GOAL 13

CLIMATE ACTION

Swami Rama Himalayan University (SRHU) actively aligns its initiatives with Sustainable Development Goal 13: Climate Action, emphasizing environmental stewardship and resilience. The university integrates sustainability into its academic and research programs, fostering awareness and innovation in climate solutions. SRHU has implemented energy-efficient practices, including renewable energy adoption and waste reduction measures, to minimize its carbon footprint. Through tree plantation drives, water conservation projects, and eco-friendly infrastructure, the university demonstrates its commitment to environmental preservation. Additionally, SRHU engages students, faculty, and the community in climate literacy programs, encouraging collective action to combat climate change and build a sustainable future.

Climate Change: Research and Innovation

Swami Rama Himalayan University (SRHU) is committed to tackling climate change through research, policy, and partnerships, aligning its initiatives with Sustainable Development Goal 13: Climate Action. Climate change poses one of the most devastating threats to our planet, necessitating urgent and collective action to mitigate its impact. At SRHU, education and research are central to addressing climate challenges, fostering innovative solutions, and building resilience against its effects. Through scholarly research, publications, and collaborative efforts, the university promotes global cooperation to combat climate change. Additionally, SRHU demonstrates its dedication to environmental sustainability through waste management procedures, energy conservation efforts, and environmental education programs. By integrating sustainable practices into its operations and promoting partnerships, SRHU contributes significantly to achieving the Sustainable Development Goals and creating a sustainable future for all. Faculty members and researchers consistently publish their findings in peer-reviewed journals, showcasing innovative approaches to environmental challenges and climate change. These publications focus on critical topics such as green nanotechnology, sustainable food systems, renewable energy resources, water conservation and wastewater treatment, rainwater harvesting, and the effects of climate change (Scopus - Swami Rama Himalayan University).

Negi, G.S., Mishra, A., Gupta, M.K., Saini, D.K.J.B., Joshi, K.P., Microgrid digital twins: concepts and their controlling through multi-agent systems, International Journal of High Performance Systems Architecture, 2023.

Das, D.S., Saini, D.K.J.B., Joshi, K.P., ...Joshi, P., Yedage, S.L., Chameleon-ACO Hybrid: Optimizing Power-Efficient Clustering and Routing in Wireless Networks, Proceedings - 2023 3rd International Conference on Ubiquitous Computing and Intelligent Information Systems, ICUIS 2023, 2023.

Rajput, V., Dhatwalia, V.K., Vlaskin, M.S., Nanda, M., Verma, M., Hydrothermal Liquefaction of Waste Agricultural Biomass for Biofuel and Biochar, Agriculture Waste Management and Bioresource: The Circular Economy Perspective, 2023.

Malik, S., Kishore, S., Dhasmana, A., ...Minkina, T.M., Rajput, V.D., A Perspective Review on Microbial Fuel Cells in Treatment and Product Recovery from Wastewater,
Water (Switzerland), 2023.

Gupta, A.K., Pratiksha,, Das, T., Ranjan, R., Mishra, S., Novel food materials: Fundamentals and applications in sustainable food systems for food processing and safety, Food Bioscience, 2023.

Bhandari, G., Dhasmana, A., Chaudhary, P., Malik, S., Sláma, P., A Perspective Review on Green Nanotechnology in Agro-Ecosystems: Opportunities for Sustainable Agricultural Practices & Environmental Remediation, Agriculture (Switzerland), 2023.

Climate Change Awareness and Education

Swami Rama Himalayan University (SRHU) demonstrates a strong commitment to Sustainable Development Goal 13: Climate Action by embedding climate action perspectives into its academic programs, research, and extension activities. The university's Environmental Science course is meticulously designed to formulate and implement academic programs and campus-based projects that focus on environmental sustainability. As part of its holistic educational approach, SRHU mandates a core course on 'Environmental Studies' for all undergraduate programs, ensuring that students gain a foundational understanding of environmental issues, sustainability, and climate change in their very first year. This course also highlights the critical connections between climate change and the Sustainable Development Goals (SDGs), fostering climate literacy and empowering students to become proactive contributors to global climate action. The specific course in various programs of the university that also address the climate change and environmental issues are listed below:

- Fundamentals of Environmental Science
- Introduction to Environmental
- Occupational, Nutritional and Genetic Epidemiology
- Community Medicine
- Environment and occupational epidemiology
- Environmental Pollution and Human Health
- Community Health Nursing-I (Environmental Science & Epidemiology)
- Community Health Nursing – II
- Energy & Environment
- Environmental Biotechnology
- Microbial Ecology
- Environmental Microbiology
- Environmental Biochemistry & Toxicology
- Disaster Management

Through these initiatives, SRHU integrates sustainability into its educational framework, equipping students with the knowledge and skills necessary to address the challenges of climate change.

