

SDG.6.3.1、6.3.2、6.4.1、6.4.2

1. The University has established a wastewater treatment plant and, in accordance with the Water Pollution Control Act, has submitted its Water Pollution Control Measures Plan for record to the Environmental Protection Bureau of Kaohsiung City Government.
2. In addition to conventional secondary biological treatment, the University's wastewater treatment plant incorporates tertiary treatment processes including screening, filtration, and ozone disinfection. The effluent quality meets regulatory standards and is primarily discharged into the campus reclaimed water system for lawn irrigation and ecological waterway replenishment. When excess discharge occurs, it is released into the First Drainage Channel of Qiaotou on the north side of the campus, which eventually flows into the Dianbao River.
3. Since its establishment, the University has set the goal of becoming a Green University, committed to pursuing sustainable development. All wastewater generated on campus is collected through a pipeline system and treated at the wastewater treatment plant. More than 80% of the treated water is directed into the reclaimed water system, primarily used for landscape irrigation and serving as the main replenishment source for the campus ecological waterways. The wastewater treatment plant records daily influent volume, effluent volume, and reclaimed water volume. In 2025, the reclaimed water recovery rate reached 92.52%.
4. For related outcomes, please refer to the Sustainability Report website:https://ces.nuk.edu.tw/var/file/11/1011/img/2025_SustainabilityReportEN.pdf. The summary is as attached.

Attachment 1



- A. provisions of the contracted project, they must abide by the government's occupational safety and health, environmental protection, and fire protection laws and other relevant laws and regulations.
- B. The school also requires the contractor to designate the person in charge of the contracted project in the design phase and before the construction of each project phase for the public construction project in the school, and to act as command, supervision and coordination work. According to its design planning, construction method or operation type, reports on hazard identification, risk assessment, and control measures taken based on the assessment results are submitted, and the formal construction can be carried out after the school's contracting unit has reviewed and confirmed it. In 2024, there was no occupational accident in the contracting of on-campus projects.

5.1.2 Green Smart Campus and Buildings

Every new school building has been awarded the Green Building Label since 2012, and the Student Activity Center in 2022 has been awarded the Smart Building Label in addition to the Green Building Label.

▼ List of green buildings

Building	Date	Award
College of Humanities and Social Sciences Building	Oct, 2012	9 indicators of Gold Label Green Building
	2013	Participated in the Kaohsiung Green Building Award and won Public Building Award and Rainwater Storage Facilities and Reuse Award
Administration Building	Sept. 2014	9 indicators of Bronze Label Green Building
Second Student Dormitory	April 2016	Qualified Green Building Label for Dormitory
Student Activity Center	July 2022	Basic Type of Qualified Green Building Label
	Dec. 2022	Smart Building Label

5.1.3 Water Resource Management

Water Resource Management Policy

The University's water resource management policy is based on the core principle of circular reuse. Through equipment improvements, reclaimed water utilization, and the establishment of smart monitoring systems, the University aims to reduce its operational dependence on natural water resources.

The University's water is mainly supplied by Taiwan Water Corporation's Seventh

Branch Office, with the primary water source originating from the Gaoping River Basin. The campus does not directly extract groundwater or natural surface water; therefore, its operations do not impose significant water withdrawal pressure on local water resources.

Since 2010, in alignment with the government's "Four-Savings Project for Government Agencies and Schools," the University has gradually established a water conservation management system. Although the project ended in 2015, the University has continued to implement campus water-saving measures. It manages and reviews water use based on the principle of reducing annual water consumption by 2% compared with the previous year, while improving water management efficiency through equipment upgrades and smart monitoring.

Water resource management is coordinated by the Office of General Affairs. Through regular water-use monitoring, equipment inspections, and campus-wide water conservation awareness campaigns, the University continues to promote sustainable campus water resource management.

Water Use and Water Supply Sources

The University's daily operational water use mainly includes teaching and research activities, domestic water use in student dormitories, campus cleaning and irrigation, and maintenance of landscape water bodies. The main water source is the public tap water system, and the campus does not directly extract groundwater or surface water.

Through reclaimed water and rainwater harvesting systems, the University is gradually increasing the proportion of alternative water sources to reduce tap water consumption.

