



# ENVIRONMENTAL AUDIT REPORT



## **Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT Jaipur)**

Ram Nagariya Rd, Shivam Nagar, Jagatpura, Jaipur, Rajasthan 302017



GSTIN : 08AAJFD9550B1ZH

# Design2Occupancy Services LLP

D2O/EA/18092021

Letter of Certification

Date: 18/09/2021

To,  
The Director,  
Swami Keshavanand Institute of Technology, Management & Gramothan  
Ram Nagariya Rd, Shivam Nagar,  
Jagatpura,  
Jaipur, Rajasthan 302017

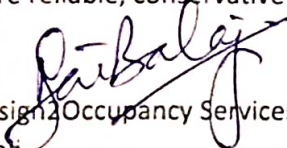
This letter is to certify that Swami Keshavanand Institute of Technology, Management & Gramothan has undergone Energy Audit, Green Audit and Environment Audit.

The audits have been performed by Design2Occupancy Services LLP, which is primarily a consulting firm which deals in Green energy, Energy Audits, Green Building Consultancy etc. We help clients in saving energy, operational costs while creating a sustainable environment.

Design2Occupancy Services LLP bears some of the most valued credentials in the industry such as LEED AP, IGBC AP, GRIHA trainer & evaluator, PQP Professional, ICP, and Certified Energy Auditors etc. and hold valuable experience in various areas like Green building facilitation, Energy Simulation and Analysis, Thermal & daylight modelling, CFD simulation, renewables, sustainability reporting, IAQ consulting, Energy audits & commissioning and several others. Our team's competence is our strength and our projects showcase our commitment towards a greener future.

This assignment is taken up for Swami Keshavanand Institute of Technology, Management & Gramothan, an environmentally responsible educational institution based out of Jaipur (Rajasthan) and embarking into this journey of sustainability. Therefore, we have independently conducted this entire assessment through step by step procedure prescribed for such practices. We have deployed our technical team to gather information and report the institution's effort towards sustainability in comprehensive manner.

We hereby submit these reports dated 18<sup>th</sup> September 2021. All assessments, results and reported facts are reliable, conservative and verifiable in all aspects.

  
for, Design2Occupancy Services LLP  
Sai Balaji,  
LEED AP and GEM Certified Professional  
(Senior Counsellor)

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## Executive Summary

The Swami Keshvanand Institute of Technology, Management & Gramothan acknowledges the importance of Energy as an essential resource for successfully meeting its operational objectives. The Institute also realizes the need to use this resource in a responsible manner that is sustainable and complementary to its Environmental Management Policy.

This document explores how the Institute uses Energy, outlines its approach to managing Energy use and sets targets for Carbon footprint reduction. This strategy is intended to sit alongside the other strategies which together make up the Institute's overall sustainability strategy

The Swami Keshvanand Institute of Technology, Management & Gramothan, Jaipur (SKIT) is committed to improving sustainability. SKIT strives to sustain its local and global environment, organizational health and ability to create a positive, viable future. SKIT endeavors to include environmental sustainability principles and targets in all aspects of its decision-making. Through its research, teaching and learning, operations and community engagement, SKIT aims to:

Minimize the environmental impact of its operations and move towards restoring environmental integrity

- Promote social justice, equity and diversity
- contribute to human health and well-being
- Maintain its financial viability.

As part of its commitment to sustainability, SKIT developed a Sustainability Strategy. SKIT is now developing a series of Sustainability Action Plans on energy and greenhouse, water, transport and waste to support implementation of the Policy and Strategy. This document deals with Environmental Audit of SKIT.



## About the Institute

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) inspired from the leanings of Swami Keshvanand, was established in the year 2000 by Technocrats and Managers Society for Advanced Learning. In order to carry the same, they leaped forward to establish MRM Public School in Nirwana village of Sri Ganganagar district of Rajasthan in the year 1992. Pursuing the vision of the Great Saint Swami Keshavanand, who devoted his life for the cause of education and the uplift of the rural folk, the promoters added "Gramothan" to the name of the institute not only to epitomize his vision but also to extend their efforts to explore the use of engineering education for innovations for improving the scenario for the rural community. Today the institute is recognized as one of the centers of academic excellence in Northern India.

The Institute is affiliated to Rajasthan Technical Institute, Kota for offering Postgraduate and Graduate Courses in Engineering and Management. Located in the Pink City Jaipur, which is a blend of traditional history and modern outlook, SKIT is putting in efforts for making industry ready engineers and managers through effective Industry –Institute Interface. Apart from Institute curriculum SKIT also pursues activities for research and development in various fields.

The green landscaping, aesthetic elegance of arches and the vibrant pursuit of knowledge by the young aspirants make the environment serene, pleasant and dynamic.

Students joining the institute share the box full of opportunities for professional and personal development through an environment of practical orientation, industrial interaction and student led activities which help the students to develop good communication skills, integrated personality and greater competitive spirit.

## Objectives of the Study

The main objective of the green analysis is to promote the Environment Management and Conservation in the Institute Campus. The purpose of the analysis is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Green Analysis are:

1. To introduce and aware students to real concerns of environment and its Sustainability.
2. To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.
3. To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requiring high cost.
4. To bring out a status report on environmental compliance.

## Audit Inclusions

- Water Audit and Conservation
- Waste Audit and Remediation

# Water Audit and Conservation

## Definition

Water auditing is a method of quantifying water flows and quality in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use. It provides the deviation existing in the actual water supply to the minimum required water in the respective premises. Also, water auditing is a mechanism for conserving water, which will grow in significance in the future as demand for water increases.