Sustainable Campus Practices

Carbon Footprint Reduction:

The Swami Rama Himalayan University (SRHU) is committed to reducing its carbon footprint through a comprehensive strategy that includes measuring and reducing emissions across several key areas. The university conducts carbon audits to monitor its direct and indirect emissions, providing a baseline for progress. Key initiatives include the implementation of energy-efficient building technologies, such as LED lighting and smart HVAC systems, and the design of new green buildings certified for sustainability. The university has invested in renewable energy systems, including solar panels, and entered into power purchase agreements for clean energy. Transportation efforts focus on promoting low-carbon options, including walking, cycling, electric vehicles, and public transport. Waste management initiatives prioritize recycling and composting to reduce landfill contributions. Through these efforts, SRHU is striving to lead by example in mitigating climate change and supporting global sustainability goals. SRHU consistently adheres to audit procedures for energy, environment, and green campus initiatives. Through these efforts, the University upholds quality standards and ensures compliance with ISO regulations set by government-approved agencies. Notably, the University maintains an active ISO 14001:2015 certification in its records.

ECOSCIENCE CONSULTANCY

CARBON FOOTPRINT CERTIFICATE 2022-23

PRESENTED TO

Swami Rama Himalayan University

Swami Ram Nagar, Doiwala, Dehradun, Uttarakhand, India

Scope of GHG emissions	tCO_2e	%
Direct emissions to air	724.5	8.67
Indirect emissions from purchased energy	9.2	0.11
Other indirect emissions	7613.9	91.2
Total tCO_2e	**8347.6**	

ECOSCIENCE CONSULTANCY
Lakshmi Vihar Colony, Bahadrabad
Haridwar, Uttarakhand- 249402

Dr. Gurpreet Singh
(Authorized Signatory)
Lead Auditor – Green & Environment Audits
Ecoscience Consultancy, Uttarakhand

Date: 21/07/2023

Certificate of Registration

This is to Certify that
Environmental Management System of

SWAMI RAMA HIMALAYAN UNIVERSITY (SRHU)

SWAMI RAM NAGAR JOLLY GRANT, DOIWALA, DEHRADUN,
UTTRAKHAND - 248140, INDIA.

has been assessed and found to conform to the requirements of

ISO 14001:2015

for the following scope :

PROVIDING EDUCATION UNDERGRADUATE (UG), POSTGRADUATE (PG) AND DOCTORAL DEGREE PROGRAMS, RESEARCH, PHD AND HEALTH CARE SERVICE.

Certificate No	: **23EELG49**		
Initial Registration Date	: 22/05/2023	Issuance Date	: 22/05/2023
Date of Expiry	: 21/05/2024	Date of Re-Cert	: 21/05/2026

mms EGAC Accredited EMS Certification CAB # 118005 IAF MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT

Director

Magnitude Management Services Pvt. Ltd.
Third Floor, A-60, Sector-2, Noida, Gautam Budh Nagar, U.P.-201301, India
e-mail: info@mmscertification.com, website: www.mmscertification.com

* Subject to Successful Surveillance Audit and one surveillance audit is not allowed to be conducted, this certificate shall be suspended/withdrawn.

Certificate Verification: Please Re-check the validity of certificate at http://www.mmscertification... or www.mmscertification.com at Active Clients

Certificate is the property of Magnitude Management Services Pvt. Ltd. and shall be ... immediately when demanded

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.

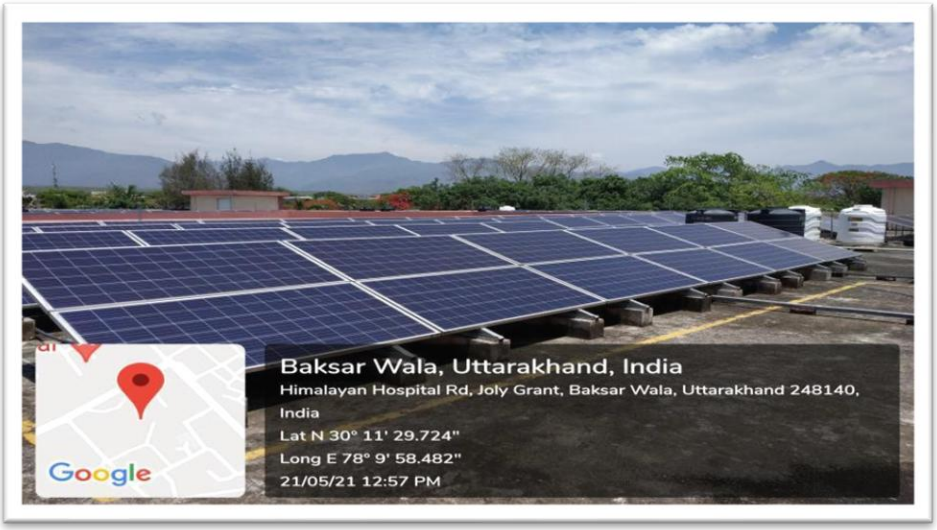
ECOSCIENCE CONSULTANCY
Lakshmi Vihar Colony, Bahadrabad
Haridwar, Uttarakhand- 249402

