	
GRI 416	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	1.2 TWC Water Resources Management	33	
GRI 418	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	1.3 Our operation and service	48	

SASB index

Topic	Accounting metric	SASB Code	Corresponding Section	Page	Remarks
Activity metrics	(1) residential, (2) commercial, and (3) industrial customers served, by service provided	IF-WU-000.A	1.3 Our operation and service	48	
	Total water sourced, percentage by source type	IF-WU-000.B	1.2 TWC Water Resources Management	33	
	Total water delivered to: (1) residential, (2) commercial, (3) industrial, and (4) all other customers	IF-WU-000.C	1.3 Our operation and service	48	
	Average volume of wastewater treated per day, by (1) sanitary sewer, (2) stormwater, and (3) combined sewer	IF-WU-000.D	4.2 Waste, and water effluents, and air pollution	147	Wastewater treatment is managed by the National Land Management Agency and local governments.
	Length of (1) water mains and (2) sewer pipe	IF-WU-000.E	1.2 TWC Water Resources Management	33	(2) Wastewater treatment is managed by the National Land Management Agency and local governments.
Energy Management	(1) Total energy consumed, (2) percentage grid electricity and (3) percentage renewable	IF-WU-130a.1	4.1 Energy and GHG emissions	139	
Distribution Network Efficiency	Water main replacement rate	IF-WU-140a.1	1.2 TWC Water Resources Management	33	
	Volume of non-revenue real water losses	IF-WU-140a.2	1.2 TWC Water Resources Management	33	
Effluent Quality Management	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations	IF-WU-140b.1	4.2 Waste, and water effluents, and air pollution	147	
	Discussion of strategies to manage effluents of emerging concern	IF-WU-140b.2	4.2 Waste, and water effluents, and air pollution	147	
Water Affordability & Access	Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers	IF-WU-240a.1	2.2 Operation performance and outlook	76	
	(1) Number of residential customer water disconnections for non-payment, (2) percentage reconnected within 30 days	IF-WU-240a.3	2.2 Operation performance and outlook	76	
	Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory	IF-WU-240a.4	2.2 Operation performance and outlook	76	

Topic	Accounting metric	SASB Code	Corresponding Section	Page	Remarks
Drinking Water Quality	Number of incidents of non-compliance associated with drinking water quality standards and regulations	IF-WU-250a.1	1.2 TWC Water Resources Management	33	
	Discussion of strategies to manage drinking water contaminants of emerging concern	IF-WU-250a.2	1.2 TWC Water Resources Management	33	
End-Use Efficiency	Percentage of water utility revenue from rate structures designed to promote conservation and revenue resilience	IF-WU-420a.1	1.2 TWC Water Resources Management	33	TWC does not offer water conservation incentives.
	Customer water savings from efficiency measures, by market	IF-WU-420a.2	1.2 TWC Water Resources Management	33	TWC does not have quantified data on water savings.
Water Supply Resilience	Total water sourced from regions with High or Extremely High Baseline Water Stress; percentage purchased from a third party	IF-WU-440a.1	1.2 TWC Water Resources Management	33	
	Volume of recycled water delivered to customers	IF-WU-440a.2	1.2 TWC Water Resources Management	33	
	Discussion of strategies to manage risks associated with the quality and availability of water resources	IF-WU-440a.3	1.2 TWC Water Resources Management	33	
Network Resiliency & Impacts of Climate Change	Wastewater treatment capacity located in 100-year flood zones	IF-WU-450a.1	—		TWC is not responsible for wastewater treatment or sanitary sewer overflow, which fall under the authority of the National Land Management Agency and local governments, such as the Public Works Department of Taipei City.
	(1) Number and (2) volume of sanitary sewer overflows (SSO) and (3) percentage of volume recovered	IF-WU-450a.2	—		
	(1) Number of unplanned service disruptions and (2) customers affected, each by duration category	IF-WU-450a.3	1.3 Our operation and service	48	
	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure	IF-WU-450a.4	1.2 TWC Water Resources Management	33	

