



University : National Chin-Yi University of Technology
Country : Taiwan
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[SDG6] Clean Water and Sanitation

[SDG6.2.1] Does your university as a body measure the total volume of water used in the university that is taken from mains supply, desalinated, or extracted from rivers, lakes, or aquifers?

NCUT has implemented an effective water management system in partnership with the Taiwan Water Supply Company (TWC) and adheres to stringent environmental regulations. Here's a summary of NCUT's water supply and management practices:

NCUT's Water Measurement and Monitoring

1. Water Supply Source

- NCUT primarily receives its water from the Taiwan Water Supply Company (TWC), which distributes municipal water nationwide.
- This ensures that all water drawn from the mains supply is accounted for through official metering systems

2. Wastewater Treatment and Recycling

- NCUT operates a sewage treatment facility that collects wastewater from the entire campus, including laboratories.
- The system applies physical, chemical, and biological treatment before discharge, with flow meters installed to measure both inflow and outflow volumes.
- About 40% of treated wastewater ("middle water") is recycled for irrigation and replenishing Mingxiu Lake, while the remainder is discharged safely under EPA supervision

3. Monitoring and Compliance

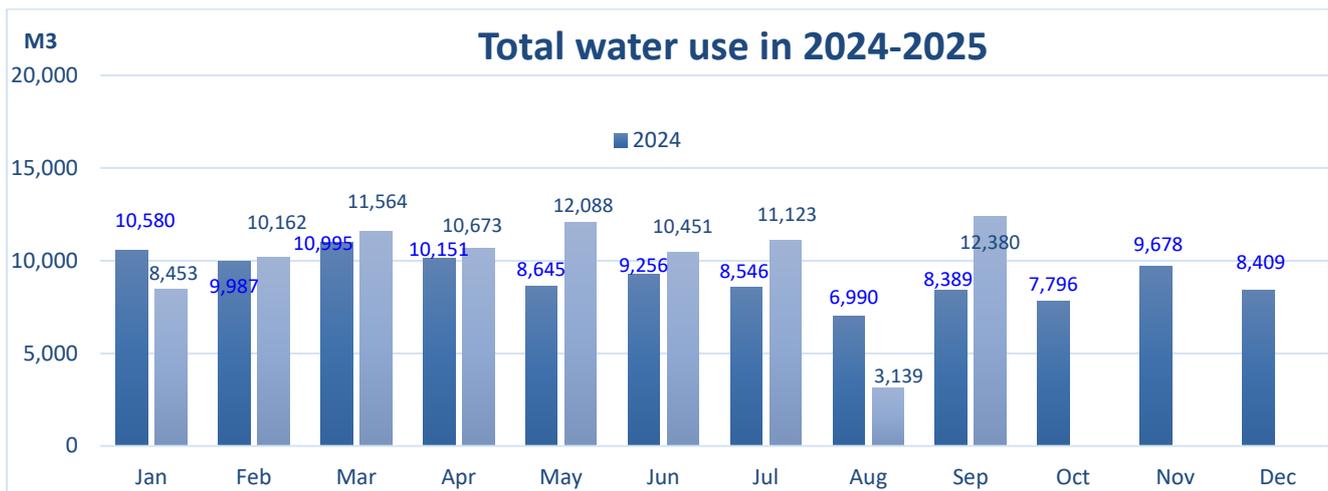
- NCUT's sewage treatment plant holds a government-issued emission permit, and the university reports water quality and quantity data to Taiwan's Environmental Protection Administration (EPA) on a regular basis.
- Digital monitoring in the central control room includes equipment such as sludge dewatering machines, microfiltration systems, UV sterilization, and discharge water flow meters, ensuring accurate tracking of water use and reuse

