Criterion - 7

Institutional Values & Best Practices

NAAC – SSR (2nd Cycle)

ETERNAL UNIVERSITY

BARU SAHIB, SIRMOUR-173101
HIMACHAL PRADESH

7.1.4(2)

Green audit report on water conservation

ETERNAL UNIVERSITY
BARU SAHIB, SIRMOUR-173101
HIMACHAL PRADESH

ETERNAL UNIVERSITY

GREEN AUDIT REPORT

2022-2023

PREPARED BY
EHS ALLIANCE SERVICES

TABLE OF CONTENT

AUDIT CERTIFICATE

EHS alliance

CERTIFICATE

PRESENTED TO

ETERNAL UNIVERSITY

Baru Sahib, Distt. Sirmour, near Rajgarh, Himachal Pradesh 173101

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

GREEN AUDIT

ACADEMIC YEAR 2022-23

The green initiatives carried out by the institution have been verified on the report submitted and was found to be satisfactory.

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

EHS ALLIANCE SERVICES GURGAON

SIGNATURE

29.05.2023
DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
WWW.EHSALL.IN | BUSINESS@EHSALL.IN | EHSALLIANCE@GMAIL.COM

ACKNOWLEDGMENT

EHS Alliance Services would like to thank the management of Eternal University for assigning this important work of Green Audit. We appreciate the cooperation of the teams for the completion of the assessment.

First of all, we would like to thank ***Prof. (Dr.) Davinder Singh, Hon'ble Vice Chancellor of Eternal University*** for giving us an opportunity to evaluate the environmental performance of the campus.

We are also thankful to

Prof. (Dr.) Amrik Singh Ahluwalia	Honorable Pro-Vice-Chancellor
Prof. (Dr.) B. S. Sohal	Controller of Examination and Dean-PGS
Prof. (Dr.) N. P. Singh	Dean, Research
Prof. (Dr.) Tusshar Mahajan	Professor, Management Department

We would also like to thank ***Dr. Puneet Negi - Assistant Professor and HoD, Physics Department*** for his Continuous Support and guidance, without which the completion of the project would not been possible. We are also thankful to other staff members actively involved in collecting the data and conducting field measurements.

DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Eternal University based on input data submitted by the representatives of the University complemented with the best judgment capacity of the expert team.

While all sensible care has been taken in its preparation, details contained in this report have been compiled in good faith based on the information gathered.

It is further informed that the conclusions are arrived following best estimates and no representation, warranty, or undertaking, express or implied is made and no responsibility is accepted by the Audit Team in this report or for any direct or consequential loss arising from any use of the information, statements or forecasts in the report.

If you wish to distribute copies of this report external to your organization, then all pages must be included.

EHS Alliance, its staff, and agents shall keep confidential all information relating to your organization and shall not disclose any such information to any third party, except that in the public domain or required by law or relevant accreditation bodies.

EHS Alliance staff, agents, and accreditation bodies have signed individual confidentiality undertakings and will only receive confidential information on a 'need to know' basis.

Signature

LEAD AUDITOR

CONCEPT AND CONTEXT

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. Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B, or Grade C according to the scores assigned at the time of accreditation. Moreover, it is part of the Corporate Social Responsibility of the Higher Educational Institutions to ensure that they contribute towards the reduction of global warming through Carbon Footprint reduction measures.

In view of the NAAC circular regarding green auditing, the University management decided to conduct an external environment assessment study by a competent external professional auditor. The green audit aims to examine environmental practices within and outside the college/university campus, which impact directly or indirectly on the atmosphere. Green audit can be defined as the systematic identification, quantification, recording, reporting, and analysis of components of a university/college environment. It was initiated with the intention of reviewing the efforts within the institutions whose exercises can cause risk to the health of inhabitants and the environment.

Through the green audit, a direction as to how to improve the structure of the environment and the inclusion of several factors that can protect the environment can be commenced. This audit focuses on the Green Campus, Waste Management, Water Management, Air Pollution, Energy Management & Carbon Footprint, etc. being implemented by the institution. The concepts, structure, objectives, methodology, tools of analysis, and objectives of the audit are discussed below.

INTRODUCTION

Nowadays, educational institutions are becoming more thoughtful towards the environmental aspects, and as a result, new and innovative concepts are being introduced to make them sustainable and eco-friendly. To preserve the environment within the institution, a number of viewpoints applied by several educational institutes to solve their environmental problems such as promotion of the saving energy, waste recycling, water consumption reduction, water harvesting, and many more...

