

Internal Green Audit Report (Year 2021-2022)

Shri Mata Vaishno Devi University,

Katra, J&K

Internal

Green Audit Report



Shri Mata Vaishno Devi University, Katra, J&K

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EXECUTIVE SUMMARY

Green Audit, also known as an Environmental Audit or Sustainability Audit, is a comprehensive assessment of an organization's environmental performance and sustainability practices. It involves the evaluation of various aspects of an organization's operations to identify areas where improvements can be made to reduce environmental impacts, conserve resources, and enhance sustainability. Green audits assess an organization's compliance with environmental regulations and standards. They evaluate the organization's environmental management systems, policies, and procedures. The audit examines resource consumption, including energy, water, raw materials, and waste generation. It identifies opportunities to optimize resource use and reduce waste. Organizations are encouraged to measure, report, and reduce their carbon emissions. Green audits go beyond compliance and aim to enhance sustainability. They evaluate an organization's efforts to support social responsibility and economic viability.

A Green Audit is a valuable tool for organizations looking to enhance their environmental and sustainability performance. It helps identify areas for improvement, reduces risks, and positions the organization for long-term success in a world increasingly focused on environmental responsibility. Implementing the findings and recommendations from a Green Audit can lead to cost savings, improved reputation, and a positive impact on the planet. Therefore, organizations should consider conducting regular Green Audits as an integral part of their sustainability strategy.

Shri Mata Vaishno Devi University (SMVDU) Katra (J&K) is deeply concerned and unconditionally believes that there is an urgent need to address these fundamental problems and reverse the trends. SMVDU is premium institute in India and started on working on 'The Green Campus' by promoting the various steps for the environment protection and sustainability.

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1. INTRODUCTION

In an era marked by increasing environmental concerns, growing awareness of sustainability issues, and stringent regulations, organizations across the globe are acknowledging the importance of conducting Green Audits. Green Audit, also known as an Environmental Audit or Sustainability Audit involves comprehensive assessment of an organization's environmental performance and sustainability practices. It is an essential tool for the organizations who wish to evaluate, and showcase their commitment to environmental responsibility and sustainable practices.

The main goal of carrying out a Green Audit is to evaluate an organization's impact on the environment to identify areas for improvement and to launch a roadmap for sustainable growth. By analyzing various aspects of an organization's operations, a Green Audit provides a complete view of its environmental footprint i.e. resource consumption and waste generation to carbon emissions and social responsibility.

Shri Mata Vaishno Devi University (SMVDU) has been established under THE JAMMU AND KASHMIR SHRI MATA VAISHNO DEVI UNIVERSITY ACT, 1999.an Act of the J&K State Legislature (ACT No. XII of 1999 dated 12th May 1999) as an autonomous, highly Technical & fully Residential University.

The University started functioning as an academic unit in Aug 2004 when it was inaugurated on 19th August 2004 at the hands of the then Hon'ble President of India Dr. A.P.J Abdul Kalam. Dr. Kalam also delivered the first lecture to the students at the University. The University isapproved by UGC under Section 2(F) & Section 12(B) of UGC Act of 1956.

The technical programs of the University are recognized by AICTE (All India Council of Technical Education) while Architecture program is recognized by Council of Architecture. The University receives funding from Shri Mata Vaishno Devi Shrine Board, an autonomous Board set up in August 1986 under the provisions of The Jammu and Kashmir Shri Mata Vaishno Devi Shrine Act, 1986 of J&K State Legislature. The University also gets funds from J&K Government. University is also a participating institution under the World Bank assisted TEQIP-III Project of MHRD, Government of India and has been getting funds under this scheme.

SMVDU located at a distance of 45 km from Jammu Airport and 14 km short of the holy town of Katra, the university is situated on a plateau surrounded by mountains on three sides in the foothills

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of the Trikuta Range where the shrine of Mata Vaishno Devi is located. It is a self- contained township with most facilities available in-house. University is in the proximity of the Trikuta foothills. The 369.60-acre (1.49 km²) University campus is divided into various blocks suchas the Academic Block, Administrative Block, Central Library, Hostels & Residential Area. The various schools of study consist of well equipped, lecture and seminar halls, conference rooms, departmental lab and computer lab and all modern facilities.