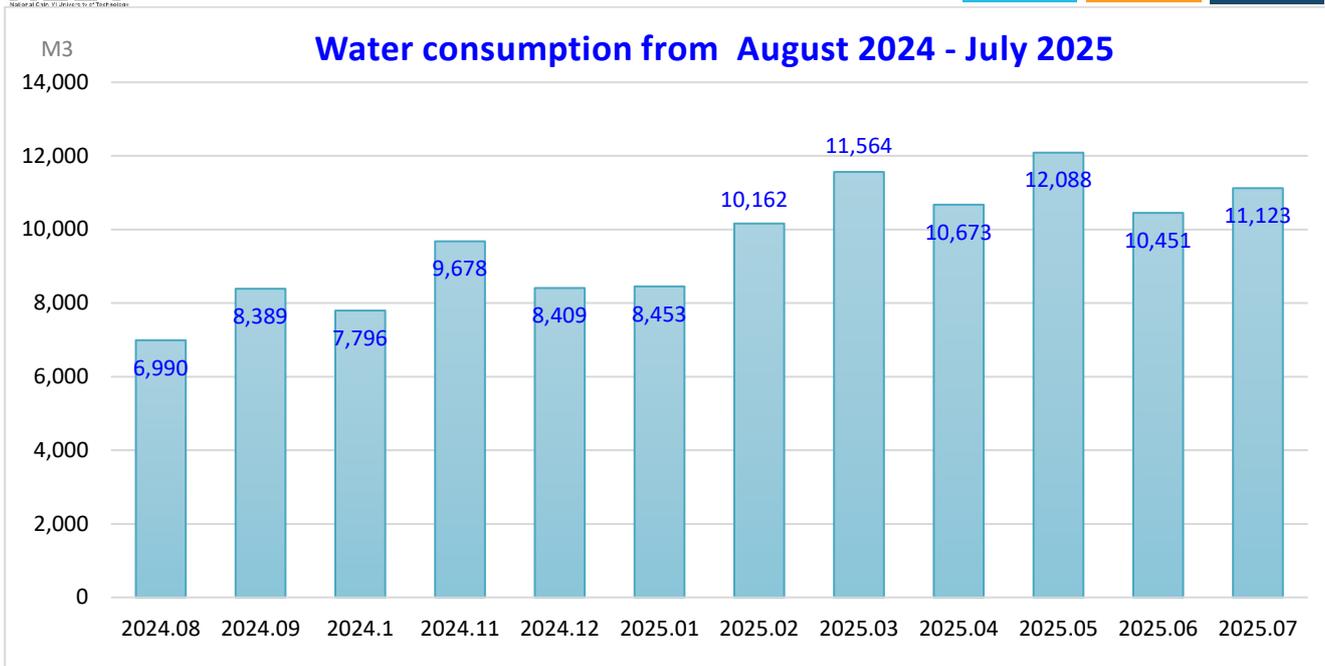
4. 4. Scope of Measurement

- **Mains Supply:** Yes – metered via TWC and building-level monitoring.
- **Recycled Water:** Yes – measured through treatment plant flow meters.
- **Desalinated Water:** No – NCUT does not use desalination.
- **Surface or Groundwater Extraction (rivers, lakes, aquifers):** No – NCUT does not extract from these sources directly; Mingxiu Lake is replenished with recycled and rainwater, not extracted natural sources.

Contribution to SDGs

- **SDG 6 – Clean Water and Sanitation:** Monitoring ensures sustainable water management.
- **SDG 9 – Industry, Innovation, and Infrastructure:** Use of smart monitoring and advanced treatment technology.
- **SDG 13 – Climate Action:** Recycling 40% of wastewater reduces strain on Taiwan’s limited freshwater resources





The raging extreme weather has led to frequent global disasters. In the past three decades, countries have actively addressing climate change, with achieving net-zero emissions emerging as a key issue. Many countries are setting carbon reduction pathways and developing new technology. Taiwan also announced its target of net-zero carbon emission by 2050.



