



GOAL 7

SUSTAINABLE AND CLEAN ENERGY

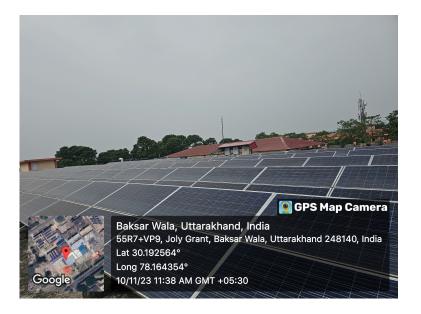
Swami Rama Himalayan University (SRHU), with its focus on integrating holistic education and sustainable practices, recognizes the importance of SDG-7 in shaping a sustainable future. The university is committed to advancing energy solutions that are not only accessible and reliable but also environmentally responsible. Through cutting-edge research, community-based initiatives, and collaboration with local and global stakeholders, SRHU seeks to contribute meaningfully to the achievement of SDG-7, fostering a future where clean energy is universally accessible, empowering individuals and communities, and supporting global sustainability goals. The institute has facilities for alternate sources of energy and energy conservation measures.





1. Renewable Energy Integration

Solar Power Systems: Swami Rama Himalayan University actively promotes solar energy systems as part of its commitment to SDG-7. By harnessing solar power, the university reduces its carbon footprint, ensures sustainable energy use, and supports the transition to clean energy. This initiative contributes to environmental sustainability and provides a model for renewable energy adoption. In the face of climate change and the increasing global concern for sustainable energy sources, the University is taking the lead in adopting eco-friendly practices. One remarkable initiative in this direction is the installation of two rooftop solar power plants (**1500 KW**) at the Swami Rama Himalayan University campus in the year 2017. The university has a power purchase agreement with the ReNew Solar Power Ltd to provide the electricity at a subsidized rate.SRHU plans to expand its renewable energy initiatives by another 1000 KW. The agreement has been signed with M/S Bakshi Engineering Works Dehradun for the Rooftop solar power plant. For more info



Solar panels on the roof of the Himalayan College of Nursing

Waste to energy production: Biogas plant





The university has built a **4 M3/day Biogas pl**ant on campus that uses cow dung from its dairy and vegetable waste from the guest house kitchen to produce biogas. This initiative supports national energy-saving efforts by saving **55.2 kgs of LPG monthly (662.4 kgs annually).** The biogas produced is used for cooking in the guest house kitchen, promoting sustainability through organic waste recycling. For more info



Biogas plant (Behind the university guest house)





2. Energy Efficiency Measures

Use of LED bulbs/power-efficient equipment

SRHU has adopted LED lights for sustainable campus lighting, reducing electricity consumption and carbon footprint. LEDs consume up to 80% less electricity, reducing greenhouse gas emissions. The university has also implemented smart lighting solutions using sensors and automated controls to minimize energy waste. Brushless Direct Current (BLDC) fans are also adopted for improved energy efficiency and comfort. BLOC fans consume less electricity and deliver superior airflow, resulting in cost savings and a more sustainable campus operation. Additionally, SRHU has implemented BEE star-rated air conditioners, promoting energy efficiency, cost savings, and improved indoor comfort. Lower electricity bills can be redirected towards sustainability initiatives or academic programs. For more info

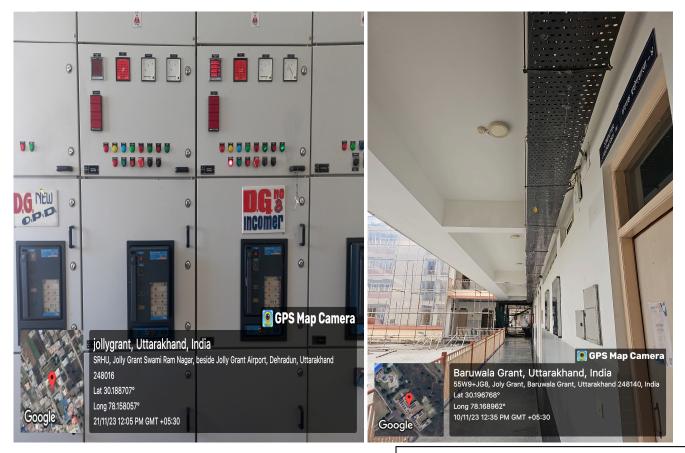
Sensor-Based Energy Conservation

SRHU is keenly focusing on effective energy conservation within the university campus. A few locations in the university campus have passive infrared (PIR) sensors installed, to measure the light (IR) emitted by things within their range of view. For more info









