
KEY SUSTAINABILITY
SUSTAINABLE DEVELOPMENT GOALS
01 No Poverty
02 Zero Hunger
03 Good Health & Well Being
04 Quality Education
05 Gender Equality
06 Clean Water & Sanitation
07 Clean Energy
08 Economic Growth
09 Industry, Innovation, Infrastructure
10 Reduced Inequalities
11 Sustainable Cities
12 Respon-sible Consum-ption
13 Climate Action
14 Life Below Water
15 Life on Land
16 Peace, Justice, & strong Institution
17 Partnership for the Goal


6
CLEAN WATER AND SANITATION

6.2.1 SPIHER systematically measures the total volume of water consumed from all sources

SPIHER is committed to sustainable resource management, and a key part of this commitment is the systematic measurement and monitoring of total water consumption across the campus. The institution maintains a structured process to track all sources of water used for academic buildings, hostels, laboratories, gardens, and other facilities.

Integrated Water Management System

Water is one of the major source of living. Per captia water consumption in the building is calculated as per the water management plan (litres / person/ day). To reduce the demand of water consumption rain water harvesting unit is implemented and practiced.

Water consumption on a per-capita basis

S. No.	Types of consumption	Normal range (L/capita/day)	Average
1.	Per capita domestic consumption at hostel and canteen	93-126	114
2.	Industrial and commercial demand at laboratories	124 - 255	189
3.	Public uses including fire demand, transport washes	2378-3345	2620
4.	Losses and waste as routine consumption	37-53	37
5.	Daily use (day-to-day use)	64	28

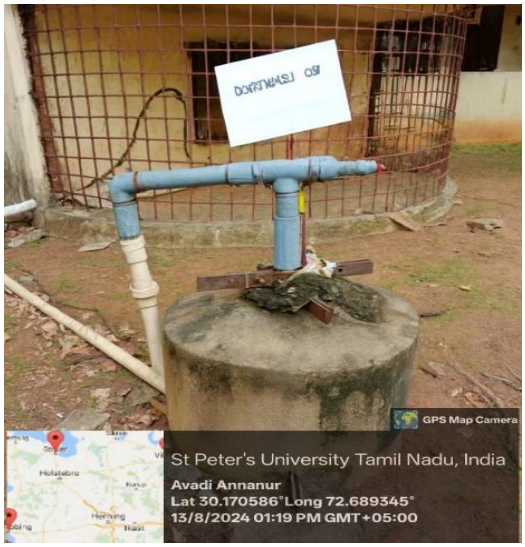
Water consumption rate

Since several variables are influenced water consumption by various stakeholders of an organization; it is hard enough to precisely assess the water quantity demanded by the public. Water is an immense requirement of any living organism. Though it is a natural resource, we are exploiting water for various purposes in day-to-day activities. As an educational institution, water requirement for various activities may differ. Per capita Domestic Consumption in Hostels combined with Canteen ranges 52 between 90 - 125 litres. Industrial or laboratory demand for water is estimated ranges between 100 - 300 litres. Losses as leakages and routine

consumption accounts approximately 30 - 50 litres (per capita) and other uses daily usage uses accounts another 50 litres.

SPIHER record the total volume of water drawn from the **municipal mains supply**, ensuring that our usage aligns with local regulations and supply norms. In addition to this, the university monitors water extracted from **groundwater sources**, such as borewells and aquifers, through calibrated digital meters installed at extraction points. These readings help us understand seasonal variations and manage groundwater responsibly.

Where treated or purified water is used whether through **reverse osmosis (RO) plants**, **desalination units**, or other **on-campus treatment systems** the institution also tracks the volume of water processed and supplied for drinking and laboratory purposes. This ensures that both raw and treated water usage are accounted for accurately.



A water pipeline setup at SPIHER

RO water system providing clean and safe drinking water for students, using water sourced from nearby lakes and rivers.

All consumption data is documented on a regular basis by the Engineering or Maintenance Department and compiled into monthly and annual reports. These reports are reviewed by the **Campus Sustainability Committee** and the **Annaul Environmental Audit Team** to identify trends, inefficiencies, or areas where conservation strategies can be improved. This may include detecting leakages, optimizing irrigation schedules, upgrading plumbing fixtures, or promoting water-saving practices among students and staff.

Environment Solutions

[ISO QMS (9001:2015) & EMS (14001:2015) Certified and Ministry of MSME Registered Organization]

No.5, P.V. Rajamannar Salai, Vijayaragavapuram West,
Chennai – 600 093, Tamil Nadu, India.
Email: environsoln@gmail.com, Mobile: 9042972540

"Best Green & Clean Campus Award"

This is to certify that St. Peter's Institute of Higher Education and Research, Avadi, Chennai - 600 054, Tamil Nadu, India been honoured with "Best Green & Clean Campus Award" for maintaining the eco-friendly campus as per the "National Building Code and Central / State Pollution Control Board" guidelines. To ensure that the environmental management system, maintenance of ecofriendly campus which lead environment clean and neat, green initiatives, social responsibility, institutional values, youth leadership quality, waste management practices, landscape management design and carbon footprint observations implemented effectively for the benefit of the stakeholders by the organization.