經濟部水利署

Earth day

有水萬事足

涓滴必較
省水有效！

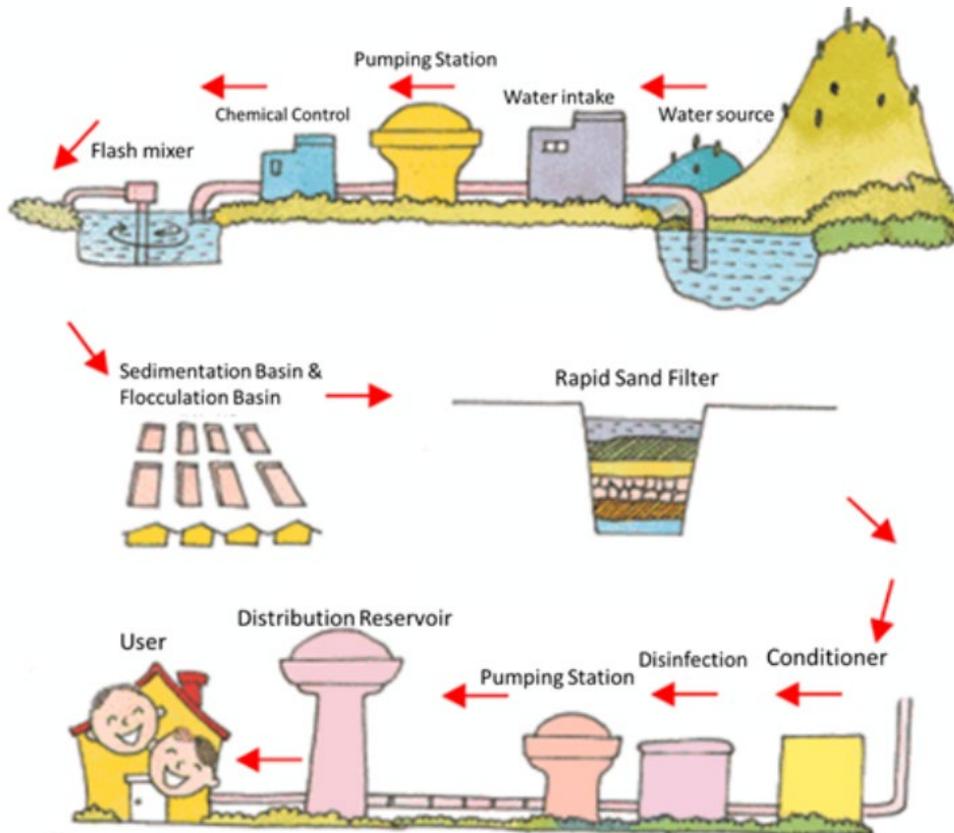


Earth dying

沒水萬般苦

水源稀少
浪費不好！

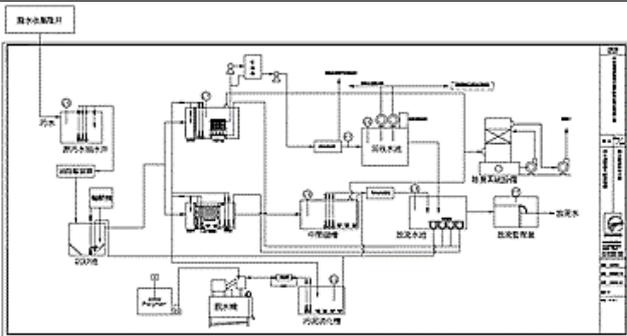






Taiwan faces the twin challenges of intensifying climate change and a mountainous topography which makes it difficult to retain rainwater. To improve the nation's water security, the government has promoted a range of water resource-related policies, implemented strict water management and initiated a water environment infrastructure project under the auspices of the Forward-looking

Infrastructure Development Program. Furthermore, in August 2021 a national water resources management master plan was approved to serve as a blueprint for future infrastructure construction and the management of the nation's water supply, incorporating a number of strategies for water management, water resource development, water conservation measures, water allocation adjustment, and the creation of auxiliary networks. The master plan centers around the promotion of three major initiatives that will from fountain to faucet bolster the water supply capabilities of each region, increase water reuse and recycling, and strengthen the management and resilience of the nation's water supply.

PH adjustment slot	Sewage plant treatment flow chart
	
Trash rack	Sludge dewatering machine



Original sewage well



Microfiltration system



UV sterilization system



Reclaimed water system



Central control room



Discharge water flow meter



Procedures for Applying Water Supply and External Lines Subsidy

The applicant goes to the Taiwan Water Corporation(TWC) to submit and prepay

construction fee

Select construction fee payment method

Application for water subsidy (Beforehand)

Application for water subsidy (Afterwards)

Pay construction fee

TWC processes construction and installation of water meters

Apply for subsidies from local government

Qualification review and budget approval

Qualification review and budget approval

Subsidized official documents issuing

Subsidies disbursement

Go to the TWC to pay the project payment (subsidized official documents and self-payment)

TWC processes construction and installation of water meters

You should prepare an application for water documents

1. Water equipment construction application
2. Applicant's identity card photocopy and signature
3. Application for installation of building water equipment inside pipeline diagram
4. Water pipe contractors join the water pipe association membership certificate
5. Application for water certificate : building license, house ownership, other supporting documents
6. Others : If the user's external pipeline passes through the land, houses, and other people's water pipes, the applicant shall obtain the consent of the owner or management in advance, and affidavit.
(Applying for tap water can be handled by a qualified plumber)

You should prepare the application documents

1. Application for external assistance for tap water user equipment
2. Applicant or representative proof of identity photocopy
3. Building related documents or other relevant supporting documents
4. (1) Water subsidy(beforehand) :
The subsidy of the water supply business, the water supply business payment notice
(2) Water subsidy(afterwards) :
Water supply business user newly established water supply device and proof of payment
5. Others : account information, low-income household documents, agent's power of attorney, etc.
(Please apply to the local government)