Diesel Generator Set panels with Automatic mains failure (AMF) and load balancing (Behind Main Hospital Building) Motion based sensor lights at HSST building





3. Sustainable Energy Infrastructure

Green Practices at Swami Rama Himalayan University

At our university, sustainability is woven into the fabric of our operations. We are dedicated to implementing robust green practices that encompass energy efficiency, waste reduction, and community engagement. By fostering a culture of environmental stewardship, we strive to create a campus that not only supports academic excellence but also prioritizes the well-being of our planet for current and future generations.

Video of SRHU Campus

Some of the practices for fostering a green campus are:

1	Restricted entry of automobiles	For more info
2.	Battery-powered vehicles	For more info
3.	Pedestrian-friendly pathways	For more info
4.	Ban on use of Plastics	For more info
5.	Landscaping with trees and plants	For more info







AUDIT CERTIFICATE

PRESENTED TO

Swami Rama Himalayan University

Swami Ram Nagar, Doiwala, Dehradun, Uttarakhand, India

Has been assessed by Ecoscience Consultancy for the comprehensive study of environmental impacts on institutional working framework to full the requirement of

Green Audit

(2022-23)

The green initiatives carried out by the university have been verified and found satisfactory in the report submitted.

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



Date: 21/07/2023

















SAVE THE ENVIRONMENT (STE)

(A Society for Research, Awareness & Social Development)

Certificate of Appreciation

is awarded to

SWAMI RAMA HIMALAYAN UNIVERSITY, DEHRADUN

for

CLEAN & GREEN CAMPUS

and exemplary & continuous efforts for maintaining the environment friendly practices in the campus for the year 2022-2023.

Chhanda Basu

(Chand Basu)

Secretary
General Secretary
AVE THE ENVIRONMENT (STE)



Bhipa Kevisa

(Dr. Kshipra Misra)

President
PRESIDENT
SAVE THE ENVIRONMENT (STE)



उपलब्धि । सीआईआई की ओर से ग्रीन प्रैक्टिस अवार्ड की सर्विस कैटेगरी में एसआरएचयु को मिला अवार्ड

एसआरएचयू को मिला सीआईआई गोल्ड अवार्ड

डोईवाला, संवाददाता। स्वामीराम हिमालयन विश्वविद्यालय जौलीग्रांट ने भारतीय उद्योग परिसंघ की ओर से आयोजित कार्यक्रम में 'ग्रीन प्रैक्टिसेस अवार्ड' की सर्विस कैटेगरी में गोल्ड अवार्ड जीता है।

गुरुग्राम में हुए कार्यक्रम में एसआरएचयू का यह अवार्ड मिला। कुलाधिपति डॉ. विजय धस्माना ने गोल्ड अवार्ड को विवि की बड़ी उपलब्धि बताया। कहा कि इस कैटेगेरी में यह अवार्ड हासिल करने वाला विवि उत्तर भारत का एकमात्र संस्थान है।

शिक्षा, स्वास्थ्य और सामाजिक विकास के क्षेत्र में आयाम स्थापित कर चुका एसआरएचयू हरित

वेस्ट पेपर रिसाइक्लिंग युनिट

कुलाधिपति डॉ.,विजय धरमाना ने कहा कि बिना पेड़ काटे अगर कागज व बाकी स्टेशनरी की मांग पूरी हो जाए, तो इससे बेहतर और कुछ नहीं हो सकता। विवि में पैपरलेस कार्य प्रणाली को अपनाया गया है, लेकिन इसके बावजूद कई ऐसे काम में हैं, जिनमें कागज का इस्तेमाल अनिवार्य हो जाता है। इसलिए विश्वविद्यालय में यूज्ड पेपर (रही) को रिसाइकिल करने का प्लांट लगाया गया है। भविष्य में इलेक्ट्रॉनिक कचरे की समस्या दुनियाभर के लिए बड़ी समस्या बनती जा रही है। एसआरएचयू परिसर में ई-वेस्ट स्टोर बनाया गया है।

