

Water Resource Efficiency Management Plan of Chunghwa Telecom Company, Ltd.

2024 Edition

- I. Evaluate water usage to identify ways to enhance efficiency
 - (I) Water Resource Assessment: Chunghwa Telecom Company, Ltd. (hereinafter referred to as "CHT") has developed the EARTH system at all regional locations for centralized water fee collection and management. The system analyzes water usage data and anomalies, and conducts regular reviews of water consumption. CHT has also developed a smart water management system by combining Intelligent Environment Network (iEN) and IoT smart network platform technology. This system automatically sends information from smart water meters and flow devices at each monitoring point back to the platform, effectively monitoring water usage in office areas and building facilities. To effectively manage abnormal water usage, the system offers analysis, reporting, alerts, and incident handling, aiding in the development of overall water management strategies for conservation and carbon reduction.
 - (II) Improving Water Resource Efficiency: CHT's water usage, mainly for data centers, cooling, and office activities, is managed through initiatives aimed at reducing consumption, enhancing wastewater, and recycling water resources.
- II. Actions to reduce water consumption:
 - (I) Spray faucets are installed on washbasins to reduce water flow.
 - (II) Dual-flush systems are added to toilets to minimize water usage.
 - (III) Hot water supply in the office building has designated opening and closing times.
 - (IV) Water usage should adhere to conservation principles and avoid wasting resources.

- (V) Contact maintenance personnel when damage is found in water supply equipment to prevent prolonged water wastage.
 - (VI) Rainwater is used for watering plants to promote eco-friendliness within the Company.
- III. Action to improve wastewater quality: Promote the installation of greywater systems in new buildings. These systems collect and treat domestic wastewater to meet the required water quality standards, allowing the treated water to be reused for non-potable and non-contact purposes within certain limits.
- IV. Set Water Consumption Reduction Goal: With 2020 as the base year, set a management target of reducing water usage by 1% each year.

V. Water resource recycling and reuse

- (I) Data Center Water Recycling: Water consumption for data center air conditioning is expected to increase with business growth. To improve water efficiency, CHT will recycle the cooling tower water and air conditioning condensate, and install a rainwater collection system for irrigation purposes.
- (II) Office Water Recycling: In addition to installing water-saving taps and adjusting toilet flush volumes, the Company has also implemented an underground rainwater collection system for collecting clean rooftop and ground rainwater, and incorporated condensate recovery from air conditioners for reuse in irrigation and cleaning tasks.

VI. Training to enhance employees' awareness of the water resource efficiency management program

CHT has established annual training aligned with ISO 46001:2019 Water Efficiency Management System standards, in order to enhance employee comprehension of water resources. The training is divided into three segments, aiming to encourage staff to integrate course knowledge and corresponding action plans into their daily activities. For details, see Table 1, which also specifies the intended participants for each course:

- (I) Core Team Training: Designed for core personnel, water resource management system promotion and management units, department supervisors, and department management system operators.
- (II) Identifying Related Regulations: Designed for the regulatory identification and registration team, regulatory auditors, and the promotion and management unit for the water resources management system.
- (III) Internal Audit Education and Training: Designed for internal auditors, as well as the promoting and managing units, of the water resource management system.

Table 1. CHT Training Course Content

Core Team Courses	Regulatory Identification and Audit Employee Courses	Internal Audit Personnel
<ul style="list-style-type: none"> • Introduction to ISO 46001:2019 Water Resource Efficiency Management Systems (including high-level framework) • Briefing on Organizational Environment and Leadership • Briefing on water use review • Explanation of the Water Balance Diagram • Identification related regulations 	<ul style="list-style-type: none"> • Introduction to Water Resource Regulations • Exercises on the Identification and Verification of Water Resources Regulations 	<ul style="list-style-type: none"> • Introduction to ISO 46001:2019 Water Resource Efficiency Management Systems (including high-level framework) • System Objectives and Requirements • Briefing on Organizational Environment and Leadership • Briefing on Water Resource Efficiency Management Plan • Support and Operations Overview • Explanation of Performance Evaluation and Consistent Improvement • Audit Planning (Internal Audit Process and Practices) • Audit Rehearsal (Drafting Internal Audit Plan) • Instructions for Drafting the Internal Audit Checklist