Dr. Gurpreet Singh
(Authorized Signatory)
Lead Auditor – Green & Environment Audits

Date: 21/07/2023

Renewable Energy Adoption

SRHU has made significant progress in adopting renewable energy, particularly through its rooftop solar power initiative. The university has installed a 1.5 MW on-grid solar power plant, which has contributed substantially to its sustainability goals. Over the past three years, the plant has generated a total of 61,12,417 kWh, resulting in savings of Rs. 1.96 crore. Notably, 13.99% of the university's total electrical demand has been met through solar energy during this period. These initiatives not only reduce the university's carbon footprint but also set a model for other academic institutions in the transition to sustainable energy systems.



Use of renewable energy in the campus

Energy Efficiency Initiatives at SRHU: A Commitment to Sustainable Campus Operations

SRHU has implemented several energy efficiency initiatives to reduce its environmental footprint and promote sustainability on campus. One of the key efforts includes the widespread installation of LED lighting across the university, which has significantly reduced energy consumption and greenhouse gas emissions. This transition has led to a reduction in the electrical load of conventional lighting from 380 kW to 219 kW. Additionally, motion sensor-based LED lights have been installed in the college and hostel corridors, further minimizing energy wastage.

Energy efficient VFD driven pumps are being used in water cooled chillers in central air conditioning

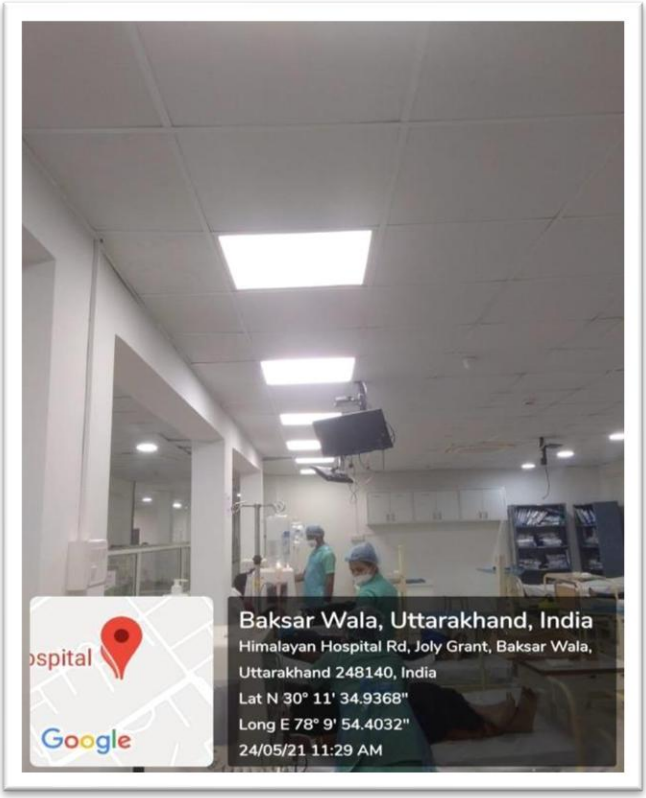
In the past three years, the university has made substantial progress in replacing conventional ceiling fans with energy-efficient 32-watt BLDC fans. This replacement of 2000 fans has saved a total of 3,04,608 kWh of electricity. Another significant step in energy conservation has been the replacement of old desktop computers with energy-efficient 120-watt models, resulting in a saving