गतिविधियों, उर्जा संरक्षण, जल संरक्षण, पर्यावरण संरक्षण के क्षेत्र में भी एक मॉडल विश्वविद्यालय के रूप में संस्थापित हो चुका है। करीब 200 एकड़ के हरे-भरे विवि कैंपस में जल और ऊर्जा संरक्षण सहित सभी प्रकारों के कुड़ा निस्तारण जैसे प्लास्टिक व ई-वेस्ट इत्यादि हेतु विभिन्न योजनाएं संचालित हैं। विवि में समय-समय पर वृहद पौधरोपण अभियान भी संचालित किया जाता है। कुलाधिपति जें. विजय धस्माना ने बताया कि सिंगल लेअर प्लास्टिक के रीसाइक्लिंग की तरफ कदम

ऊर्जा संरक्षण पर भी जोर

कुलाधिपति डॉ.विजय धस्माना ने बताया कि ऊर्जा संरक्षण के महत्व को समझते हुए वर्ष 2007 में पहला कदम बढ़ाया था। तब हिमालयन हॉस्पिटल, कैंसर रिसर्च इंस्टीट्यूट सहित सभी हॉस्टल में सोलर वाटर हीटर पैनल लगाए गए थे।

बढ़ाते हुए एसआरएचयू में प्लास्टिक बैंक बनाया गया है। सिंगल लेअर प्लास्टिक के इस्तेमाल पर रोक के लिए विवि में पहले से ही अभियान चलाया जा रहा है। आधिकारिक कार्यों के लिए इलेक्ट्रिक वाहनों का संचालन शुरू किया गया है।



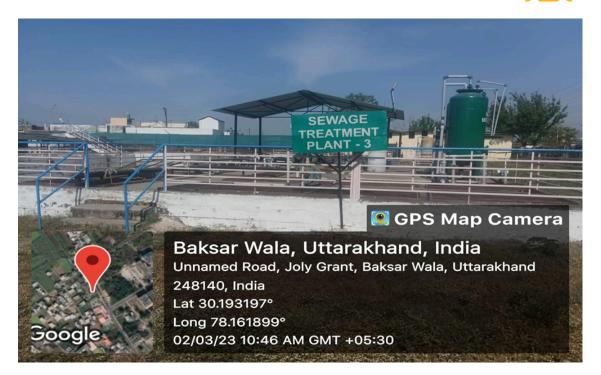


1. Liquid waste management : STP

The sewage from the campus, including the hospital, undergoes treatment through an advanced Sewage Treatment Plant (STP) with a capacity of 1 MLD employing MBBR technology and extended aeration-activated sludge process. The treated water meets quality standards set by the state pollution control board and is used for irrigation in parks and green areas on campus, ensuring environmental compliance and sustainability.

S.No.	Name of the policy	Link to the relevant document
1.	Policy for General Waste Management	For more info
2.	Policy for Bio-medical Waste Management	For more info
3.	E-Waste Management Policies	For more info





Sewage Treatment Plant (Capacity: 1 MLD)

2. Wastewater treatment: ETP

The university has prioritized sustainability with the establishment of a 90 KLD Effluent Treatment Plant (ETP) on campus. This plant addresses the significant daily wastewater generated from various campus activities, including laboratories and laundry. By treating this wastewater, SRHU mitigates environmental risks and ensures public health and campus aesthetics are maintained. The treated water is efficiently recycled for non-potable uses such as irrigation, conserving valuable freshwater resources and supporting SRHU's commitment to environmental stewardship.





Baksar Wala, Uttarakhand, India
Unnamed Road, Joly Grant, Baksar Wala, Uttarakhand
248140, India
Lat 30.193194°
Long 78.161845°
02/03/23 10:46 AM GMT +05:30

Effluent Treatment Plant (Capacity: 90 KLD)

3. Conservation of water (Rain Water Harvesting)

Rainwater from the medical college building's roof is collected and stored in a 150 KL underground tank. This water is used for toilets in the medical and nursing colleges, as well as for cleaning purposes. Excess rainwater from the campus is directed to infiltration wells across fourteen locations, allowing it to recharge underground aquifers. This sustainable practice supports groundwater management and conservation efforts on campus.