## Objective of the Audit

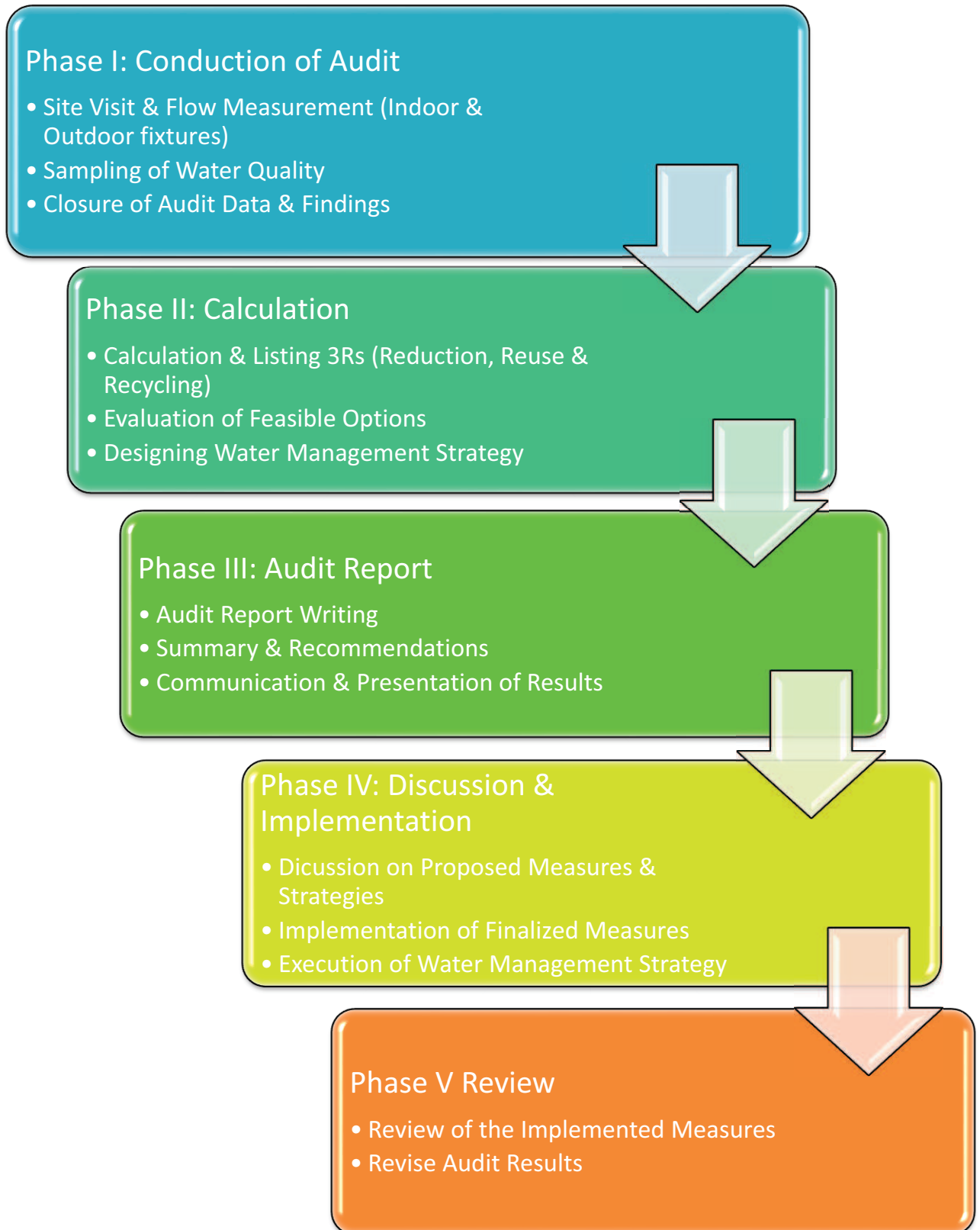
The objective of water audit is to assess the following:

1. Water Required (in accordance with National and/or State Bye Laws)
2. Water Used (as per the Existing Fixtures & Equipment)
3. Physical & Non-physical Losses
4. To identify and priorities areas which need immediate attention for control

## Procedure

The different stages of the water audit have been depicted in form of below flow chart. The whole procedure is divided into five phase starting from the site inspection to review of the implemented measures.



*Audit Procedure*

## Phase I: Conduction of Audit

At the beginning of water audit, it is must to observe the supply, storing & consuming facilities are provided on the site. The water audit team commits to:

- Conduct site visit to locate the water points & Map them
- Locate the water usage areas
- Take samples at various location to define water quality
- Mark storage tanks
- Compile the findings during visit
- Notice conditions of fixtures (dirty, stuck, leaking etc.)

## Phase II: Calculation

After completion of site visit, the audit team performed calculation to analyze the acquired data with reference to local bye laws (in India: NBC 2016) as base line. This enables to determine whether the premise is consuming surplus water or not. The results will help to calculate the amount of water wasted or misused. Following goals are kept in mind during the calculation;

- a) Estimating water use from different areas and activities of a building.
- b) Estimate rate of flow of water from different outlets and inlets.
- c) Determine the rate of flow of water for faucets and shower head.
- d) Estimating shortage or surplus with reference to NBC 2016.

Based on the calculation, the water management strategies have to be define and implement in the respective premises.

## Phase III: Audit Report

The team prepares detailed report based on procedure mentioned above. The audit report consists:

- Observations done during audit
- All the measurements, calculations
- Overview of the current working of water supply system
- Summary and conclusions based on the calculations

## Phase IV: Discussion & Implementation

After formation of audit report, the audit team will hold meeting with the respective project team to discuss the current and future scenario towards the water management. The key discussion points are:

- a) Possible water conservation measures & their implementation
- b) Areas where water can be conserved & wastage of water can be minimized

Later, the project team will implement the measure that are finalized in accordance to the discussion and meetings held with audit team.

