SIKKIM MANIPAL UNIVERSITY (SMU)

ENVIRONMENT AUDIT REPORT

2024-2025

Prepared by

EHS ALLIANCE

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CERTIFICATE

EHS alliance

CERTIFICATE

PRESENTED TO

SIKKIM MANIPAL UNIVERSITY (SMU)

5th Mile Tadong Gangtok, East Sikkim -737102

Has been assessed by EHS Alliance for the comprehensive study of environmental impacts on institutional working framework to fulfill the requirement of

ENVIRONMENT AUDIT

ACADEMIC YEAR 2024 - 25

The environment legal compliances and initiatives carried out by the institution have been verified on the report submitted and were found to be satisfactory.

The efforts taken by management and faculty towards environment and sustainability are highly appreciated and noteworthy.

EHS ALLIANCE LLP GURUGRAM

01.11.2025
DATE OF AUDIT

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ACKNOWLEDGEMENT

EHS Alliance LLP would like to thank the management of Sikkim Manipal University, Gangtok for assigning this important work of Environment Audit. We appreciate the co-operation to the teams for completion of assessment.

First of all, we would like to thank ***Air Vice Marshal (Dr.) Dilip Chandra Agarwal, VSM – Hon'ble Vice Chancellor, Sikkim Manipal University*** for giving us an opportunity to evaluate the environmental performance of the campus.

We would also like to thank ***Mr. Premendra Mani Pradhan, Deputy Registrar, IQAC SMU***, for his Continuous Support and guidance, without which the completion of the project would not have been possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Prof. (Dr) Karma S Sherpa - Registrar

Dr. Muralidhar V Pai - Dean, SMIMS

Prof. (Dr) G. L. Sharma - Director SMIT

Col. V. S. Yadav (Retd) - Head General Services, SMU

DISCLAIMER

This report has been prepared by the Audit Team of EHS Alliance LLP for Sikkim Manipal University based on the documents, records, data and representations provided by the University's authorised representatives, supplemented by site observations, sample verification and the professional judgement of the audit team.

The audit was conducted with reasonable professional care and diligence within the agreed scope, objectives, methodology and assessment period. The findings, observations and recommendations reflect the conditions observed and the information made available at the time of the audit. As the assessment involved sampling and selective verification, it should not be construed as an exhaustive examination of every facility, activity, record or control within the University.

While reasonable efforts have been made to ensure the accuracy and reliability of this report, EHS Alliance LLP has relied upon the authenticity, completeness and correctness of the information supplied by the University. Unless specifically stated otherwise, such information has not been independently verified. Accordingly, no absolute assurance, representation or warranty—express or implied—is provided regarding information outside the agreed scope or not disclosed during the assessment.

The findings and recommendations are intended to support informed decision-making, resource efficiency, institutional compliance and continual improvement. They do not constitute legal advice, statutory certification or a guarantee of compliance with every applicable legal or regulatory requirement. Responsibility for evaluating, approving and implementing the recommendations remains with the University's management.

To the extent permitted by applicable law, EHS Alliance LLP, its partners, employees and authorised representatives shall not be liable for any direct, indirect, incidental or consequential loss arising from reliance on, interpretation of or action taken based on this report.

This report is intended solely for Sikkim Manipal University and for the purpose defined in the agreed scope of work. If shared outside the University, it must be reproduced and circulated in its entirety, including all pages, annexures, qualifications and limitations. No portion of the report may be altered, reproduced separately or quoted out of context without the prior written consent of EHS Alliance LLP.



Signature

LEAD AUDITOR

CONCEPT AND CONTEXT

In India, the process for environmental audit was first mentioned under the Environment Protection Act, 1986 by the Ministry of Environment of forests on 13th march, 1992. As per this act, every person owning an industry or performing an operation or process needs a legal consent and must submit an environmental report or statement.

The National Assessment and Accreditation Council, New Delhi (NAAC) has made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. Moreover, it is part of Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the sustainable environment.

In view of the NAAC circular regarding environment auditing, the management decided to conduct an external environment assessment study by a competent external professional auditor.

The term 'Environmental audit' means differently to different people. Terms like 'assessment', 'survey' and 'review' are also used to describe similar activities. Furthermore, some organizations believe that an 'environmental audit' addresses only environmental matters, whereas others use the term to mean an audit of health, safety and environment-related matters. Although there is no universal definition of Environment Audit, many leading companies/institutions follow the basic philosophy and approach summarized by the broad definition adopted by the International Chambers of Commerce (ICC) in its publication of Environmental Auditing (1989).

The ICC defines Environmental Auditing as:

"A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects."

This audit focuses on the environment legal compliances and implementation of rules defined by MoEFCC or state pollution control board. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit are discussed below.

INTRODUCTION

Nature is very precious gift for all life forms. Disturbance in the nature causes environmental Problems. These are increasing day by day as a result of development of urbanization and industrialization on earth. Because of unplanned utilization of resources, our planet is facing tremendous pressure results a sharp rise in temperature. Therefore, there is an urgent need to plan the consumption of the resources in sustainable manner in order to conserve natural resources for future generation.

Sustainable development is becoming popular in the world for saving the earth. Utilizing resources judicially can save the earth's precious resources. Measurement of environmental components is the most effective step to conserve and protect natural resources.

Environmental auditing had begun in the early 1970s with provision of civil lawsuits for non-compliance with environmental regulations. Environment auditing involves on site visit, collection of samples, performing analyses, and report results to competent authorities.

Industry, the corporate world is initiating auditing for saving natural resources. Academic institutions also can contribute to the preservation and conservation of resources within their premises.

In this, "Environment Audit" report would help everyone to think about preserving resources, show willingness to learn their importance, adopt steps to minimize resource use and set an example for others to follow the path of eco-friendly practices to achieve the goal of sustainable development. Effective implementation of environmental auditing helps in minimization of environmental risks at low cost.

OVERVIEW OF THE UNIVERSITY

The Sikkim Manipal University (SMU) was established in 1995. It is recognized by the University Grants Commission (UGC) and established under the Sikkim Manipal University of Health, Medical and Technological Sciences Act, 1995, enacted by the Government of Sikkim.