Rainwater harvesting pits with filter bed recharge near Cardiac OPD building





4. Recycling and waste management

SRHU operates an 8 kg per day waste paper recycling plant on campus to manage paper waste from various offices and schools. Recycled handmade paper is used to create envelopes used within university offices. Additionally, biodegradable waste collected across the campus is processed in a compost pit to produce organic fertilizer for the university nursery and gardens. Furthermore, SRHU operates its own Bio-Gas plant near the university guest house, utilizing cow dung from the campus dairy and vegetable waste from the guest house kitchen to produce biogas for cooking and organic waste recycling purposes.



Waste paper recycling unit

5. Solid Waste Management:

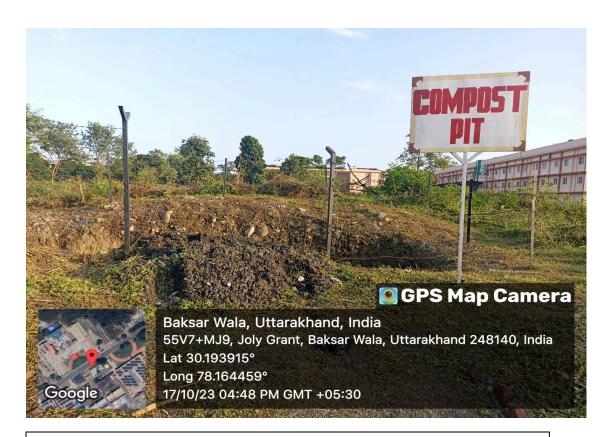
The university effectively manages solid waste by segregating biodegradable and non-biodegradable materials at the source, using green and black bins placed throughout the campus. Housekeeping staff collect the waste daily in color-coded bags and transport it to a central collection site. Biodegradable waste is composted on-site to create manure, while a biogas plant generates biogas from cow dung and organic kitchen waste.







Collection of solid (general) waste from residences and hostels



Compost pit for disposal of biodegradable waste





6. Vehicles that do not emit gases: Battery powered vehicles



7. Restricted entry of automobiles:

There is restriction on the entry of vehicles in the campus to reduce air & noise pollution within the campus.







- 8. Regular audits are carried out in the University:
 - a. Environmental Audit (Certificate)







b. Green Audit (Certificate)



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

ECOSCIENCE CONSULTANCY:
Lakshmi Vihar Colony, Bahadrabad
Dr. Gurpreet Shariwar, Uttarakhand-249402 (Authorized Signatory)
Lead Auditor - Green & Environment Audits

Date: 21 07 2023















c. Energy Audit (Certificate)



9. There is **ban on single use plastic** in the university







10. Landscaping with trees and plants









Landscape between Medical College and Himalayan Hospital









Gazebo at park area near Swami Rama Centre Trees





4. Energy Awareness and Education

Swami Rama Himalayan University has conducted various environmental promotional activities.

List of beyond the campus environmental promotion activities of Swami Rama Himalayan University

SN	Activities	Date &
		Duration
1	Training on ODF Sustainability, Solid & Liquid Resource Management and Behavioural Change	2 - 4 /07/2018
2	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years)
3	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years)
4	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years
5	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years
6	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years
7	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years
8	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years
9	Implementation of water Supply, spring shed and Sanitation Schemes	10/2019 – 12/ 2022 (3 Years)
10	Preparation of Village Action Plan (VAP) and Formation of Village Water & Sanitation Committee (VWSC)	5/ 2020
11	Training on Participatory Planning, Implementation and Operation & Maintenance for Har Ghar Jal	4-8/10/2021
12	Training on Innovative Technologies for Har Ghar Jal	7-11/12/2021
13	Online Training Program on Long- term Sustainability, Security, Recharge and	15-16/12/2021