## Phase V Review

After the implementation of measures, the review and maintenance of the same is much needed. Because, the continuous monitoring of the measures can only justify and revise the water savings occurring in the premises.

The formation of “Sustainable Cell” in the premises will help in proper & continuous execution of the measures. This cell is also responsible to educate the occupants regarding effects of water management along with the finding and installing any new techniques at the project site.

## Water- Use

This indicator addresses water consumption, water sources, irrigation, storm water, appliances and fixtures. A water analysis is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

Sr.No.	Name	Quantity (Nos)	Capacity (litres)	Location	Operating hours
1	Borewell	1	14000	Gate No-2	NA
2	Borewell	2	20000	Near Panel Room	NA
3	Borewell	1	9000	Saraswati mandir	NA
4	Borewell	1	13000	Opp. Canteen Parking	NA
5	Borewell	1	8000	Sir M. Visvesvaraya Block Ramp	NA
6	Borewell	1	5000	Back Side Of Director Academic Bungalow	NA
7	Borewell	1	6000	Back Side Of Noran Girls Hostel	NA

## Observations

The study observed that the Water tanker supply system, Tube well and Municipal connection are major sources of water in college and hostels. Water is used for drinking purpose, toilets and gardening. The waste water from the RO water purifier is used for gardening purpose.

During the survey, no loss of water is observed, neither by any leakages, nor by over flow of water from overhead tanks. On an average the Institute consumes 250,000 Liters of Water per day.

The campus is installed with STP, which fosters the need for landscape irrigation of the campus. A part of treated water is used in the flushing purposes as well.



*Underground water tank*



*Sewage Treatment Plant*

Sr.No.	Name	Quantity (Nos)	Capacity (litres)	Location
1	Pump	1	3000 litres Per Hour	Saraswati mandir Water tank
2	Pump	2	4000 Litres Per Hour	S.T.P
3	Pump	1	2000 Litres Per Hour	Sewage Tank Back Side Nirwana Boys Hostel
4	Pump	1	2000 litres Per Hour	Sewage Tank Back Side Sir M. Visvesvaraya Block
5	Pump	1	22000 Litres per pump	Rain Water Tank Near Gate No-1
6	Pump	1	18000 litres per Hour	Rain Water Tank Back Side Vikram Sarabhai Block
7	Pump	1	8000 litres Per Hour	Water Tank (5000 Lit) Back Side Vikram Sarabhai Block
8	Pump	1	18000 litres Per Hour	Rain Water Tank opp. Noran Girls Hostel ( Carpet Lawn)
9	Pump	1	20000 litres Per hour	S.T.P

*Details of Pump installed at SKIT*



*Separate rainwater collection pits were installed in the campus for proper collection and transmitting the rainwater*



*Rainwater collection system at SKIT*

Sr.No.	Name	Quantity (Nos)	Capacity (litres)	Location
1	Rainwater harvesting Tank	1	265000	Gate No-1
2	Rainwater harvesting Tank	1	11000	Back Side Of Vikram Sarabhai Block
3	Rainwater harvesting Tank	1	7000	Back Side Of Vikram Sarabhai Block
4	Rainwater harvesting Tank	1	28000	Out Side Of Saraswati Temple
5	Rainwater harvesting Tank	1	255000	OPP, Noran Girls Hostel (Carpet Lawn)

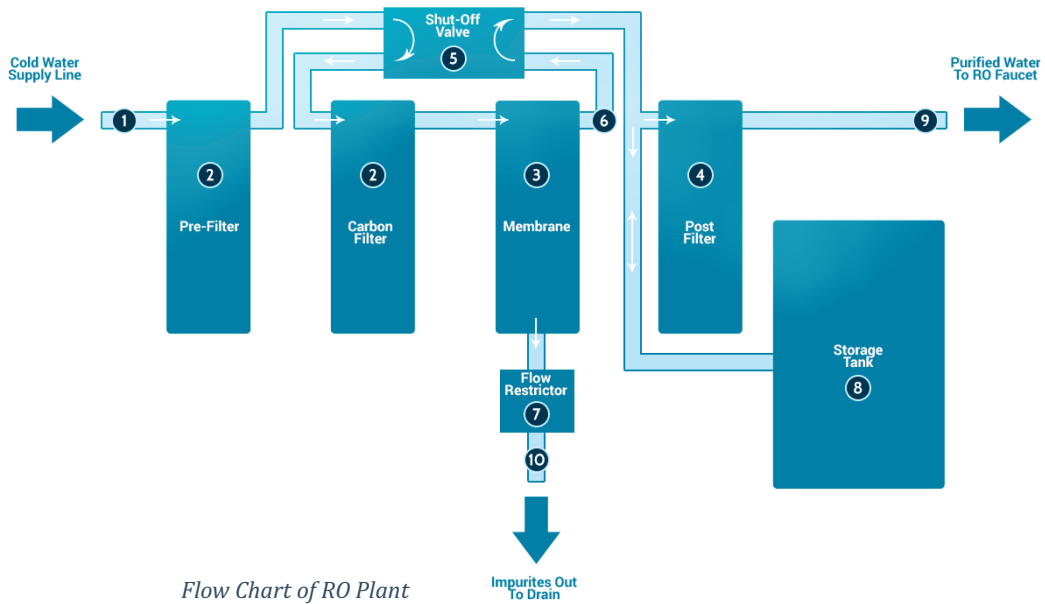
*Details of Rainwater Storage tanks*

Sr.No.	Name	Quantity (Nos)	Capacity (litres)	Location	Operating hours
1	Rain Water Recharge	1	30000	Gate No-3	NA
2	Rain Water Recharge	1	10000	Near Saraswati Temple	NA
3	Rain Water Recharge	4	4000	Dhanwantri Block Cut Out	NA
4	Rain Water Recharge	4	4000	Nirwana Boys Hostel cut Out	NA
5	Rain Water Recharge	3	4000	Vishvakarma Cut Out	NA
6	Rain Water Recharge	6	4000	Sir M. Visvesvaraya Block Cut Out	NA
7	Rain Water Recharge	3	4000	Noran Girls Hostel Chief Warden Residence	NA
8	Rain Water Recharge	6	4000	Vikram Sarabhai Block Cut Out	NA
9	Rain Water Recharge	1	30000	Vikram Sarabhai Block Back Side Of Amphitheatre	NA