TCFD index

TCFD Framework	Disclosure Item	Corresponding Section	Page	Remarks
Governance	Describe the board's oversight of climate-related risks and opportunities.	3.2 Net-zero governance and climate risk	109	
	Describe management's role in assessing and managing climate-related risks and opportunities.	3.2 Net-zero governance and climate risk	109	
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	3.2 Net-zero governance and climate risk	109	
	Describe the impact of climate-related risks and opportunities on the organization's business, strategy, and financial planning.	3.2 Net-zero governance and climate risk, 2.2 Operation performance and outlook	109	
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios	Under evaluation; not disclosed in this report.		
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	3.2 Net-zero governance and climate risk	109	
	Describe the organization's processes for managing climate-related risks.	3.2 Net-zero governance and climate risk	109	
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	3.2 Net-zero governance and climate risk	109	
Metrics and Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	3.2 Net-zero governance and climate risk	109	
	Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	4.1 Energy and GHG emissions9 (Scope1, 2)	139	
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	3.2 Net-zero governance and climate risk	109	

Assurance certificate

Independent Assurance Statement

Taiwan Water Corporation 2025 Sustainability Report

AFNOR GROUP was established in 1926. We are the National Standardization Body of France, a permanent council member in ISO and one of the leading certification bodies in the world. This assurance work was carried out by AFNOR ASIA LTD., a subsidiary of AFNOR GROUP. All the members of the verification team have professional backgrounds and have accepted AA1000 AS, AFAQ 26000, ISO 9001, ISO 14001, ISO 14064, ISO 45001, ISO 50001, and other sustainability-related international standard trainings. All assigned verifiers have been approved as the lead auditors or verifiers. AFNOR ASIA LTD. (hereinafter referred to as AFNOR ASIA) and Taiwan Water Corporation (hereinafter referred to as TWC) are independent entities. Except for the contents described in this independent assurance statement, AFNOR ASIA LTD. is not involved in the preparation process of the sustainability report of TWC.

RESPONSIBILTIES

TWC is responsible for reporting its economic, environmental, and social operating activities and performance of Taiwan operating locations in sustainability report (hereinafter referred to as "the Report") in accordance with the declared sustainability reporting standards.

AFNOR ASIA is responsible for providing an independent assurance statement to TWC and its stakeholders in accordance with the described scope and method. This statement is for TWC use only and is not responsible for any other purpose.

SCOPE AND CRITERIA

The assurance scope of the agreement between TWC and AFNOR ASIA includes:

1. The scope of assurance operation is consistent with the scope disclosed in the "Taiwan Water Corporation 2025 Sustainability Report".
2. AFNOR ASIA performs assurance operation according to the Type 1 assurance of the AA1000 assurance standard (v3), reviewing and evaluating TWC's compliance with the AA1000 AccountAbility Principles (2018).
3. The assurance operation includes reviewing and evaluating TWC's relevant processes, systems and controls and available performance information, as well as compliance with the following reporting criteria:
   - GRI Standards.

METHODOLOGY

- The Report is reported in accordance with the GRI Standards, and the content of the Report is

reviewed for compliance with the GRI Guidelines for general disclosure and specific topic disclosure.

- The verification team interviewed relevant personnel to confirm the communication and response mechanism for stakeholders and the decision-making process for material topics, but did not directly contact external stakeholders.
- All documents, data and information related to the preparation of the Report were verified by the verification team through interviews with relevant personnel.
- The process of reviewing organizational outputs, collecting and managing qualitative and quantitative data disclosed in reports based on a sampling plan.
- By interviewing the responsible personnel of each group, examining and reviewing the relevant documents, materials and information, the verification team evaluated the reasonableness of the sources of supporting materials and evidence for the contents of the Report.

CONCLUSION

◆ **AA1000 Accountability Principles**

Inclusivity

TWC has communicated with stakeholders through multiple communication channels, listened to and understood their needs and expectations, and used them as an important reference for formulating sustainable strategies and plans. The Report has presented relevant practices on inclusivity.