To effectively monitor overall campus water use, the University regularly compiles annual total water consumption and water use by major buildings. It also continues to reduce water-use intensity through water-saving measures and equipment upgrades.

In recent years, due to the impacts of climate change, longer periods of high temperatures in summer have slightly increased the demand for campus irrigation and domestic water use. In the future, the University will continue to reduce pressure on water resources through smart water management and expanded reclaimed water utilization.

Water Recycling and Reuse Measures

- 1. Reclaimed Water System:** The effluent from the University's wastewater treatment plant complies with environmental discharge standards. Except during



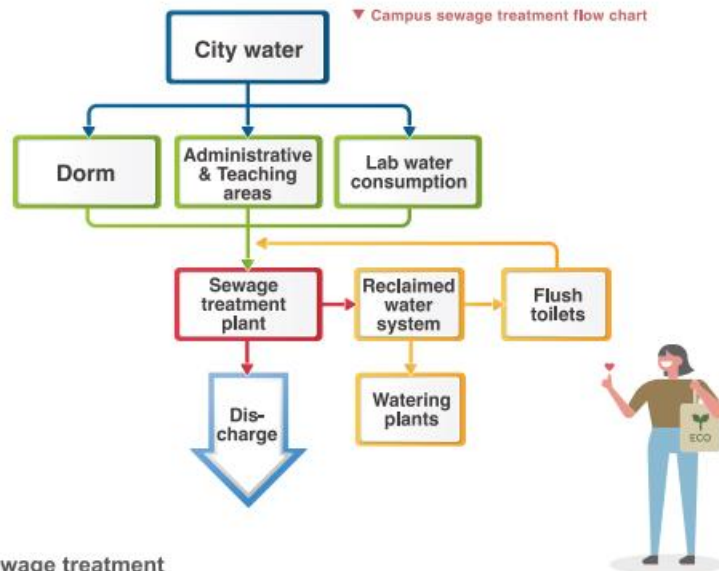
Discharge divided by end point

▼ Chart of Water Consumption

Water withdrawal (Divided by source)		Discharge (Divided by end point)	
Surface water + ground water + sea water	0	Surface water + ground water + sea water	0
Produced water (total)	0	Third-party water used by other organization	0
Third-party water (total)	176,466	Third-party water (total)	13,207
Total water withdrawal	176,466 ⁽¹⁾	Total discharge	13,207
Total water consumption ⁽²⁾		163,259	

*1: All fresh water (≤1,000mg/Total dissolved solids)

*2: Total water consumption=total water withdrawal- total discharge



Sewage treatment

NUK sewage sources include laboratory washing waste, dormitory and office sewage, which are collected through pipelines and sent to the sewage treatment plant for treatment. The reclaimed water is mainly used as supplementary water for grass sprinkler and ecological waterways. When there is excessive displaced water, it will be discharged to the drain on the north side of the campus and

eventually into the Dian-bao River. The low removal rate in 2024 was due to the low influent concentration at the time of sampling, and the effluent concentration met the effluent standard.



▼ List of removal rates of sewage treatment plant 2025

Water quality standard	Removal rate
BOD	80%
COD	41%
SS	69%
Escherichia coli	99%

▼ Discharge water quality test data and discharge water volume

Test Item	2023	2024	2025	Discharge standard
BOD(mg/l)	12.4	7.5	7.2	30
COD(mg/l)	48.7	29.5	32.1	100
SS(mg/l)	6.7	8.5	8	30
Escherichia coli(CFU/100mL)	58,250	164,000	39,425	-
Grease(mg/l)	0.85	0.5	1.1	10
Water temperature(°C)	26.6	27.2	27.5	35
PH	7.7	7.6	7.7	6-9
Discharge volume(CMD)	22,100	14,959	14,097	-

Drinking water

NKU has a total of 135 drinking fountains, and outsources regular monthly maintenance and regular replacement of filter materials, tank cleaning and disinfection. In accordance with the current drinking water laws and regulations, at least 1/8 of drinking fountains are inspected quarterly, i.e., 17 units, but the actual number inspected is 18 units. Water quality testing is based on the principle of sampling at least two drinking fountains in each building and once a quarter.

▼ Drinking Fountain Test Results

Test Item	2023	2024	2025	Standard
Escherichia coliCFU/100mL	<1	<1	<1	6