*Details of Rainwater Harvesting pits*

The Total rainfall catchment in the site area of SKIT is 1000m<sup>3</sup> and by the method of rainwater recharge and harvesting, the Institute campus is able to save 660m<sup>3</sup> of rainwater. The rest of 340m<sup>3</sup> of water is used for landscape.

**Reverse Osmosis Plant** - Reverse osmosis (RO) is a membrane separation process, driven by a pressure gradient, in which the membrane separates the solvent (generally water) from other components of a solution. The membrane configuration is usually cross-flow. The Institute has provided purified R.O. drinking water to all the students and staff residing in the campus by setting up the R.O plants in the hostels and academic buildings. In addition to drinking purpose, R.O water is provided to the hostel mess for cooking foods.



Flow Chart of RO Plant

Sr.No.	Name	Quantity (Nos)	Capacity (litres)	Location
1	R.O Plant	1	250	Dhanwantri Block
2	R.O Plant	1	500	Mess
3	R.O Plant	1	25	Old Engineering Block
4	R.O Plant	1	1000	Nirwana Boys Hostel
5	R.O Plant	1	500	Sir M. Visvesvaraya Block
6	R.O Plant	1	15	Director Academic Bungalow
7	R.O Plant	1	15	Chief Warden Residence
8	R.O Plant	1	1000	Vikram Sarabhai Block

Details of RO Plants in SKIT



## Water Conservation Measures

Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) utilizes 250,000 Liters of Water per day approximately. SKIT has set a good standard for water utilization by implementing 94000 Liters capacity of rain water harvesting by recharging the underground wells and 5,66,000 liters of rain water harvesting tank. This rainwater is used for various purposes like Landscaping.

### Sub water Metering

Water sub meter is a utility meter solution that is put in place to separate the usage of water into consumption-based billing. Installed water sub-meters in the Institute is essential and advantageous. Here are some of the advantages:

1. Identify large and very costly leaks in the park's piping infrastructure, that, when fixed can drastically reduce the park's utility bill and improve the value of the property.
2. With all the water shortages and environmental problems, we face nowadays, water conservation is vital. With the help of water sub-meters, homeowners or tenants will be aware of their consumption and therefore find ways on how they can cut down their utility expenses while saving water at the same time.

Advances in meter communication, data collection and data analytics have changed sub metering at universities now have the information to understand their water usage, fix leaks, change behaviors and better manage this precious resource. All of this is now available in a cost effective and user-friendly platform, giving park owners capabilities previously only available to the largest municipal utilities.




The facility has a scope of smart metering where all the water meters can be clubbed over a single dashboard to monitor and record the daily consumption. This reduces human interference and recording errors associated with them.




It is suggested that in future if any meters are to be replaced a policy can be implemented supporting smart monitoring of the campus.







## Detail of Water Sub-meter in the Campus





First: - Detail of incoming water for use





Sr. No.	Location of the meter	Number of meter	Image of meter
1	Gate No-2	1	
2	Near Panel Room	1	
3	Opp. Canteen Parking	1	



4	Sir M. Visvesvaraya Block Ramp	1	
5	Back Side Of Director Academic Benglow	1	
6	Back Side Of Noran Girls Hostel	1	
<b>Total Meter in this category</b>		<b>6</b>	<b>Six</b>

Second: - Detail of Block wise water meter

Sr. No.	Location of the meter	Number of meter	Image of meter
1	Nirwana Boys Hostel	2	
			
2	Laundry	1	
			

3	Noran Girls Hostel	2	
4	Mess	2 (RO & Cleaning)	 
			

5	M. Visvesvaraya Block	3 (Labs, RO, Toilet)	 
6	Workers Area	1	
7	Vikram Sarabhai Block	1	

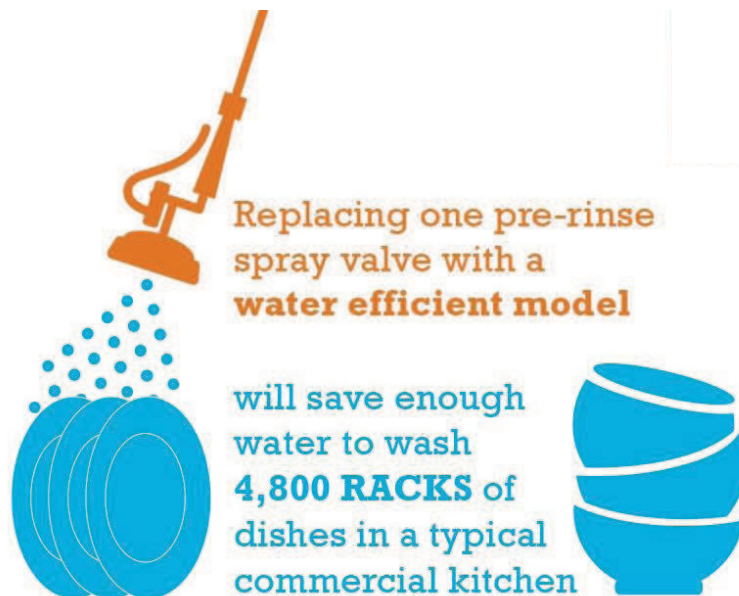
8	Vishvakarma Block	1	
9	Dhanvantari Block	1	
<b>Total Meter in this category</b>		<b>14</b>	<b>Fourteen</b>