Materiality

TWC has identified material topics that are critical to its stakeholders and its own operations through a series of processes. The Report fully reflects the organization's emphasis and priority ranking of these material topics.

Responsiveness

TWC has established a systematic stakeholder communication mechanism to respond to stakeholder concerns through multiple channels. It has set management goals and action measures for material topics and demonstrated good responsiveness practices on its official website and in Reports.

Impact

TWC currently faces many internal and external challenges in its business environment. Externally, extreme climate impacts the hydrological and water supply systems, and it is difficult to develop new water sources. Internally, it faces increasing labor demand and faults, aging pipelines

and facilities, and huge improvement costs. To overcome difficulties and consider the continuity of policies, TWC has proposed 18 business strategies and 13 business goals to effectively manage and track the promotion of various work.

◆ **Global Reporting Initiative Sustainability Reporting Standards**

Based on the results of the review, it is confirmed that the general disclosures, specific topic disclosures, and material topics management disclosures in the Report have complied with the requirements of the GRI Standards. In the future, the organization can continue to combine other international reporting requirements to demonstrate its positive actions on sustainable issues in the context of changes in internal and external environments and the expectations of stakeholders.

ASSURANCE OPINION

AFNOR ASIA has developed a complete sustainability reporting assurance standard based on the verification guidelines of the AA1000 Assurance Standard (v3) and the GRI Standards. Based on the sufficient evidence provided by TWC and the facts seen during on-site verification, we adhere to the principle of fairness and issue a statement on the global sustainability reporting standards followed by the organization. In our opinion, the information and data presented in the Report by TWC provides a fair and balanced representation. We believe the focuses on economic, social, and environmental indicators in TWC in 2024 are well represented.

ASSURANCE LEVEL

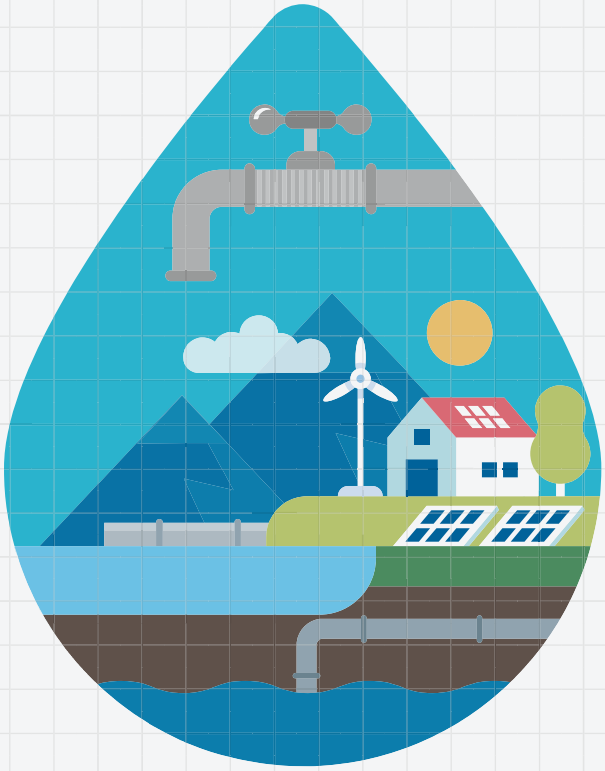
In accordance with the AA1000 Assurance Standard (v3), we verified this assurance statement corresponding to a moderate level. The scope and methods are as described in this statement.

For and on behalf of AFNOR：

AA1000
Licensed Report
000-84/V3-XDEOR

Dr. August Tsai
The Director for Certification and Assessment
Jul.03.2025
Verification team: Chun-Jen Juan (Lead Verifier), Chi Huang Chen (Verifier).

AFNOR Asia Ltd.—20F, No. 102, Chung Ping Rd., Taoyuan, Taiwan
Tel.：+886 3 2208080, Fax：+886 3 2204866
https://international.afnor.com/en/



台灣自來水公司

TAIWAN WATER CORPORATION