SMU is the first Public-Private Partnership (PPP) initiative in India in the fields of higher education and healthcare services, established with the objective of providing quality education and affordable healthcare services. The University has been instrumental in offering quality education to students from Sikkim, the North-Eastern Region, and other parts of India, while also providing advanced healthcare services at affordable costs through its teaching hospital.

Since its inception, SMU has achieved several significant milestones in academics, research, healthcare, innovation, and community engagement. Today, the University has evolved into a multidisciplinary institution and continues to expand its academic programmes, research initiatives, infrastructure, and national and international collaborations.

The University is supported by highly qualified, experienced, competent, and dedicated faculty members who are committed to ensuring that graduates are equipped with the knowledge, professional skills, ethical values, and practical competencies required to excel in their chosen professions and contribute effectively to society. SMU plays a significant role in contributing to the nation's skilled human resource pool through quality teaching, research, innovation, entrepreneurship, and community outreach. Transparency, merit-based admissions, academic excellence, student-centric learning, and state-of-the-art infrastructure have been the characteristic features of the University since its establishment.

All academic programmes offered by SMU are approved by the respective statutory and regulatory bodies wherever applicable, including the National Medical Commission (NMC), Indian Nursing Council (INC), All India Council for Technical Education (AICTE), University Grants Commission (UGC), and other relevant statutory bodies.
The engineering programmes like B.Tech. Computer Science Engineering, B.Tech. Civil Engineering and Master of Computer Applications (MCA) (subject to the applicable accreditation cycle and validity period) offered by the University at Sikkim Manipal Institute of Technology (SMIT) have been accredited by the National Board of Accreditation (NBA).

The University has also been accredited with an 'A+' Grade by the National Assessment and Accreditation Council (NAAC), reflecting its commitment to academic excellence, quality assurance, research, innovation, governance, and continuous institutional improvement.

Constituent units of Sikkim Manipal University

SMU operates through two of its main campuses:

Majhitar Campus: Located at Majhitar, Rangopo, Pakyong District, Sikkim.

This campus houses:

Sikkim Manipal Institute of Technology (SMIT)
Centre for Distance and Online Education (CDOE)

Tadong Campus: Located in Tadong, Gangtok District, Sikkim

This campus houses

Sikkim Manipal Institute of Medical Sciences (SMIMS)
Sikkim Manipal College of Nursing (SMCON),
Sikkim Manipal College of Allied & Healthcare Professions (SMCAHP)
Department of Hospital Administration
Department of Medical Biotechnology
Faculty of Humanities, Social Sciences and Liberal Arts

Programmes offered by the university:

Majhitar Campus		
S. No	**Programme Name**	
1	**B. Tech.**	Civil Engineering
		Computer Science & Engineering
		Electronics & Communication Engineering
		Electronics Engineering (VLSI)Design & Technology)
		Electrical & Electronics Engineering
		Mechanical Engineering
		CSE (Artificial Intelligence & Machine Learning)
		CSE (Data Science)
		CSE (IoT & Cyber Security including Blockchain Technology)
		Computer Science & Information Technology
		Computer Science & Technology
2	**M. Tech.**	Computer Science & Engineering (M. Tech)
		Structural Engineering (M. Tech)
		Hydrology & Water Resources Engineering (M. Tech)
3	**B. Sc.**	Physics
		Chemistry
		Mathematics
		Applied Psychology
4	**BPES**	Physical Education and Sports
5	**M. Sc.**	Physics
		Chemistry
		Mathematics
		Applied Psychology
6	**BBA**	Bachelor of Business Administration
7	**MBA**	Master of Business Administration

8	**BCA**	Bachelor of Computer Applications
9	**MCA**	Master of Computer Applications
Tadong Campus		
10	**MBBS**	Bachelor of Medicine, Bachelor of Surgery (MBBS)
11	**MD/MS**	Doctor of Medicine (MD) Master of Surgery (MS)
12	**Nursing**	B. Sc Nursing
		M. Sc Nursing
13	**Physiotherapy**	Bachelor of Physiotherapy (BPT)
		Masters of Physiotherapy (MPT)
14	**Paramedical Courses**	Bachelors in medical Radiology and Imaging Technology
		Bachelors in Anesthesia and Operation Theatre Technology
		Bachelors in medical laboratory science (BMLS)
		Bachelors in Cardiovascular Technology
15	**B. A.**	English
		Political Science
		Sociology
16	**M. A.**	English)
		Political Science
		Sociology
17	**B. Com**	Bachelor of Commerce
18	**M. Com**	Master of Commerce
19	**B. Sc.**	Medical Biotechnology
20	**M. Sc.**	Medical Biotechnology
21	**BHA**	Bachelor Of Hospital Administration
22	**MHA**	Master in Hospital Administration

MISSION | VISION OBJECTIVES | COREVALUES

VISION

Global Leadership in Human Development, Excellence in Education and Healthcare.

MISSION

Develop professionals of excellent technical calibre in the field of Health Sciences, Engineering, Management and Social Sciences with a humane approach capable of shouldering the responsibility of building the nation and be globally competent.

OBJECTIVES

- To support, promote and undertake the advancement of academics
- To promote use of ICT and modern education technologies
- To encourage research, creation and dissemination of knowledge
- To facilitate extension and community service
- To empower people of Sikkim and contribute to human development in Northeast
- To create environmental and social responsibilities among students and employees
- To ensure steady growth of the University

CORE VALUES

Integrity and Honesty

We conduct ourselves ethically and legally in all situations upholding stakeholder trust.

Committed to Teams, Accountable for Results and Passion to Win

We are passionate about winning and hold ourselves accountable to organizational goals. We believe in teamwork and foster a performance driven culture across the organization.

Achieving Social Impact

We fulfil our responsibility to society, continuously contributing to build a better world.

Respect and Fairness

We trust every individual and treat them with dignity, respect and fairness. We practice open and honest communication at all times.

Excellence through Quality, Innovation and Leadership

We are committed to delivering superior programs and academic services through continuous innovation and leadership at all levels.