Total water meter installed in SKIT campus for measuring the use of water

<b>Sr. No.</b>	<b>Particulars</b>	<b>Count</b>
1	Total Meter in first category:	6
2	Total Meter in second category:	14
<b>Total Number of Meter in the campus:</b>		<b>20</b>

## Pre-rinse Spray

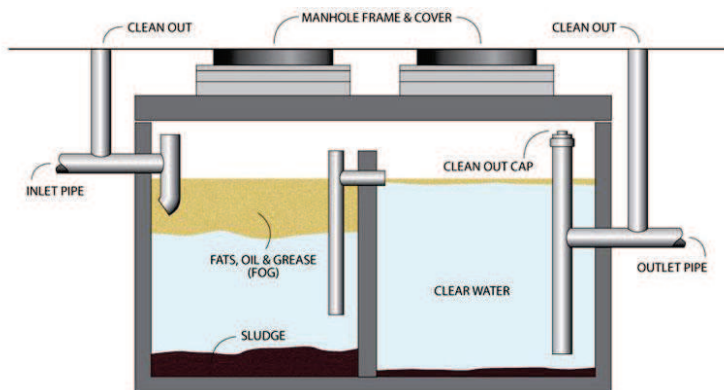
Pre-rinse spray valves—often used in commercial and institutional kitchens—are designed to remove food waste from dishes prior to dishwashing. By switching to a high-efficiency pre-rinse spray valve, a commercial or institutional kitchen can save more than \$110(8,170.71 Indian Rupee) annually in energy and water costs as per EPA.



*Pre-Rinse Spray*

## Oil & Grease Interceptor in Kitchen

An oil and grease interceptor is a waste treatment tank that uses only gravity and time to filter wastewater from kitchen sinks and drains.



*Oil and grease inceptor*

- Prevent the blockage of kitchen drain pipe & Increase operating life cycle of STP
- Captured grease is actually recyclable! With no wastage, there will be monetary savings.
- Indirect benefits can be derived by utilizing this water measure



## Summary – Water Audit

The water audit was conducted by a team of experts and recommendations have been shared in the report above. The report is an analysis of the water inflows and outflows, and presents opportunities to save water across the facility. Incorporation of the measures suggested in this report shall bring up the water efficiency in the campus and would be a step further in rendering the education campus among the leading institutions in water efficiency. A summary of the identified water conservation measures is given below:

Water Conservation Measures details

WCM	Description	Remarks
1	Install pre-rinse spray valves	66 % savings
2	Use of Grease & Oil Interceptor in kitchen	Prevent the blockage of kitchen drain pipe & Increase operating life cycle of STP
3	Use of Irrigation System	40 % savings in landscaping water usage
4	Prevention of leakages in building taps	100 % Savings in leakages

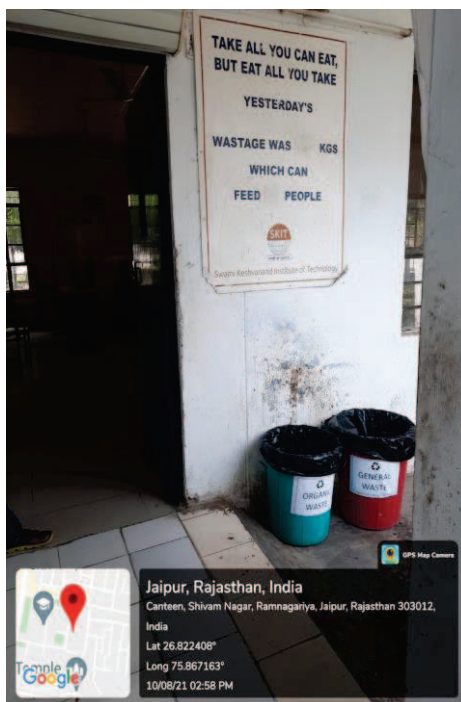
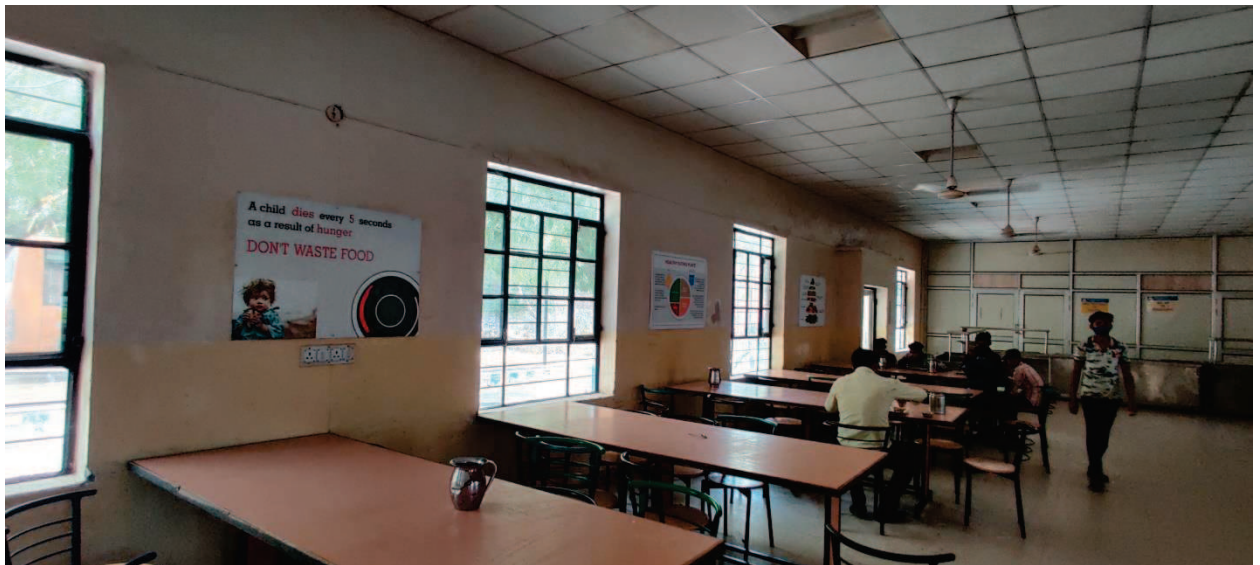
# Waste Audit and Conservation

