



University : National Chin-Yi University of Technology
Country : Taiwan
Web Address : www.ncut.edu.tw



[SDG6] Clean Water and Sanitation

[SDG6.4.1] Does your university as a body have a policy to maximise water reuse across the university?

NCUT is committed to sustainable water resource management through a comprehensive Water Reuse Program. This program integrates environmental policy, real-time monitoring, rainwater harvesting, and advanced wastewater treatment to significantly reduce reliance on external water sources and promote a circular water system on campus.

Key Components of the Program:

1. Environmental Protection Policies and Goals

- NCUT's Environmental Policy focuses on:
 - Compliance with environmental laws and regulations
 - Pollution prevention
 - Recycling and continuous improvement
- The university conducts regular inspections, implements pollution control measures, and promotes environmental education to cultivate a culture of water conservation and eco-responsibility among all staff and students.

2. Water Resource Management

- **Smart Monitoring:**
 - A digital water meter is installed at the main water inlet, connected to the school's energy management system.
 - Water usage is monitored in real-time, enabling early detection of anomalies and immediate emergency response.
- **Water-Saving Infrastructure:**
 - All campus faucets, toilets, and urinals have been upgraded to water-saving devices, effectively reducing unnecessary water consumption.

3. Rainwater Recycling and Reuse

- Rainwater harvesting systems are installed in the Library, Chin-Yi Dormitory, and the Machine Tool Building.
- Collected rainwater is reused for:
 - Toilet flushing
 - Irrigation of surrounding vegetation

4. Wastewater Treatment, Recycling, and Reuse



- NCUT operates a sewage treatment plant that collects wastewater from all campus areas, including laboratories.
- The treatment process includes biological purification, ensuring effluent meets national discharge standards.
- 40% of treated water is recycled for:
 - Irrigating campus greenery
 - Refilling Mingxiu Lake, an ecological feature of the university
- Biannual water quality testing ensures all recycled water meets safety and environmental requirements.

Outcomes and Impact:

- Achieved a 40% internal water reuse rate.
- Reduced total freshwater consumption and wastewater discharge volume.
- Strengthened emergency responsiveness through real-time digital monitoring.
- Enhanced environmental awareness through visible campus-wide water-saving practices.

Contribution to the Sustainable Development Goals (SDGs):

SDG	Contribution
SDG 6 – Clean Water and Sanitation	Implements efficient water management and promotes rainwater and wastewater reuse
SDG 9 – Industry, Innovation, and Infrastructure	Integrates smart water meters and digital control systems
SDG 11 – Sustainable Cities and Communities	Builds a green campus through ecological water reuse and infrastructure
SDG 13 – Climate Action	Reduces emissions and resource strain by minimizing freshwater dependence

Evidence Links:

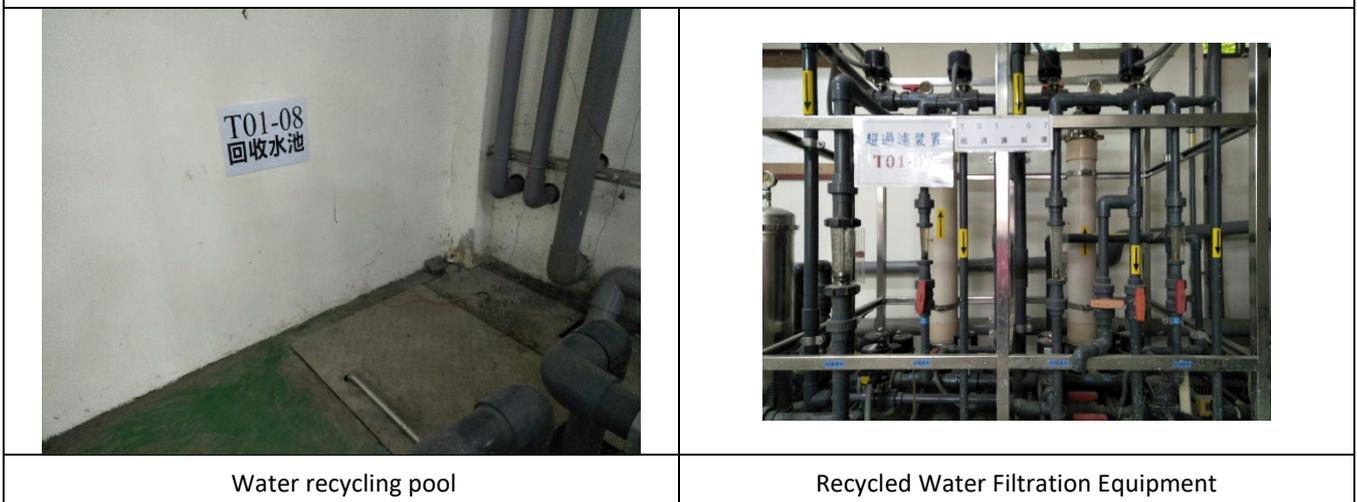
- NCUT Environmental Protection Center [環境保護及安全衛生中心](#)
- [勤益永續](#)
- Water reuse logs, maintenance records, and sewage treatment compliance reports available upon request



Put up water saving posters to remind teachers and students to save water

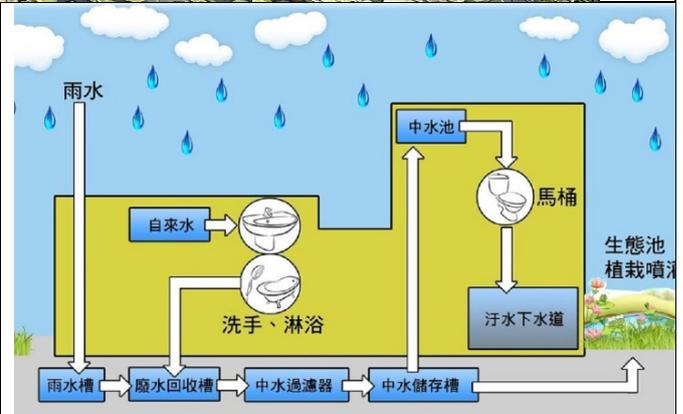


Guoxiu Teaching Building Rainwater Recovery System, NCUT



Water recycling pool

Recycled Water Filtration Equipment



Sewage treatment plant recycles reclaimed water