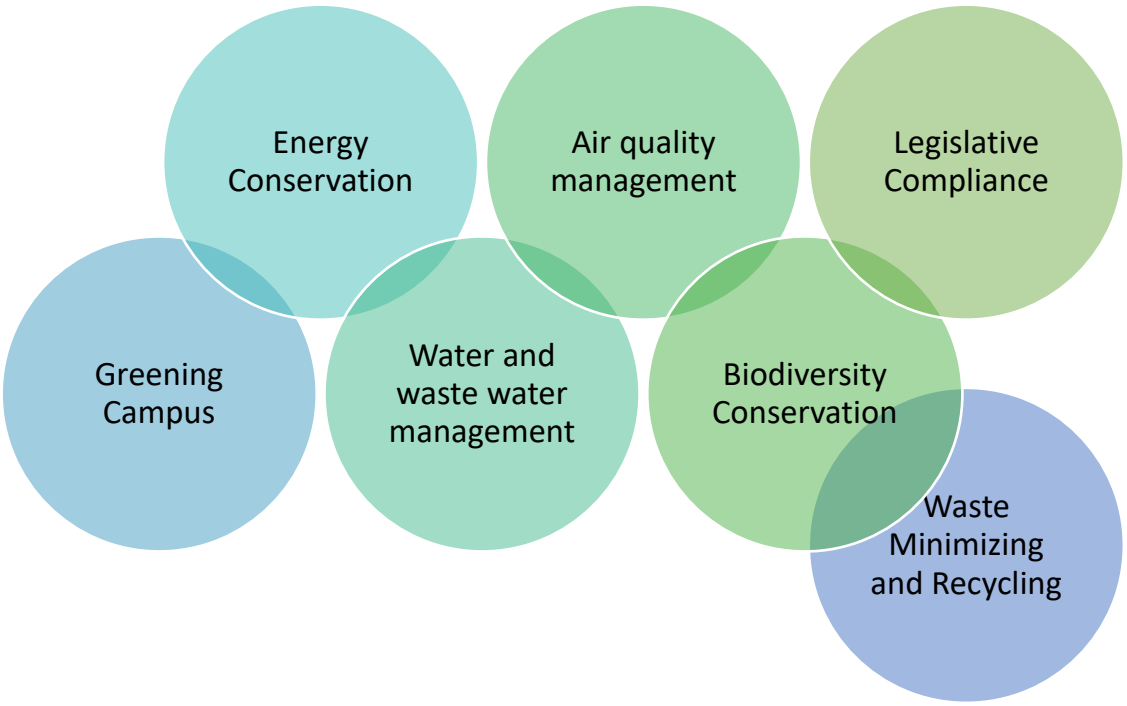
AUDIT PARTICIPANTS

On behalf of university

Name	Designation
Air Vice Marshal (Dr.) Dilip Chandra Agarwal	*VSM - Vice Chancellor, SMU*
Prof. (Dr) Karma S Sherpa	*Registrar, SMU*
Dr. Murlidhar V Pai	*Dean, SMIMS*
Prof. (Dr) G L Sharma-	*Director SMIT*
Col Virender S Yadav (Retd)	*Head General Services, Sikkim Manipal University*
Col. Surajit Debnath	*HES, SMIT*
Mr. Premendra Mani Pradhan	*Deputy Registrar, IQAC SMU*
Col D B Chhetri (Retd)	*Head Administration, SMIT*
Mr. Sebom Mukherjee	*Dy. Manager (Housekeeping), SMIT*

On behalf of EHS Alliance Services

Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	*Ph.D., PDIS, QCI – WASH, Lead Auditor ISO 14001:2015*
Ms. Pooja Kaushik	Co-Auditor	*M.Sc., Field Expert, QCI – WASH*



EXECUTIVE SUMMARY

The third Environmental Audit of the University was undertaken to assess its environmental performance, evaluate compliance with applicable environmental laws and regulations, and identify opportunities for strengthening sustainable campus practices. The audit provides a systematic overview of the University's current environmental initiatives and serves as a baseline for monitoring future progress.

An environmental audit represents the conditions prevailing during a particular period. Its long-term value depends upon the establishment of an effective system for regularly monitoring environmental performance, legislative compliance, resource consumption, waste generation, and implementation of corrective actions. Accordingly, the University is encouraged to integrate periodic monitoring and review mechanisms into its institutional planning and operational processes.

The audit covered key areas including environmental awareness, waste minimisation and management, biodiversity conservation, water conservation, energy conservation, pollution prevention, and compliance with applicable environmental legislation. The assessment was conducted through a structured questionnaire, review of available records, physical inspection of campus facilities, discussions with relevant stakeholders, and evaluation of existing environmental practices.

A green campus is one where education, institutional governance, infrastructure, and environmentally responsible practices collectively contribute to sustainable development. It provides the University with an opportunity to strengthen its environmental culture, optimise the use of natural resources, reduce its ecological footprint, and develop practical solutions to environmental, social, and economic challenges. The campus can also serve as a living laboratory where students gain practical exposure to sustainability principles and apply them in their professional and personal lives.

The findings of this audit acknowledge the University's ongoing efforts towards environmental protection and awareness at both local and global levels. The report presents observations and recommendations intended to improve environmental performance, strengthen compliance, promote resource efficiency, and enhance the participation of students, faculty, and staff in campus sustainability initiatives.

The effectiveness of the audit will ultimately depend upon the timely implementation of the recommendations, periodic review of environmental objectives, assignment of responsibilities, maintenance of appropriate records, and continuous engagement of the University community. By adopting a structured environmental management approach and embedding sustainable values within education and campus operations, the University can demonstrate institutional leadership and make a meaningful contribution to long-term environmental sustainability.

WASTE MANAGEMENT

TYPE OF WASTE ON UNIVERSITY CAMPUS

To create effective waste management plans, university first need to know the type of waste being generated at the campus. Below, we have compiled a list of various kinds of waste commonly generated on institutional campus:

1. **FOOD WASTE -** University campus generates food waste. The average mess and canteen generates approximately 90 kg of food waste a day. The reasons for food waste on an educational campus may be over purchasing food to ensure a sufficient supply and then throwing it away, especially in all hostel messes where plentiful stores are essential. And in the cafeteria or hostel mess, students may pile food onto their trays, find it unappealing once they sit down and dutifully scrape it into the garbage. Immediate attention is given to the food waste minimization techniques.

2. **RECYCLABLE PAPER, CARDBOARD, PLASTIC, GLASS AND CANS -** Campus tends to produce vast quantities of these recyclables. Even in the digital age, many students, professors and staff members still prefer handwritten notes and end up with piles of unwanted paper once their courses and projects are complete. And shipments of necessary items throughout the year are likely to arrive in recyclable plastic and cardboard packaging. The same is sold/auctioned to the scrap vendors time to time.