स्वामी राम हिमालयन विश्वविद्यालय Swami Rama Himalayan University

	Management of Drinking	
	Water Sources5	
14	Online Training Program on	21-22/12/2021
	Rainwater Harvesting &	
	Ground Water Recharge	
15	3 days Training program on	27-29/12/2021
	key components of Jal Jeevan	
	Mission (JJM)	
16	Online Training Program on	27-28/01/2022
	Grey Water Management	
17	Training on Jal Jeevan Mission	24-27/02/2022
	for Har Ghar Jal	
18	Online Training Program on	8-9/03/2022
	Innovative Technology	
19	3 days training and Capacity	5-7/04/2022
	Building on Jal Jeevan Mission	
	for Har Ghar Jal	
20	2 days Training Capacity	13-14/06/2022
	Building of Implementation	15 11 50 2022
	Support Agencies (ISAs) under	1
	Jal Jeevan Mission	1
21	Training on Issues, Challenges	30/8-1/9/2022
21		30/8-1/9/2022
	and Solutions in Spring based	1
22	Water Supply Systems	12-13/10/2022
22	2 days Training & Capacity	12-13/10/2022
	Building of Implementation	1
	Support Agencies (ISAs) under	1
	Jal Jeevan Mission	
23	One day training program on	8/12/2022
	Jal Jeevan Mission (JJM) at	1
	Nyay Panchayat Level	
24	2 days training & Capacity	20-21/12/2022
	Building on Change	1
	Management (Role as Public	1
	Health Engineers) And	1
	Activities for Har Ghar Jal	
25	Training on WASH Services	27-28/01/2023
	during Disaster and	
	Emergencies	
26	One day training program on	5/5/2023
	Jal Jeevan Mission (JJM) at	
	Nyay Panchayat Level	
	Date: 05 May 2023	
27	One day training program on	6/5/2023
	Jal Jeevan Mission (JJM) at	J. J. 2023
	Nyay Panchayat Level	
	Date: 06 May 2023	
	Date: 00 May 2023	





28	One day training program on	25/5/2023
	Jal Jeevan Mission (JJM) at	
	Nyay Panchayat Level	
29	Training on Direct injection of	21-23-06/2023
	treated rainwater in aquifer	
	recharge, revival of springs &	
	spring shed management,	
	spring-based water system and	
	innovative technologies for	
	mountainous area	
30	Training on Issues, Operation	26-28/06/2023
	and Maintenance (O&M) of	
	water supply systems, Utility	
	approach & tariff collection	
	mechanism	
		22/01/2020
31	Swachhta Pakhwada	23/01/2020
32	Plantation Drive at Gauhari	20/09/2023
	Mafi Village, Raiwala,	
	Dehradun	
	LACIII dolliii	

For more info





6. Sustainable Transport

Swami Rama Himalayan University already offers facilities to reduce its carbon footprint, using electric vehicle charging stations. Public transport access and pedestrian-friendly infrastructure are in place, while flexible schedules and sustainability awareness campaigns further promote eco-friendly commuting options for students and staff.

Vehicles that do not emit gases: There are 2 Battery powered vehicles and Bicycles at Swami Rama Himalayan University.









7. Policy and Governance for Sustainable Energy

- The campus is eco-friendly and energy-efficient with facilities like solar energy usage. The solar power
- plants installed in the campus generate 1500 KWH electricity, producing 16% of the electricity used.
- University prioritizes environmental sustainability by installing:
- Rooftop solar power plants with 1500 KW capacity.
- LED lights accounting for 80% of lighting.
- BEE Star-rated appliances.
- Comprehensive waste management system is in place for treatment/ disposal of solid, liquid,
- Biomedical, e-waste, hazardous chemicals, and radioactive wastes.
- Waste recycling is done through a paper recycling unit and compost pit.
- Water conservation facilities are available through Rainwater harvesting system, borewell recharge, STP, ETP, etc.
- The drinking water is drawn through 03 borewells and supplied through well-maintained water distribution system.
- To maintain a green campus, University has incorporated initiatives such as restricted vehicle entry, battery-powered vehicles, pedestrian-friendly pathways, and ban on single-use plastic and landscaping with trees and plants.





Reduced Carbon Footprint in Commuting:(Certificate)