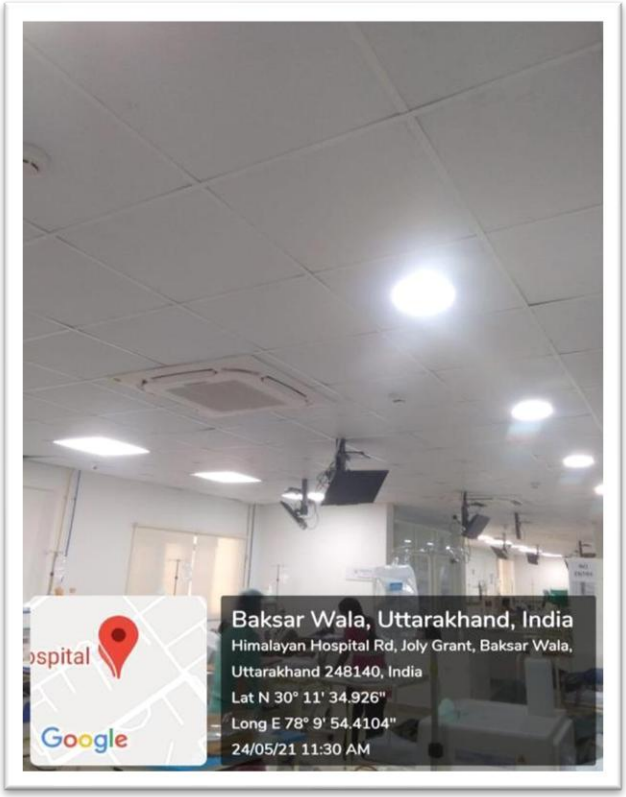
of 177.8 kWh per day (equivalent to 53,340 kWh annually). The university has also embraced high-efficiency BEE star-rated air conditioners, which provide energy savings of 20-45%. In addition, heat-reflective glass and heat-reflective paint have been used in air-conditioned areas and on rooftops, respectively, to improve air conditioning efficiency. To further reduce energy consumption, energy-saving message slips are displayed at electrical switchboards across the campus, encouraging responsible energy use.

Use of energy efficient LED and Fans

Use of BEE star-rated ACs

Use energy-saving message slips to save energy





Installation of LED lights throughout the campus to save energy

Looking ahead, the university has several forward-thinking energy conservation measures in place, including the installation of an EV charging station for campus electric vehicles, the introduction of an app-based cycle service for commuting within the campus, and the proposal for a 500 kW solar power plant. Additionally, the ongoing installation of PNG-powered dual-fuel DG sets will further reduce dependence on conventional fossil fuels. These combined efforts demonstrate SRHU's ongoing commitment to energy efficiency and sustainability, making the campus a model for energy-conscious institutions.

Water Conservation Practices at SRHU: A Sustainable Approach

At SRHU, a robust set of water conservation initiatives is in place, aimed at reducing water usage, enhancing sustainability, and preserving precious water resources for future generations. The university has implemented various strategies, including rainwater harvesting, groundwater recharging, the installation of waterless urinals, and innovative approaches to water usage in toilets and other facilities.

Rainwater Harvesting & Groundwater Recharging

SRHU benefits from an annual rainfall of 2073.3 mm, which is harnessed through a well-planned rainwater harvesting system. The rainwater collected from different surfaces including rooftops, road/ paved areas, open areas and green belts across the campus contributes significantly to water conservation. This brings the total annual volume of rainwater available for harvesting to 3,77,892.7 cubic meters. To complement this, the university has constructed 13 recharge pits and 2 borewell recharge structures, contributing to 796.73 cubic meters of groundwater recharging.

Installation of rainwater harvesting & Groundwater recharging system

Waterless Urinals: A Game Changer

In an effort to conserve groundwater, SRHU has installed 150 waterless urinals across the campus. Each waterless urinal saves an impressive 151,000 liters of water annually, resulting in a total water saving of 2.26 crore liters per year.

Installation of waterless urinals to save water and energy

Smart Water Usage in Toilets

SRHU has also implemented water-saving measures in its toilets. Sand bottles (1 liter each) are placed in cisterns, saving 15 liters per day for each of the university's 2000 toilets. This innovation has resulted in a total savings of 1.09 crore liters of water annually, based on 15 flushes per toilet each day.