3. **STUDENT CLOTHES AND HOUSEWARES -** As we have mentioned above, many students find it more convenient to throw away their clothes and dorm furnishings at the end of the year than donate or recycle them.

4. **E–WASTE -** Student and facility electronics often form a large portion of a campus's waste — As campus continually upgrade their computing facilities and office computers to keep up with the latest technology, the old computers have to go somewhere. So do old printers, phones, copy machines and other electronics that receive upgrades over the years. Discarded student electronics often become part of a campus's waste stream as well.

5. **CHEMICAL WASTE -** Chemical waste on a campus may come from numerous sources. Campus laboratories generate waste chemicals, as do cleaning services. The detergents used in campus laundry rooms eventually become waste as well. Much of these chemical substances are hazardous waste under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and must undergo specific disposal processes according to state environmental rules and regulations.

6. **MAINTENANCE WASTE -** In the maintenance department, spent paints, solvents, adhesives and lubricants all form potentially hazardous waste. Because they are difficult to

recycle, spent incandescent light bulbs usually become landfill waste. Spent fluorescent light bulbs, which contain small amounts of mercury, typically require special handling because of the environmental and health risks they pose.

7. **BIOLOGICAL WASTE -** Biological waste from laboratories will require special handling and disposal as per BMW Rules, 2016. Sikkim Manipal University has installed number of furnace to manage lab's waste at different labs.

8. **FURNITURE -** Furniture waste on a campus has a couple different sources. The campus itself may also get rid of old furniture as it modernizes its classrooms, cafeterias, computer labs and study spaces. Annually sold to junk dealer.

9. **BOOKS/MAGAZINES/NEWSPAPERS -** Books accounted for solid waste generation and institutions often generate tons of textbook waste. As courses upgrade to new editions, they may end up throwing their newly obsolete textbooks into the garbage if donation programs cannot use them. Students of Sikkim Manipal University donates their text books and notes to junior students, or else are auctioned to reseller.

10. **C & D WASTE -** Expansion of campus building and renovation works result significant amount of construction and demolition waste that should be either used for back filling or disposed off through authorised dumping site by CPCB/SPCB.

11. **SOLID WASTE -** The university is managing solid waste by providing via composting and bio gas plant.

12. **HORTICULTURE WASTE –** University campus has lavished greenery and grounds that results significant horticulture waste which is managed by in-house composting system.

ENERGY CONSERVATION

1. **List ten ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.**

A. Electricity

- *Lights, Fans, Air conditioners*
- *Lab equipment*
- *Computers in labs, faculty rooms & offices*
- *Electrical Appliances in Pantry*

B. LPG

- *Cafeteria and hostel mess*

Ways to use less energy

- *Replacing the conventional bulbs to LEDs*
- *Solar PV installed on building roofs*
- *Use of natural light when possible*
- *Use large appliances together to reduce energy use.*
- *Turn off the switch on the socket after use.*

2. **Are there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some**

- *Electricity is saved by use of LED bulbs for illumination.*
- *In Canteen, LPG is saved by use of pressure cookers for cooking food*
- *Switch off fans and lights when not in use*
- *Various energy conservation awareness programs for students and staff*
- *Keep the computers and ACs on power saving mode.*

3. **How many CFL/LED bulbs has your institute installed?**

Approx 80 % of Total Conventional bulbs and tube lights are replaced by LED Lights.

4. **Do you run "switch off" drills at institute?**

Yes

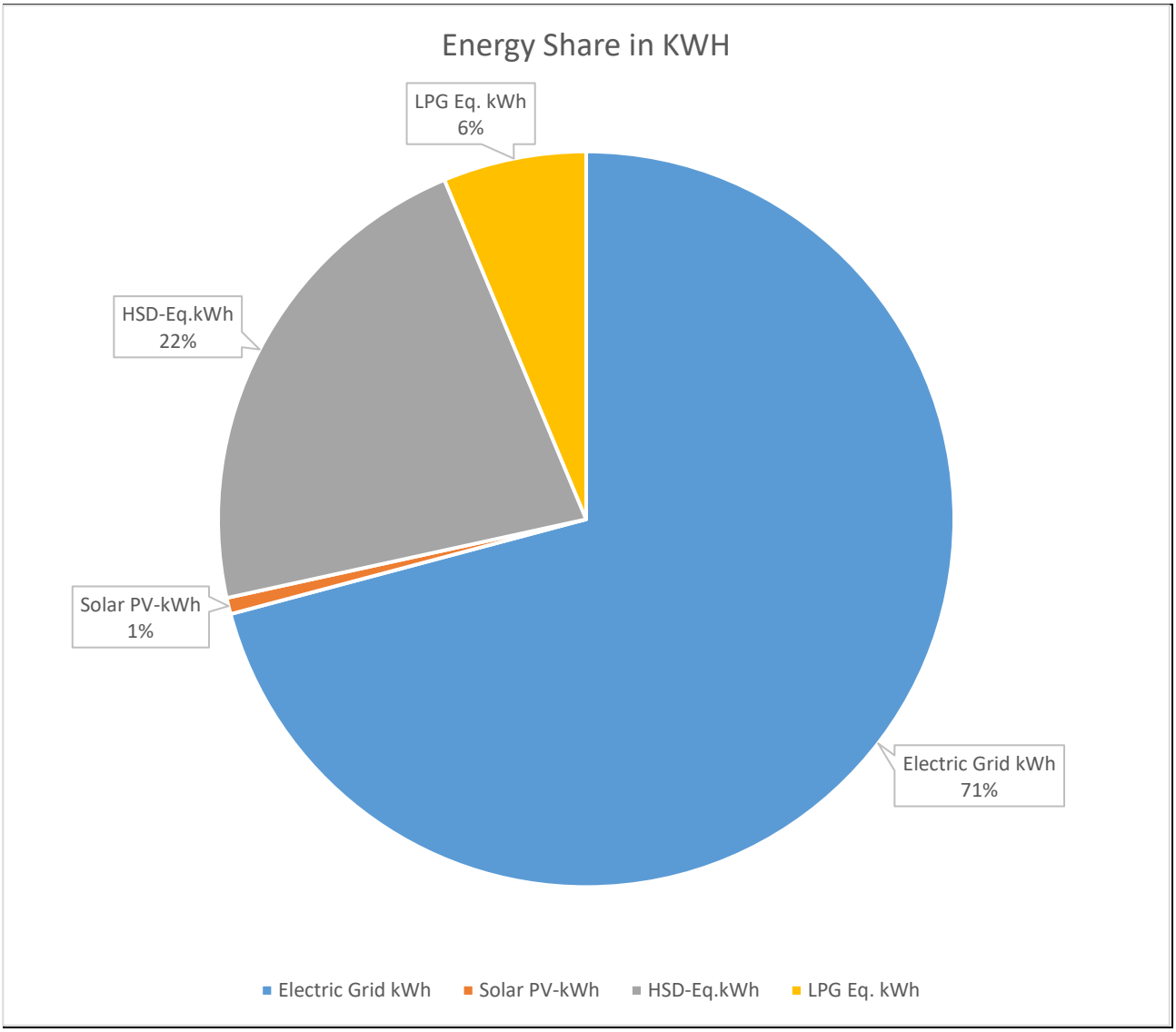
5. **Are your computers and other equipment's put on power-saving mode?**