Vision and Mission statement of University

Vision of the University

Establishment of a Scientific & Technical University of Excellence to nurture young talented human resource for the service of Indian Society & World at large preserving the integrity and sanctity of human values.

Mission of the University

The Mission of the University is the pursuit of Education, Scholarship and Research and its application to the Society at highest international levels of excellence.

2. TOTAL CAMPUS AREA & UNIVERSITY BUILDING SPREAD AREA

1	Total Area of Land	369.60 Acres
2	Built Up Area	1790583 m ²

Total no. of Buildings in campus

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Sr. No.	Name of Buildings	Number
1	Academic Blocks	12
2	Boys Hostels	5
3	Girls Hostels	2
4	Residential Buildings	43
5	Central Facilities	9
	Total	71

*Married accommodation for Ph.D scholars and Academic Block are under construction

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Academic Blocks

- (i) Faculty of Engineering
- (ii) Faculty of Management
- (iii) Faculty of Science
- (iv) Faculty of Humanities and Social Sciences
- (v) School of Biotechnology
- (vi) School of Physics
- (vii) School of Mechanical Engineering
- (viii) School of Electronics & Communication Engineering
- (ix) School of Mathematics
- (x) Central Workshop
- (xi) School of Architecture & Landscape Design
- (xii) School of Civil Engineering
- (xiii) School of Electrical Engineering
- (xiv) School of Energy Management
- (xv) School of Philosophy and Culture

Boys Hostels

Sr. No.	Name of Hostel	Capacity
	Trikuta Boys Hostel	150
2	Kailash Boys Hostel	150
3	Nilgiri Boys Hostel	311
4	Vindhyanchal Boys Hostel 312	
5	Basohli Boys Hostel Block	546
	Total Capacity	1469

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Girls Hostels

Sr. No. Name of Hostel		Capacity	
1	Shivalik Girls Hostel	655	
2	Vaishnavi Girls Hostel	293	
	Total Capacity	948	

Residential Buildings

- (i) Level I = 11 (11 Qtrs.)
- (ii)Level II = 19 (56 Qtrs.)
- (iii)Level III = 8 (72 Qtrs.)
- (iv) Level IV = 3 (36 Qtrs.)
- (v) Level V = 2 (24 Qtrs.)

Total Buildings =

43 Total No. of

Qtrs. = 199

Other Buildings (Central Facilities)

- (i) Medical Aid Centre
- (ii) Dining Hall
- (iii) Gym
- (iv) Shopping Complex
- (v) Telephone Exchange
- (vi) Guest House
- (vii) Central Store

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(viii) Auditorium

(ix) Sports Complex

3. WATER QUALITY

Safe and readily available water is important for public health, whether it is used for drinking, domestic use, food production or recreational purposes. SMVDU provides good quality of waterto students, staff etc. The Water Supply System in SMVDU and drinking water quality report areattached herewith.

Water Supply System in

SMVDU<u>At Jhajjar Nallah</u>

(i) Dug wells	= 02 nos.
(ii) Bore wells	= 04 nos. of 200mm diameter
(iii)Sump tank	= 20000 Gallons capacity
(iv) Sump tank	= 75000 Gallons capacity

In SMVDU Campus

(i) Over Head Tanks	= 02 nos. (1.5 Lakh Gallons capacity each)
(ii) Ground reservoir	= 01 (50000 Gallons capacity)

Purified water is being provided by way of:

- (i) Installation of RO in Basohli hostels C&D
- (ii) Water filters at various hostels and academic blocks

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4. AIR QUALITY MONITORING

SMVDU located at a distance of 45 km from Jammu Airport and 14 km short of the holy town of Katra, the university is situated on a plateau surrounded by mountains on three sides in the foothills of the Trikuta Range where the shrine of Mata Vaishno Devi is located. It is a self-contained township with most facilities are available in-house. As SMVDU campus is located by hills and forest around it, the quality of air is very good. The students of campus are not using vehicles so also air pollution is negligible in the campus.