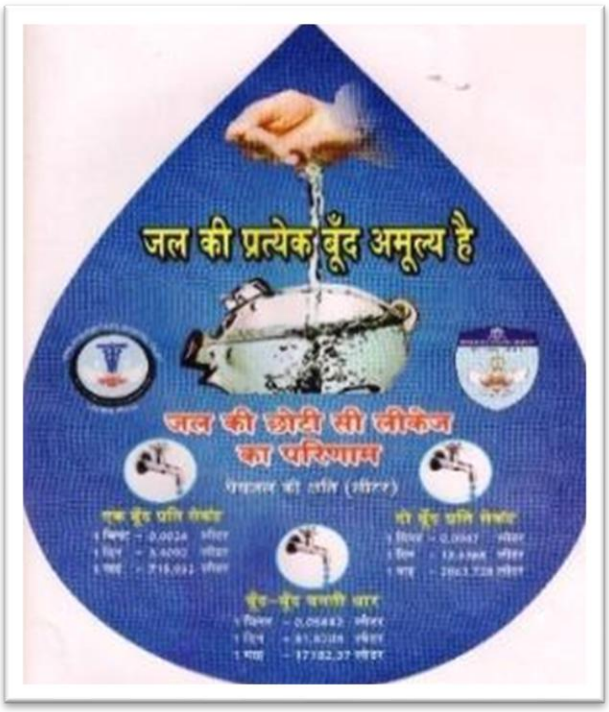
Condensed Water Collection

SRHU efficiently utilizes the condensed water collected from air conditioning units for cleaning purposes, contributing to water conservation efforts. This innovative practice helps reduce overall water consumption on campus, further supporting sustainability goals.

Condensed water collected from AC units used for cleaning

Awareness Campaigns and Behavioral Change

To further promote water conservation, SRHU has conducted a variety of awareness campaigns focused on water conservation. Pamphlets are distributed across the campus, and initiatives like Leakage Proof Campaigns and Water Day Celebrations engage the campus community in responsible water use. The university also promotes cleanliness through Swachhta Campaigns and utilizes condensed water collected from air conditioning units for cleaning purposes, contributing further to reducing overall water consumption.



These collective efforts highlight SRHU's commitment to water conservation and sustainable campus operations. Through rainwater harvesting, groundwater recharging, the use of waterless urinals, and awareness campaigns, SRHU continues to lead by example in its mission to conserve water and protect natural resources for future generations.

Greywater Recycling

The SRHU actively supports Sustainable Development Goal 13: Climate Action by integrating innovative water conservation practices into its sustainability initiatives. The university has implemented greywater recycling systems that repurpose water from sinks and showers for non-potable uses such as landscape irrigation. This approach significantly reduces overall water usage while promoting resource efficiency and environmental stewardship. By adopting such sustainable water management strategies, SRHU not only minimizes its ecological footprint but also sets an example of responsible resource utilization, demonstrating its commitment to addressing the challenges of climate change through practical and scalable solutions.

The campus operates an advanced Sewage Treatment Plant (STP) with a capacity of 1 MLD, utilizing MBBR technology and an extended aeration-activated sludge process to treat sewage effectively. The treated water complies with state pollution control board standards and is repurposed for irrigation in parks and green spaces, promoting sustainability and environmental compliance. Additionally, SRHU has implemented a 90 KLD Effluent Treatment Plant (ETP) to address wastewater from campus activities, including laboratories and laundry facilities. This treated wastewater is reused for non-potable purposes such as irrigation, conserving precious freshwater resources while minimizing environmental impact. These initiatives underscore SRHU's dedication to environmental stewardship, sustainable campus management, and proactive measures to combat climate change.

Sewage Treatment Plant (STP) at SRHU

Effluent Treatment Plant (ETP) at SRHU

Waste Management and Circular Economy

1. Waste Reduction and Segregation

The SRHU has implemented a comprehensive waste segregation system across its campus to promote sustainable waste management practices. Designated recycling bins for plastics, paper, and metals, as well as separate organic waste bins, are strategically placed throughout the university. This ensures that waste is correctly categorized at the source, facilitating efficient recycling and disposal. Additionally, SRHU emphasizes waste reduction through awareness campaigns that encourage the campus community to minimize waste generation by adopting sustainable consumption habits and reducing single-use materials.

2. Composting and Organic Waste

The University has established an innovative campus composting program to manage organic waste effectively. Food scraps from dining facilities and garden waste from landscaping activities are collected and processed into nutrient-rich compost. This compost is then utilized for landscaping and gardening across the campus, reducing reliance on chemical fertilizers and

promoting a circular waste management approach. These efforts not only reduce the volume of organic waste sent to landfills but also contribute to the enhancement of campus greenery.