Yes

6 Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?

Yes, In office hours

Energy Share	kWh	Percentage
Electric Grid kWh	6,788,179	70.85%
Solar PV-kWh	68,530	0.72%
HSD-Eq. kWh	2,121,133	22.14%
LPG Eq. kWh	603,072	6.29%
Total -kWh	**9,580,914**	**100.00%**



WATER & WASTEWATER MANAGEMENT

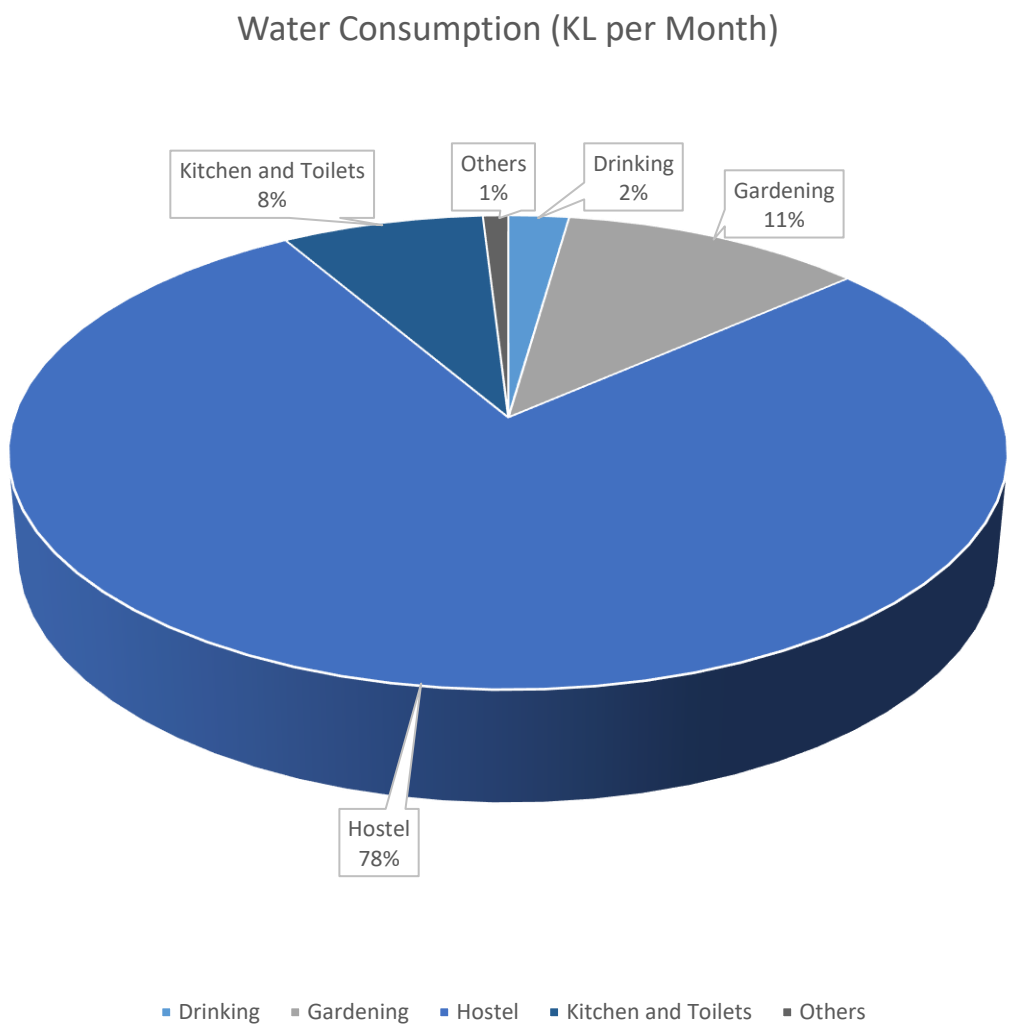
1. List uses of water in your institute

Basic use of water in campus:

***Drinking** – 167.79 KL/month*
***Gardening** – 842.80 Kl/month*
***Kitchen and Toilets** – 560.46 KL/month*
***Others** – 70.32 KL/month*
***Hostel** – 5800 KL/Month*
Total = 7441.36 KL/Month

Note: Please note that all calculations have been made on the basis of NBC 2016 norms as university has no water usage records.

To account for sustainable water management practices, a volume of 500 KL of treated wastewater has been deducted from the university's total raw water requirement.