## Questionnaire

1.	<b>Does your institute generate any waste? If so, what are they?</b>	<b>Yes, Solid waste Canteen waste, paper, plastic, Horticulture Waste etc.</b>
2.	How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify)	<ul style="list-style-type: none"><li>• Reuse of one side printed Paper for internal communication instead shredding</li><li>• Domestic Waste is given to Municipal Corporation.</li><li>• Two types of Waste bins are provided at campus for biodegradable and non-biodegradable waste.</li></ul>
3.	Do you use recycled paper in institute?	No
4.	Do you use reused paper in institute?	Yes
5.	Can you achieve zero garbage in your institute? If yes, how?	Not yet achieved. Possible through waste management plan.

## Kitchen Waste

The Canteen in Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT) runs for all the students, Staff and supporting Staff and has policy of zero food waste policy. It has created awareness for the same through posters in the canteen. The food waste log is maintained daily and makes sure people produce less food waste and as a community SKIT excels in reduction of food waste.



SKIT is committed to zero food waste policy and reduced significant amount of food through daily logging of wastage and its feeding capacity to needy people, it has resulted in daily update and awareness which triggers mentally in students and staff to reduce food waste.

# Waste Remediation Methods



**01**

**BIOGAS Plant**  
 Cost (1000 Kg) : INR 30,00,000/-\*  
 LPG Generation: 70 kg/ day  
 Energy Consumption : 40 kWh/day



Producing biogas gives many advantages for the environment, companies and people involved. The advantages are: Biogas is a green energy source in form of electricity and heat for the local grid. Considerable environmental advantages - less emission of the greenhouse gasses methane, CO2 and nitrous oxide



**02**

**Plastic Waste Converter**  
 Cost – INR 4,95,600 /-



**ZELENO- reverse vending machine** allows you to easily dispose of your plastic PET bottles and Aluminum/steel cans of different sizes. The machine automatically accepts the trash and crushes them to be recycled later.



**ZELENO-RVM** generates an instant reward for the trash disposed and creates a receipt, which can be redeemed at the chosen outlets.

\* Might vary based on actual requirement



**Do you want to dispose your e-waste?**

If you have more than 10kgs of e-waste to dispose then write to us **e-waste pickup request form** or call us at **7349737986** between 9:30am and 6pm (Monday to Saturday) else drop it at our e-waste collection centres / List of **e-waste drop boxes**

**03**

**Association with Recycling/ Feed the Need Organizations**



Formed to facilitate recycling of all kinds of packaging waste and thus contribute towards cleaner and greener environment. We specialize in collection and aggregation of all packaging waste in a professional and organized manner backed by technology and we offer Pan India services.



Existing Segregated Dustbins

## Existing Green Campus Policy

Eco-friendly practices and educational resources combine in a Green Campus to promote sustainable practices. It allows institutions to re-define their environmental culture and develop new paradigms for solving the social, economic, and environmental problems of mankind by utilizing a Green Campus concept.

### Objectives of the Policy

- To safeguard the environment within and around the campus.
- To keep the campus clean and environment friendly.
- To motivate all stake holders to ensure judicious use of scarce natural resources.
- To increase awareness among staff and students regarding different issue and possible solutions related to environment and motivate them to adopt good practices for protection of environment.
- To frame the green policies that will enhance the ecological efficiency in the campus.
- To continually improve the efficient use of all natural resources including water and energy.
- To make sustainable efforts to make the campus plastic free and tobacco free.
- To improve resource use through reduction in material use by reducing waste and to identify recycling opportunities for waste generated such as metal scrap, paper, e-waste etc.
- To conduct in house environmental and energy audits from time to time.
- To make the campus self-reliant in energy using solar energy and to make the campus net zero.
- To recycle waste water and utilize it for landscape irrigation.

### Scope of the Policy

Green Campus develops new extracurricular and co-curricular practices that allow students to take leadership roles in creating positive change. As a result of these initiatives, all infrastructural and administrative activities will be reviewed from the viewpoints of energy, efficiency, sustainability, and environment.

The focus areas of the policy are

- Green Campus Initiatives

- Clean Campus Initiatives
- Tobacco free Campus
- Net Zero Campus
- Water Conservation Initiatives
- Waste Management Initiatives

## Existing Plastic Ban Policy

The pollution of the environment by plastics has now been identified as a global problem. A quick-term advantage and ease of use have made plastic and plastic goods wildly popular. Plastic has grown more and more popular over the past century, outpacing trash management as a result. Our environment, as well as our health and well-being, suffer from plastic pollution. We have all contributed, consciously or unwittingly, to this issue, and we must work together to minimize and eradicate plastic pollution.

The government has chosen to implement a plastic ban on a nationwide scale in order to address the environmental dangers created by the widespread usage of plastic. Educational institutions must take the lead in this national effort. Educational institutions must take a leadership role in the fight to phase out single-use plastics.