3. E-Waste Management

Recognizing the environmental hazards posed by electronic waste, SRHU has developed a robust e-waste management system. The campus features dedicated collection points for the responsible disposal of old computers, phones, and other electronic devices. Partnering with certified e-waste recycling firms, SRHU ensures that electronic waste is handled in an environmentally safe manner, minimizing its impact on the ecosystem and promoting resource recovery through recycling. In response to this issue, SRHU has taken a proactive approach by establishing the E-Waste Store, a dedicated facility on campus for the responsible disposal and recycling of electronic devices. This convenient on-campus resource provides a simple solution for students, faculty, and staff to safely dispose of old and unwanted electronic equipment. All e-waste is processed with approval from IT experts, ensuring that data privacy concerns are addressed. The University follows a clear policy for managing e-waste through government-approved vendors. These vendors are invited to the E-Waste Store, where the e-waste is collected and disposed of according to government rules and regulations. A certificate of e-waste disposal is provided by the vendor to the University for official records, ensuring accountability and compliance with environmental standards.

4. Zero-Waste Events

SRHU is committed to hosting zero-waste events and conferences, aligning with its sustainability goals. These events are carefully planned to minimize waste generation by prioritizing reusable products such as plates, cups, and cutlery, and incorporating waste diversion strategies like composting and recycling. The university also engages attendees in sustainability efforts by providing clear instructions on waste segregation and actively promoting the use of environmentally friendly alternatives. These initiatives exemplify SRHU's dedication to reducing its ecological footprint and fostering a culture of sustainability within the campus community.

Regd. : 140/2014-15

Anmol Paryavaran Sanrakshan Samiti

(Green Solution for E-Waste Management certified by UEPPCB)

Facility of E-Waste Collection, Storage, Dismantling, Recycling, Refurbishing & Disposal

Regd. Off. : 119, Old Nehru Colony, Dehradun-248001

Works at : Kh. No. 85/2, 87/1, Daulatpur, Hajratpur Urf Budhwasahid Tehsil Roorkee, Distt. Haridwar

Email : apssdoon@gmail.com

Membership Certificate

This is Certify that M/s Himalayan Institute Hospital Trust, Swami Ramnagar, Jolly Grant, Dehradun, 248016

is a member of ANMOL PARYAVARAN SANRAKSHAN SAMITI with membership No. (20) *dated* 15.11.22

Date 15/11/2022

This Certificate is valid upto 31 March 2026

Vinay
President

Secretary

Sustainable Transportation and Mobility

SRHU demonstrates its commitment to Sustainable Development Goal 13: Climate Action by integrating electric vehicles (EVs) into its campus operations. This initiative significantly reduces greenhouse gas emissions by replacing fossil fuel-powered vehicles with eco-friendly EVs, thereby lowering the university's carbon footprint and contributing to a cleaner, healthier environment. EVs now serve as an efficient and sustainable mode of transportation for faculty, staff, campus shuttles, and maintenance activities. To further encourage the adoption of EVs, SRHU has strategically installed charging stations at key locations across the campus, facilitating the transition to greener transportation solutions and reinforcing its dedication to environmental sustainability.

Battery Powered Vehicle

Solid Waste Management Practices

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

Pit for organic waste composting

Climate Resilience and Adaptation

The University actively integrates climate resilience and adaptation strategies into its operations, research, and community outreach in alignment with the Sustainable Development Goals (SDGs). Recognizing the increasing risks posed by climate change, the university emphasizes capacity-building initiatives to enhance preparedness and resilience against climate-related challenges. SRHU promotes climate-smart practices, such as sustainable water management, and green infrastructure development, to mitigate vulnerabilities. Research and academic programs are geared toward developing innovative solutions for climate adaptation, empowering students and communities with the knowledge and tools to thrive in a changing environment. Through

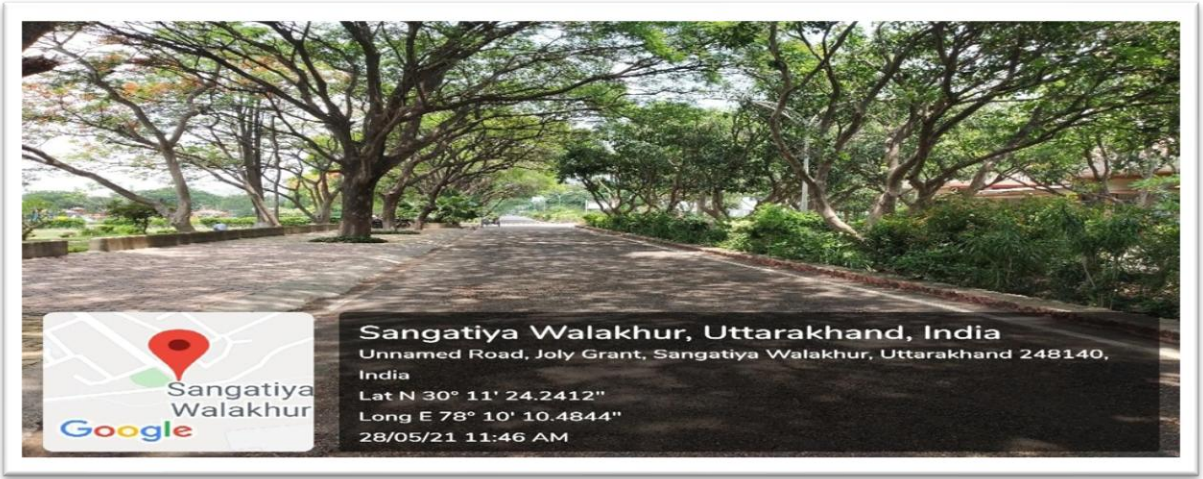
partnerships and policy advocacy, SRHU strengthens local and regional resilience, contributing to global efforts to combat climate change and fostering a sustainable future for all.