2 How does your institute store water? Are there any water saving techniques followed in your institute?

Underground Tank - 4 Tanks total capacity 5,50,000 Litres
Over Head Tanks - 99 Tanks of capacity 10,00000 litres
Reservoir Tanks - 17,70,000 Litres

- *Avoid overflow of water-controlled valves are provided in water supply system.*
- *Close supervision for water supply system.*
- *Sensor based taps are installed*
- *Water Conservation awareness for new students*
- *Sprinklers usage for gardening and grass cover*

3. Locate the point of entry of water and point of exit of waste water in your institute. (Entry and Exit)

Entry - SMU uses spring water and have 5 bore wells as a secondary source

Exit- From Canteen, Toilets, Hostel, Bathrooms and Labs through covered drainage which is connected to sewage treatment plant, and treated waster is used for gardening purpose

4. Write down ways that could reduce the amount of water used in your institute

Basic ways:

- *Close the taps after usage*
- *Water Conservation awareness for new students*
- *Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage*
- *Sensor based taps and push tap are installed to save water*

5. Does your institute harvest rainwater?

The university is in process to build rainwater storage tanks of capacity 2,00,000 liters for better rainwater reuse for various purposes. The stored water in this tank can be used for gardening purposes

6. Is there any water recycling System?

Yes, Sikkim Manipal University has fully functional STP (480 KLD) and ETP (15 KLD) which treated the waste water. And treated water is being used for gardening purpose

AIR QUALITY MANAGEMENT

1. Are the Rooms in Campus Well Ventilated?

Yes, as per National Building Code, guidelines

2. Window Floor ratio of the Rooms?

Very Good, ample daylight utilization because of big windows.

3. What is the ownership of the vehicles used by your campus?

There are 12 buses and 22 cars including other vehicles.

4. Provide details of Institute-owned vehicles?

Below is the details of university owned vehicles
Bus -12 (Diesel), Cars- 12 (Diesel), Vans -3 (Petrol), Utility -1 (Diesel), Ambulances- 6 (Petrol-1, Diesel-5)

5. PUC done?

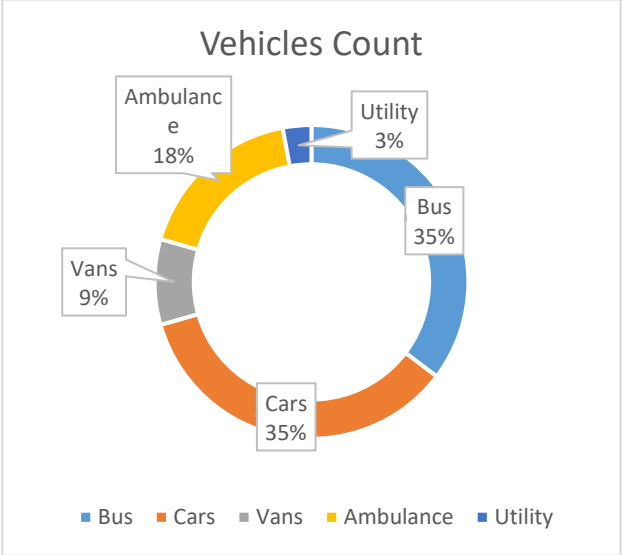
Yes

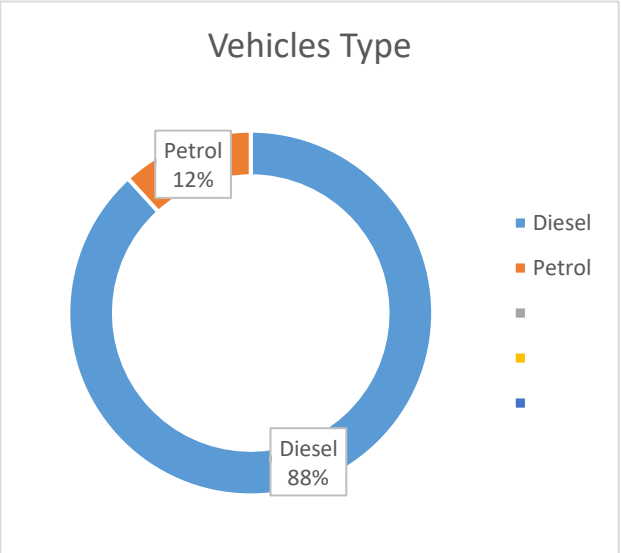
6. Specify the type of fuel used by your campus's vehicles

Petrol and diesel

8. Air Quality Monitoring Program (If, Any)

No





ENVIRONMENT LEGISLATIVE COMPLAIANCE

1. Are you aware of any environmental Laws Pertaining to different aspects of environmental management?

Sikkim Manipal University complies with national environmental laws to support the principl of reducing, reusing, and recycling waste on campus. The institution aligns its operational practices with official statutory frameworks, including the E-Waste Management and Handling Rules 2011, the Plastic Waste Management Rules 2016, and the Solid Waste Management Rules 2016.

Adhering to these legal frameworks ensures that electronic items, plastic goods, and genera campus garbage are handled safely and responsibly. Following these structured guidelines helps the university minimize its environmental impact and prevents local ecological hazards

2. Does your institute have any rules to protect the environment? List possible rules you could include.

Yes, Sikkim Manipal University's- Eco club is conscious about the environment protection an takes proper measures in terms of awareness campaigns, activities, webinar, seminars, etc.

3. Does Environmental Ambient Air Quality Monitoring conducted by the Institute?

No

4. Does Environmental Water and Waste water Quality monitoring conducted by the Institute?

No

5. Does stack monitoring of DG sets conducted by the Institute?

Yes, half yearly monitoring is done by the NABL approved Laboratory

6. Is any warning notice, letter issued by state government bodies?

No

7. Does any Hazardous waste generated by the Institute?

Yes, it is being disposed though the ETP and incinerator.

GENERAL INFORMATION

1. Does your institute have any rules to protect the environment? List possible rules you could include.

- *Periodic Plantation drive*
- *Ban on single use plastic*
- *Biodegradable waste management through Composting and bio gas plant*
- *Water and energy conservation through posters*

2. Are students and faculties aware of environmental cleanliness ways? If Yes Explain

Yes. Sikkim Manipal University creates awareness through ECO Club activities, Webinars, cleanliness drives in the community.

3. Does Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?

Yes, World Environment Day, Ozone Day, Earth Day, World water day, World wetland Day, Earth hour and more are celebrated by campus.

4. Does Institute participate in National and Local Environmental Protection Movement?

Yes, SMU is actively participating in environment protection movements like Swatch Bharat Abhiyan by students at the campus

5. Does Institute have any Recognition or certification for environment friendliness?

Yes

6. Does Institution conduct a green or environmental audit of its campus?

This is the third external audit carried out by the university.