### Guidelines

The guideline aims to assist Indian higher education institutions in achieving a plastic-free campus. It is not intended to be comprehensive, but rather to offer basic guidelines and suggestions relevant to all institutions. The recommendations urge institutions to implement policies and practices that promote a more environmentally friendly and plastic-free campus environment.

- The institute will educate stakeholders about the need of reducing, reusing, and recycling plastic.
- All stakeholders are encouraged to reduce their reliance on plastic bags on campus.
- Stakeholders must adhere to rigorous waste segregation guidelines.
- As far as feasible, students should recycle the resources available for creative work at college festivals.
- Conducting events and poster contests, among other things, to promote the

creation of ecological and environmentally friendly products in order to reduce the use of single- use plastic.

## Transport

Transport accounts for a significant and growing share of an Institute's carbon footprint. An increasing demand for international collaboration and knowledge sharing has led to rising CO2 emissions, with international flights being by far the biggest contributor to CO2 emissions from transport at universities.

To create healthier options, an overall campus plan needs to include transportation, and conflicts of overall objectives have to be taken into account, critically analyzed, and communicated transparently. Working alongside local government and planning authorities is also crucial to optimize local public transport solutions.

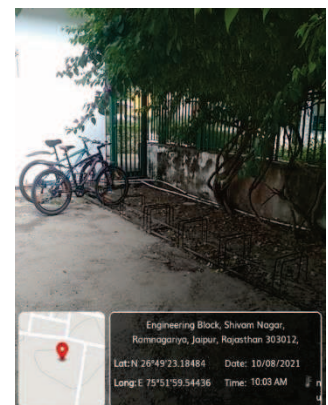
## Internal Campus Transport

SKIT cover large areas, so transport to and from institute's campus are unavoidable. However, the method of transport is a choice and, rather than only thinking of the quickest way, universities need to consider the greenest way. While cars can sometimes prove necessary, cycling and walking is strongly encouraged. Following suggestions can be implemented at the institute.

- To offer people an alternative to using their cars: (More Electric buggy van can be provided)
- Facilitate bicycle use by installing bike racks/safe storage next to entrances, as well as safe paths.
- Offer access to free/cheap bikes, provide bike hire, etc.
- Offer interest-free loans to purchase public transport season tickets.



*Transport facility at SKIT*



*Bicycle Racks*

## Sustainable Transport at SKIT

<b>Are the Rooms in Campus are Well Ventilated?</b>	<b>Yes</b>				
Window Floor ratio of the Rooms	<b>Very Good</b>				
What is the ownership of the vehicles used by your Institute? (Please Tick ✓ only one)	Yes				
	Operator-owned vehicles				
	✓	Institute-owned vehicles			
	A combination of campus-owned and operator-owned vehicles				
Provide details of school-owned motorized vehicles?	Buses	Cars	Vans	Other	Total
PUC done	Yes	Yes	Yes	Yes	Yes
Specify the type of fuel used by your school's vehicles:	Buses	Cars	Vans	Other	
Diesel	Y	Y	--	--	
Petrol	--	--	Y	--	
CNG	Y	--	--	--	
LPG	--	--	--	--	
Electric	--	--	--	Y	
Air Quality Monitoring Program (If Any)	Yes, Monitoring is being done by approved Laboratory				
Students suffer from respiratory ailments? (If Any)	No				
GENSET pollution prevention	Yes				



Sr.No.	Transportation Type	Distance travelled/Route	Fuel Type	Mileage	No.of passengers
1	College Bus Ashok Layland	90 K.M Per Day	Diesel	6 K.M Per Litre	51 Seater
2	College Bus-Swaraj Mazda	85 K.M Per Day	Diesel	6 K.M Per Litre	51 Seater
3	College Bus-Swaraj Mazda	82 K.M Per Day	Diesel	6 K.M Per Litre	51 Seater
4	College Bus-Swaraj Mazda	82 K.M Per Day	Diesel	6 K.M Per Litre	51 Seater
5	College Bus-Swaraj Mazda	60 K.M Per Day	Diesel	6 K.M Per Litre	51 Seater
6	College Bus-Swaraj Mazda	60 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
7	College Bus-Swaraj Mazda	52 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
8	College Bus-Swaraj Mazda	75 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
9	College Bus-Swaraj Mazda	50 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
10	College Bus-Swaraj Mazda	80 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
11	College Bus-Swaraj Mazda	40 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
12	College Bus-Swaraj Mazda	42 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
13	College Bus-Swaraj Mazda	60 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater
14	College Bus-Swaraj Mazda	60 K.M Per Day	Diesel	7 K.M Per Litre	41 Seater