Date of Validity: 08.09.2027

Dr. M.R. Chandra Mohan
CHIEF EXECUTIVE OFFICER

Dr. B. Mythili Gnanamangai
CERTIFIED AUDITOR IGBC & ASSOCHAM

Er. D. Dinesh Kumar
BEE CERTIFIED ENERGYAUDITOR

NATURE SCIENCE FOUNDATION

[A Unique Research and Development Centre for Society Improvement]
An ISO/IEC 17020:2012 Accredited Type 'A' Inspection Body [Reg. No. IB 121]
by National Accreditation Board for Certification Bodies (NABCB),
QCI, An Autonomous body under Ministry of Commerce & Industry, India.

NSF Regd. No. 114/2017

Inspection Certificate

This is to certify that St. Peter's Institute of Higher Education and Research, Avadi, Chennai – 600 054, Tamil Nadu, India has implemented ecofriendly sustainability practices in line with National Building Code of India, Part 11 (Approach to Sustainability) which covers the following areas,

1. Green Audit
2. Environment Audit
3. Energy Audit
4. Waste Management Audit
5. Soil and Water Audit
6. Air Quality Audit
7. Hygiene Audit

NABCB IB 121

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Checklist No: NS/PR/F/7.1.7

Dr. D. Vinoth Kumar
Director (Audits)

SALAYARAJ RAJALAKSHMI

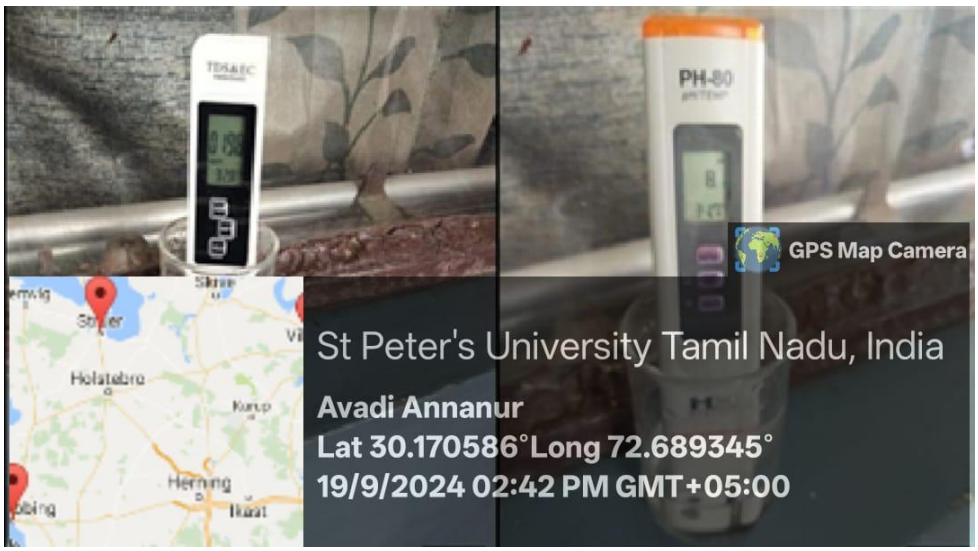
Dr. S. Rajalakshmi
Chairman

No. 2669, LIG-II, Gandhi Managar, Peelamedu, Coimbatore - 641 004, Tamil Nadu, India.
Phone: 0422 4917999; Mobile: 95667 77255; 95667 77258
Email: director@nsfonline.org.in, Website: www.nsfonline.org.in

Note: Organization management is responsible for the validated not meeting the requirements during the Inspection Process.

Physico-chemical properties of various water sources

S.No.	Water source	pH	TDS (mg/L)	Salinity (mg/L)	Turbidity (NTU)	Dissolved Oxygen (mg/L)
1.	RO water	7.8	178	312	4.4	6.3
2.	Tap water	6.6	1197	314	4.8	6.7
3.	Well water	6.8	1168	313	4.4	6.3
4.	Waste water	7.9	270	333	5.1	8.5
5.	Treated water	8.1	390	537	5.1	8.4
Mean		4.14%	356.07%	201.04%	2.66%	4.03%
SEC ±		0.13	28.87	2.55	0.13	0.12
CD at P = 0.05:		0.23	51.44	4.55	0.23	0.21



Salinity and pH levels being checked to ensure the water quality meets safe drinking standards.

By maintaining transparent measurement practices and employing highly accurate monitoring tools, the university ensures that every aspect of its water usage is carefully tracked and responsibly managed. This commitment not only promotes greater efficiency and reduces unnecessary waste but also supports environmentally responsible operations across campus. In doing so, the university consistently aligns its water management strategies with national standards and guidelines for sustainability, reinforcing its dedication to long-term ecological stewardship and resource conservation.

Conclusion

In conclusion, SPIHER's comprehensive approach to monitoring water consumption reflects its strong commitment to sustainable resource management. By carefully tracking municipal, groundwater, and treated water usage across the campus, the institution ensures responsible consumption, regulatory compliance, and long-term conservation of essential water resources. This systematic monitoring not only supports informed decision-making but also reinforces SPIHER's dedication to creating an environmentally conscious and sustainable campus for future generations.