INITIATIVES CARRIED OUT BY UNIVERSITY

- **Solid Waste Management**
  - Systematically engage with the 3Rs of environment friendliness (Reduce, Reuse and Recycle).
  - Collect paper waste produced on campus and collaborate with scrap dealers for recycling.
  - Reduce use of paper by supporting digitization of attendance and internal assessment records.
  - Reduce requirement of printed books by updating the e-books and e-journals collection of the SMU library.
  - Take initiatives to spread awareness amongst students about food wastage and ways of minimizing it
  - The habit of reusing and recycling non-biodegradable products
  - Organizing workshops for students on solid waste management.
  - There is ban on single use plastic and plastic crockery in the campus.

- **Liquid Waste Management**
  - Maintain leak proof water fixtures.
  - Continued employment of a caretaker to take immediate steps to stop any water leakage through taps, pipes, tanks, toilet flush etc.
  - Reuse of wastewater generated by the Reverse Osmosis (RO) system for gardening purpose.
  - STP & ETP are installed for waste water treatment

- **E-waste Management**
  - University has a separate storeroom for the safe storage of electronic waste. After a certain interval of time university disposes of the E-waste to concerned agencies through the auction process.

- **Rain water harvesting**
  - Rainwater-harvesting capacity: 2,00,000 litres
  - Systems installed: rooftop harvesting, surface-runoff harvesting, percolation pits, recharge wells and storage tanks

- **Renewable Energy**
  - SMU has installed solar PV (100 KW) on the rooftop of building.
  - SMU is using solar lights for street lights.
  - SMU has installed solar heaters.
  - SMU believes in using cleaner energy such as LED lighting.

- **Air Pollution Reduction**
  - Personal Vehicles (Students) are not allowed in the campus

- **Activities Carried out by university**
  - Conducted a plantation drive on August 15, 2024.
  - Celebrated National Sports Day 2025 on August 29, 2024.
  - Hosted a dedicated NSS plantation drive on August 31, 2024.
  - Executed a campus cleanliness drive on September 7, 2024.
  - Organized a tree plantation drive on September 17, 2024.
  - Carried out an additional plantation drive on September 18, 2024.
  - Observed National Energy Conservation Day 2024 on December 13, 2024.
  - Celebrated World Environment Day on June 5, 2025.
  - Promoted eco-friendly transit on World Bicycle Day on June 7, 2025.
- **Completed Projects Under UBA**
  - Ethos in Technical and Higher Education Institutions
  - Anganwadi operations in villages of Sikkim
  - Realising Digital Education Platforms in Schools

RECOMMENDATIONS

- Eco-friendly parameters should be included in the purchase of articles and goods for the campus.
- Car-pooling practices can be adopted by campus to minimise air pollution.
- The periodic maintenance schedule for solar PV, rainwater harvesting and STP to achieve optimised efficiencies.
- Reduce carbon emission by reducing the LPG and diesel consumption
- Initiate the use of more solar geysers in hostel
- Water metering records should be in practice for water auditing and balancing.

CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on a wide range of issues related to environmental aspects. Overall, 60% of university campus is for landscaping. Sikkim Manipal University is dedicated to promote the environment management and conservation in the campus and community. The audit has identified some suggestions for making the campus premise more environment friendly. The recommendations and suggestions are mentioned for campus to initiate actions.

The audit team opines that the overall site is well-maintained from environmental perspective. The recommendations in this report highlight many ways in which the university can work to improve its actions and become a more sustainable institution.

REFERENCES

- **The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)**
- **The Petroleum Act: 1934 – The Petroleum Rules: 2002**
- **The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle Rules:1989 (Amended in 2005)**
- **Energy Conservation Act 2010.**
- **The Water [Prevention & Control Of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975**
- **The Air [Prevention & Control Of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982**
- **The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981**
- **E-waste management rules 2016**
- **Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006)**
- **The Hazardous Waste (Management and Handling and Trans-boundary Movement) Rules, 2008 (Amended 2016)**
- **The Noise Pollution Regulation & Control rules, 2000 (Amended 2010)**
- **The Batteries (Management and Handling) rules, 2001 (Amended 2010)**
- **Relevant Indian Standard Code practices**