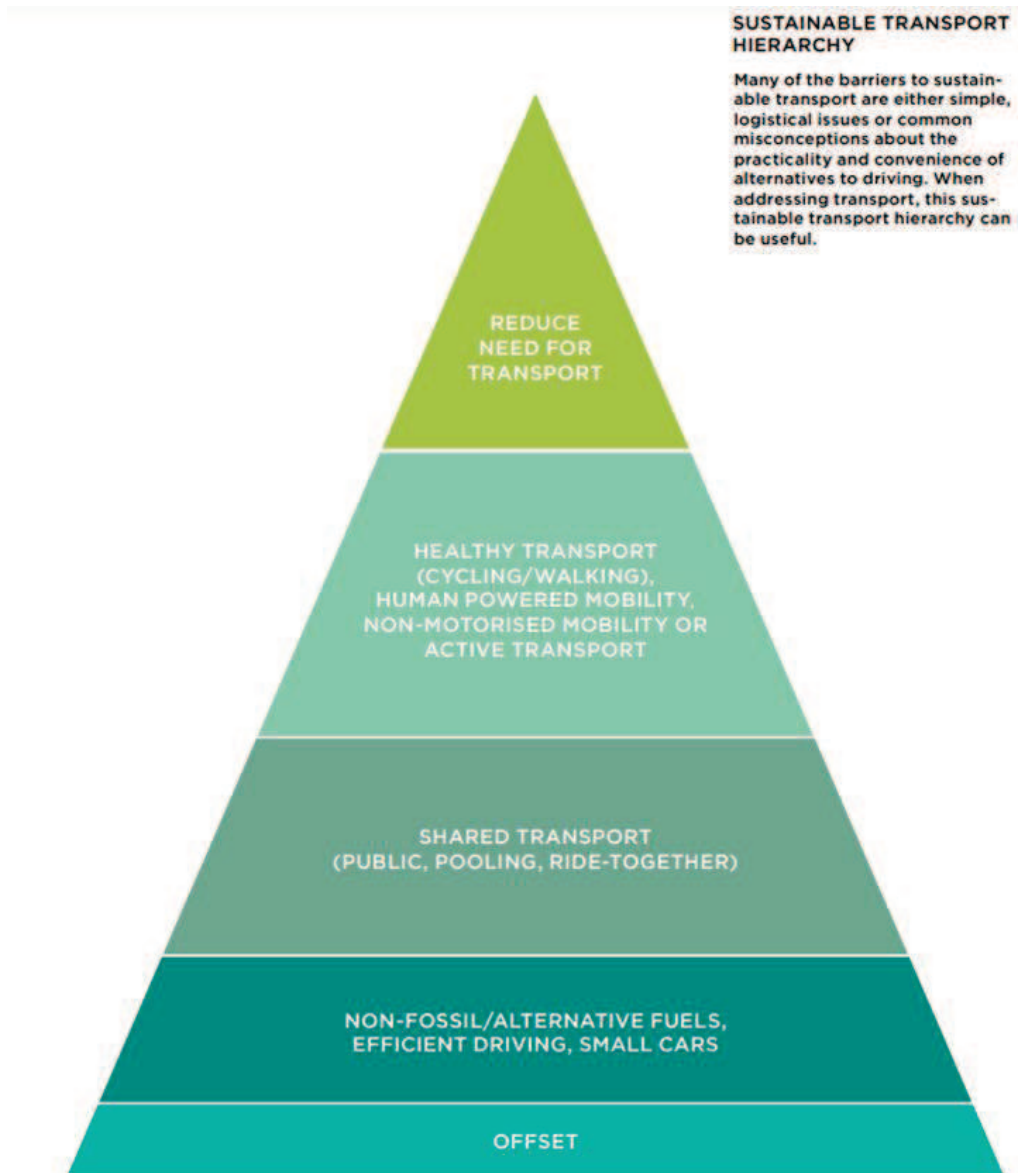
*Transportation Details at SKIT*



Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT Jaipur) has 14 Swaraj mazda buses which ply on different routes totaling 918 kms per day which runs on diesel emits 0.3 Mt of tCO<sub>2</sub>/day

Electric bus can be used as a replacement to the old diesel buses when they become isolate. SKIT will be able to successfully set new benchmark after replacement of this buses with electric bus.





Swami Keshvanand Institute of Technology, Management & Gramothan (SKIT Jaipur) has total on campus population of 5,500. In addition to this cars, bikes and bicycles are part of transport at SKIT. Ample amount of parking facilities is available at the campus.

The internal campus transport of students majorly takes place through walking as the paths are well shaded. It's the most preferable mode of transport. Saving a tons of emission and adding to the Sustainable strategy of the Institute. Also electric buggy van is available at campus for senior citizens

End of Report

## Team Credentials



## CERTIFICATE OF ACHIEVEMENT

### Avanta Global Pte Ltd

Certified by International Register of Certificated Auditors  
Approved Training Partner ID: 01199246

hereby certify that

*Ankur Mantri*

has successfully completed and passed the exam towards the

ISO 50001:2018 Energy Management System  
Auditor / Lead Auditor Course

CQI-IRCA Certified Course Reference No.: 17623

4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup> and 8<sup>th</sup> November 2020

D.N: 290184

Director  
Training & Development



AG-EnMSLAC-2020-03  
16 November 2020

*Certificates of Achievement are only valid for three years for the purposes of auditor certification by CQI-IRCA.*



GREEN BUSINESS CERTIFICATION INC. CERTIFIES THAT

# N Sai Balaji

HAS ATTAINED THE DESIGNATION OF

## LEED AP<sup>®</sup> Building Design + Construction

by demonstrating the knowledge and understanding of green building practices and principles needed to support the use of the LEED<sup>®</sup> green building program.

11181524-AP-BD+C

CREDENTIAL ID

18 SEP 2018

ISSUED

17 SEP 2022

VALID THROUGH

A handwritten signature in black ink that reads "Mahesh Ramanujam".

MAHESH RAMANUJAM  
PRESIDENT & CEO, U.S. GREEN BUILDING COUNCIL  
PRESIDENT & CEO, GREEN BUSINESS CERTIFICATION INC.



IGBC



Confederation of Indian Industry

## The Indian Green Building Council

hereby certifies that

**Tanmay Sharma**

has successfully demonstrated knowledge on the Green Building Design & Construction, Building Standards & Codes, IGBC Resources & Processes and Green Design Strategies & their Impacts, required to be awarded the title of

## IGBC Accredited Professional

**K S Venkatagiri**  
Executive Director  
CII-Godrej IGBC

**V Suresh**  
Chairman  
Indian Green Building Council

**Gurmit Singh Arora**  
Vice-Chairman  
Indian Green Building Council

200432

05 September 2020