Landscaping plays a crucial role in promoting a green and sustainable campus at the University. By incorporating native plants, eco-friendly designs, and sustainable practices, the University enhances its aesthetic appeal while supporting biodiversity and environmental conservation. Thoughtfully designed green spaces, including gardens, tree-lined pathways, and water features, help reduce the carbon footprint, improve air quality, and create a tranquil environment that supports learning and well-being. Furthermore, initiatives such as organic waste composting, rainwater harvesting systems, and the use of low-maintenance plants further reinforce the University's commitment to sustainability and ecological responsibility. These efforts reflect SRHU's dedication to achieving a harmonious balance between growth and environmental stewardship, ensuring a sustainable and thriving campus for future generations.

Green campus @SRHU

SRHU is dedicated to fostering a sustainable and environmentally conscious campus. One of the most impactful steps taken towards achieving this vision is the extensive tree plantation initiative within the university premises. Trees act as natural air filters, absorbing pollutants and releasing oxygen. This significantly contributes to improved air quality on campus, creating a healthier atmosphere for all. Trees provide shade and reduce the heat island effect, helping to maintain a comfortable and cooler campus environment, especially during hot seasons. SRHU's tree plantation initiative includes a wide variety of indigenous and exotic tree species carefully chosen to thrive in the local climate and conditions.

Plantation drives for Green campus



Green campus @SRHU

Sustainable Urban Forest to mitigate Climate Change @SRHU

Climate Action Events and Celebrations

The SRHU takes an active role in organizing Climate Action Events and Celebrations to raise awareness and encourage collective action for sustainability. The university commemorates global observances such as Earth Day, World Environment Day, and Environment awareness sessions through a variety of engaging activities that involve students, faculty, and staff. These initiatives include climate action campaigns, tree plantation drives, campus clean-up activities, and interactive workshops on environmental conservation and sustainable living. SRHU also fosters meaningful dialogue on climate action through seminars, exhibitions, and student-led projects, creating a vibrant platform for education and collaboration. By empowering its community to participate in these efforts, SRHU strengthens its commitment to global climate action and sustainable development. Details of these organized activities are outlined below.

Name of the activity: Session on 'Environmental responsibilities & Sustainability to mitigate Climate Change'

Date: 14th Sept. 2022

Time: 9:30 am onwards

Venue: Auditorium, Himalayan School of Science and Technology, SRHU

Delivered by: Dr Ashutosh Kumar Choudhary, Department of Applied Sciences & Humanities, HSST

Summary:

Himalayan School of Science and Technology (HSST) organized the Induction Programme for the newly admitted students to BCA, B. Tech, B. Sc. Data Science and MCA for academic session 2022-23 from 12th September, 2022 to 14th September, 2022. On day three (14th Sept. 2022) was opened by a session from Dr. A. K. Choudhary on the **'Environmental responsibilities & Sustainability to mitigate Climate Change'**. He interacted with the newly admitted students on environmental issues and sensitized them towards environmental responsibilities. He also brief about the importance of sustainable use of natural resources and the role of an individual in climate change mitigation.