5. SOLID WASTE MANAGEMENT POLICY

Solid Waste Management is one of the most obvious areas in the sustainability agenda. Good waste management practices including infrastructure provision and awareness raising/promotional activities, demonstrates a commitment towards improvement in environmental performance by staff, students and visitors, offers an opportunity for people to help make a difference, and get involved in sustainability issues and environmental protection activities.

Providing a good waste management infrastructure and promotional/awareness raising information and activities demonstrates our commitment to all SMVD University campus users and offers an opportunity for people to easily get involved in environmental protection and sustainability initiatives.

SMVDU are committed to keep our environment clean and shall observe following practices to segregate waste at source. We will put the different type of waste in appropriate BIN / Yard as per following convention.

S. No.	Bin / yard Name	Bin- colour	Waste type	Use disposal method
1	Paper	Blue	All type of papers and paper products like cups / plates	Shall be send to vendors through auction or as
2	Plastic	Yellow /orange	All type of plastic products Like wrappers, bags, toys,	Shall be send to vendors Through auction or as Appropriate for recycling

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3	Organic (biodegradable)	Green	Peels of fruits and Vegetables, left over food Stuff, tissue papers, leaves, Horticulture waste	Shall be disposed on Campus through Composting
4	Domestichazardous	Red	Metals, brocken glass, Glass bottles, batteries, Sharp objects, cold drink Cans	Shall be send to vendors Through auction or as Appropriate for recycling And/or disposal
	Bio-medical	Black/ metal (ss)	Waste from medical aid Center, sanitary napkins / Pads, diapers, used cotton	Shall be disposed on Campus through burning In designated pits
6	E-waste	NA	Obsolete computers, Monitors, printers, mouse, Keyboards, and other it Related products	Repairable it products or Products in working Condition but of obsolete Nature / specifications Shall be donated to Underprivileged children And remaining Irreparable items shall be Send to vendors through Auction or as appropriate For recycling

1. PAPER: All type of Papers and Paper Products like Cups / Plates etc. (Shall be send to Vendors through auction or as appropriate for recycling)

2. PLASTIC: All type of Plastic Products like wrappers, bags, toys, plastic bottles, etc.

(Shall be send to Vendors through auction or as appropriate for recycling)

3. ORGANIC (Biodegradable): Peels of Fruits and Vegetables, Leftover food stuff, Tissue Papers, leaves, horticulture waste etc (Shall be disposed on campus through composting)

4. Domestic HAZARDOUS: Metals, Brocken Glass, Glass Bottles, Batteries, Sharp Objects, Cold Drink Cans (Shall be send to Vendors through auction or as appropriate for recycling)

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5. Bio-Medical Waste: Waste from Medical Aid Center, Sanitary Napkins / Pads, Diapers, Used Cotton etc. (Shall be disposed on campus through burning in designated Pits)

6. E – Waste: Obsolete computers, printers and other IT related products shall be send to Vendors through auction or as appropriate for recycling).

7. RAINWATER HARVESTING IN SMVDU CAMPUS

(i) Collection of roof top rainwater through rainwater pipes and channeling to the rain water tank in Basohli hostel C&D Block and Academic area Block A

(ii) Check dams are built at gorge to recharge the rainwater and to prevent soil erosion

8. USE OF SOLAR ENERGY IN SMVDU CAMPUS

Solar Water Heating System

(Costing Rs. 32 Lakhs)

(i) Solar Water heating with backup system 9 units @ 2000 ltrs. capacity each i.e. 18000 ltrs. capacity is being installed in Shivalik hostel new Block B

Solar Power plant

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(Costing Rs. 166.05 Lakhs)

 Solar Power plant Grid connected of cumulative capacity 900 kWh on 13 buildings has been installed in SMVDU campus.

9. Energy saving by replacing conventional lights by LED lights in SMVDU campus

Compared to traditional incandescent, energy-efficient lightbulbs such as halogen incandescent, compact fluorescent lamps (CFLs), and light emitting diodes (LEDs) have the following advantages:

- Typically use about 25%-80% less energy than traditional incandescent
- Can last 3-25 times longer.

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