ANNEXURE I – ENVIRONMENTAL RECOGNITION AND COMPLIANCE



राष्ट्रीय मूल्यांकन एवं प्रत्यायन परिषद

विश्वविद्यालय अनुदान आयोग का स्वायत्त संस्थान

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

An Autonomous Institution of the University Grants Commission

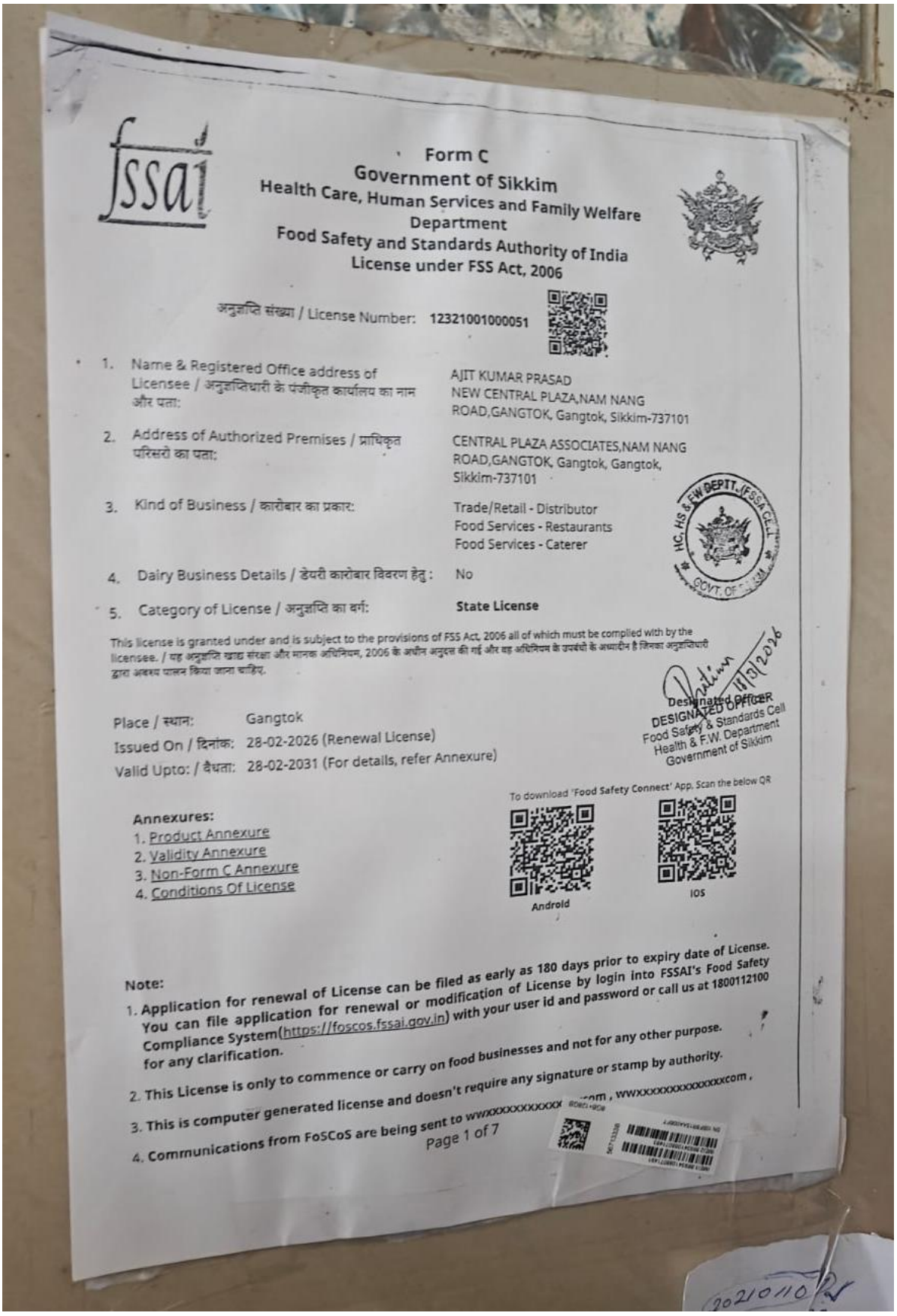
Certificate of Accreditation

The Executive Committee of the
National Assessment and Accreditation Council
is pleased to declare
Sikkim Manipal University
Fifth Mile, Tadong, Gangtok, Sikkim as
Accredited
with CGPA of 3.28 on four point scale
at A+ grade
valid up to August 22, 2027

Date : August 23, 2022

Director

EC(SC)/120/1st Cycle/SKUNGN100586



Form C
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Food Safety and Standards Authority of India
License under FSS Act, 2006

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2. Address of Authorized Premises / प्राधिकृत परिसरो का पता: CENTRAL PLAZA ASSOCIATES,NAM NANG ROAD,GANGTOK, Gangtok, Gangtok, Sikkim-737101
3. Kind of Business / कारोबार का प्रकार: Trade/Retail - Distributor; Food Services - Restaurants; Food Services - Caterer
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Food Safety & Standards Cell
Health & F.W. Department
Government of Sikkim

Annexures:
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2. Validity Annexure
3. Non-Form C Annexure
4. Conditions Of License

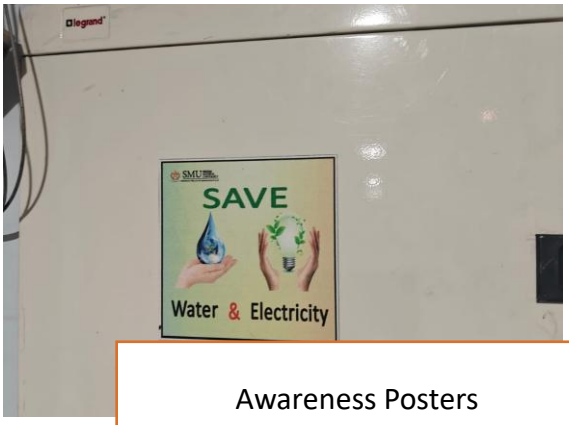
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Food Safety Licence

ANNEXURE II – PHOTOGRAPHS OF ENVIRONMENTAL INITIATIVES



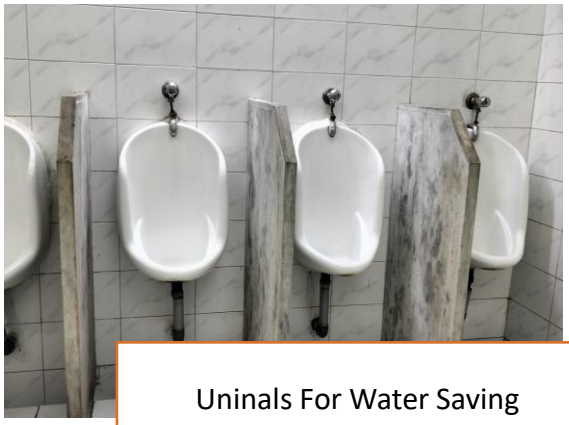
Awareness Posters



HVAC Energy Efficient Cooling



Solar Panel Installed On Building Roof



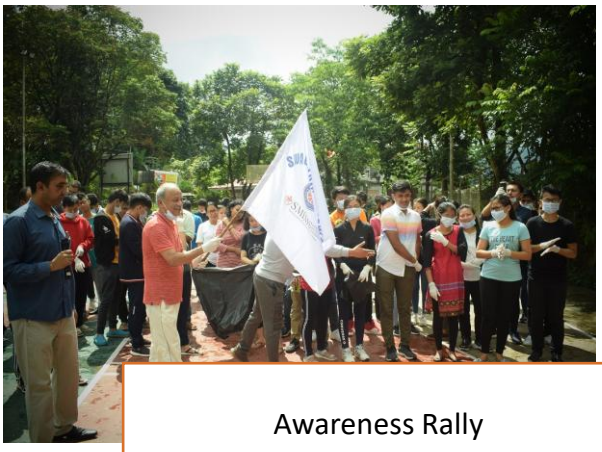
Uninals For Water Saving



Centralized AC Plant



Air Purifying Plants



Awareness Rally



Color Coded Dustbins



Awareness Program



UBA Survey & Field Visit



Solar Water Heaters



Push Taps In Water Coolers



5star Rates AC For Energy Conservation



Clean Campus



BEE Star Rated Fans



15 Kld Etp



Push Taps In Washrooms



Silent Generators

********** **END OF THE REPORT** **********