Session on 'Environmental responsibilities & Sustainability to mitigate Climate Change'

Group photo on 'Environmental responsibilities & Sustainability to mitigate Climate Change'

Name of Activity: Forum on Sustainable Development: Securing a Resilient Future: Sustainability in Reference to Uttarakhand (Under the Banner of G-20 Summit)

Date: May 31, 2023

Venue: Adi Kailash auditorium, SRHU

Summary:

The Himalayan School of Biosciences, a constituent unit of Swami Rama Himalayan University, organized a one-day '**Forum on Sustainable Development: Securing a Resilient Future: Sustainability in Reference to Uttarakhand'**, on May 31, 2023. The forum was organized in reference to the G-20 Summit to contribute to the ongoing discourse on sustainable development in the Himalayas and help identify new approaches and strategies to tackle the challenges posed by climate change. It focused on climate change adaptation, ecosystem services, renewable energy, community-based conservation, and sustainable tourism. The keynote speakers included Dr. K.K. Pant, Director of the Indian Institute of Technology, Roorkee; Dr. Rajendra Dobhal (Director, Strategic Planning, Research, and Development, SRHU); and Dr. C.S. Nautiyal (Scientific Advisor, SRHU).

Participants: Students and faculty members of different constituent colleges of SRHU

Session on Sustainable Development: Securing a Resilient Future: Sustainability in Reference to Uttarakhand (Under the Banner of G-20 Summit)

Name of Activity: Celebration of World Environment Day-2023

Date: 5th June 2023

Venue: Himalayan School of Science & Technology, SRHU

Summary: In order to observe the World Environment Day-2023, the Himalayan School of Science & Technology (HSST) undertook two activities on 1st June and 5th June 2023. The objective was to create awareness about the environment and to inculcate sustainable consumption behavior.

The activities undertaken were as follows:

1. A workshop has been organized on "Sustainable practices to save environment" (Date: 1st June 2023, Venue: LT-2, Time: 10:30 AM).
2. Poster making activity based on the themes: Sustainable Development, Climate change, Sustainable practices, Avoid use of paper. (Date: 5th June 2023, Venue: Engineering Drawing Hall, Time: 10:30 AM).

In these activities, students of B.Tech (Computer Science & Engineering), BCA, and MCA programs, have participated and make the event successful.

Conducted by: Dr. A.K. Choudhary (Department of Applied Sciences & Humanities), HSST, Swami Rama Himalayan University, Dehradun.

No. of Participants: 45

Workshop delivered on 'Sustainable practices to save environment'

Workshop delivered on 'Sustainable practices to save environment'

Display of Poster made by students on World Environment Day-2023

Name of Activity: Environmental Field visit (2022-23)

Date: 21st November 2022

Course: Environmental Sciences

Program: B.Sc. Biotechnology/Microbiology

Site: Sewage Treatment Plant, SRHU

Summary: To undertake the Environmental Sciences field visit which is a part of the curriculum, a visit was organized for the students of B.Sc.(H.) Biotechnology and B.Sc. Microbiology I semester, Himalayan School of Bio-Science, to Sewage Treatment Plant (STP), Swami Rama Himalayan University, on 21st November 2022. The STP exists in SRHU campus premises and treats sewage/wastewater generated by Hospital, different academic units, hostel mess, and residential units. A total number of 40 students were taken for the field visit. The purpose of the visit was to demonstrate the process and setup of sewage treatment plant. It includes mainly primary sedimentation tank, aeration chambers, secondary sedimentation tank and sand/activated charcoal filters. The students also documented the physical characteristics of untreated and finally treated wastewater and asked queries about the process. For each of the findings, students were eagerly taking photographs which would help them in preparing the reports/assignments. It was a great learning experience for the students.

Students visit at Sewage Treatment Plant (STP), SRHU

Name of Activity: Environmental Field visit (2022-23)

Date: 15th & 23th December 2022

Program: BCA - I Semester

Course: Environmental Studies

Site: Sewage Treatment Plant, SRHU

Summary: To undertake the Environmental Studies field visit which is a part of the curriculum, a visit was organized for the BCA I semester students of Department of Computer Science & Engineering, Himalayan School of Science & Technology (HSST) to Sewage Treatment Plant (STP), Swami Rama Himalayan University, on 15th & 23th December 2022. The STP exists in SRHU campus premises and treats sewage/wastewater generated by hospital, academic units, hostel mess, and residential units. A total number of 71 students were taken for the field visit in two groups. The purpose of the visit was to demonstrate the process and setup of sewage treatment plant. It includes mainly primary sedimentation tank, aeration chambers, secondary sedimentation tank and sand/activated charcoal filters. The students also documented the physical characteristics of untreated and finally treated wastewater and asked queries about the process. For each of the findings, students were eagerly taking photographs which would help them in preparing the reports/assignments. It was a great learning experience for the students.

Students visit at Sewage Treatment Plant (STP), SRHU

Students visit at Sewage Treatment Plant (STP), SRHU