The activities carried out by the institution can also create adverse environmental impacts. The green audit is defined as an official inspection of the effects a University has on the environment. Green Audit is conducted to evaluate the actual scenario at the institution campus. The green audit can be a useful tool for a university/college to determine how and where they are using most of the energy water or resources; the University can then decide how to implement changes and make savings. It can also be used to determine the nature and volume of waste, which can be used for a recycling project or to improve a waste minimization plan.

Green auditing and the application of mitigation measures is a win-win situation for all the institutions, the learners, and Mother Earth. It can also result in health awareness and can promote environmental awareness, values, and beliefs. It provides a better understanding to staff and students about the green impact on the institution. Green auditing also upholds financial savings through the reduction of resource usage. It gives an opportunity to the students and teachers for the development of ownership of personal and social responsibility. The audit process involves primary data collection, and site walk-through with the team of the University/college including the assessment of policies, activities, documents, and records.

OVERVIEW OF THE UNIVERSITY

Eternal University is NAAC Accredited & ISO 9001: 2015 Certified University established under the Himachal Pradesh Private University (Establishment & Regulation) Act 2006 & Himachal Pradesh Government Act. 3 of 2009, with the right to confer degree as per the UGC public notice on private Universities dated April 18, 2011.

The great visionary of the 20th century (Sant Attar Singh Ji) had a vision that modern scientific education alone will not serve humanity well, until and unless it is amalgamated with Braham Vidya (Spiritual Education). The graduates of this unique education system will not only be outstanding in academics, but also will have high moral values (i.e. they will have love for humanity, compassion for the weak and the underdog, and a sense of selfless service for the community). These graduates will work towards establishing permanent peace in the world. They will act as Ambassadors of Peace wherever they live, work, and raise their families.

Eternal University with its seven constituent colleges is unique in imparting value-based education to female students and is the first private university of Himachal Pradesh to start the College of Nursing, School of Public Health, and College of Agriculture. Among several previous recognitions, Eternal University has been recently recognized as “The 20th Best Higher Education Institution in India, 2019 which provides a broader perspective and cutting-edge higher education with a focal point on fostering skills and innovation” by EDUCATION BRAINIAC magazine.

In a largely residential campus the day-scholar girl students from nearby areas of Sirmaur district who could commute from home can now also pursue their studies in the Eternal University. This campus is situated in the Valley of Divine Peace, the Modern Gurukul provides the safest, drug and pollution-free environment with facilities such as a sports complex, gymnasium, NSS and NCC units, experimental farms, poly houses, modern dairy complex, solar power utilization systems and support for holistic development of its students. The Eternal University has organized several conferences, workshops, camps and Kisan Melas with an emphasis on addressing the crucial problems of farmers of Sirmour and adjoining districts of Himachal Pradesh for their inclusive development.

The university offers 18 Bachelor programs, 28 Master Programmes, and 22 Doctorate Programmes.

Bachelor Programs

B.Sc. (Hons) Agriculture	B.Tech. Food Technology	B.Tech. CSE	B.Sc. Information Technology	B.Sc. Non-Medical
B.Sc. (Hon.) Mathematics	B.Sc. (Hons.) Microbiology	B.Sc. (Hons.) Economics	B. Ed	B.Com (Hons.)
B.B.A.	B.A. (Hons.) Music	B.A. Humanities	B.Sc. (Hons.) Psychology	B. Lib
	B.Sc. Medical	B.Tech. CSE Lateral/Migrated	*B.Sc. Nusring*	

Master Programs

M.Sc. Agronomy	M.Sc. Ag. Genetics & Plant Breeding	M.Sc. Ag. (Entomology)	M.Sc. Ag. (Horticulture) Vegetable Science	M.Sc. Ag. (Horticulture) Fruit Science
M.Sc. Ag. Horticulture (Floriculture & Landscape Architecture)	M.Sc. Ag. Plant Pathology	M.Sc. Agricultural Economics	M.Sc. Food Science & Technology	M.Tech. Food Technology
M.Tech. CSE	M.Sc. Botany	M.Sc. Chemistry	M.Sc. Mathematics	M.Sc. Microbiology
M.Sc. Physics	M.Sc. Zoology	M.P.H	M.Sc. Economics	M.Com.
Master of Business Administration	M.A. Music	M.A. (Hons.) Punjabi	M.Sc. Psychology	M.A. English
	M.A. Education	M.Sc. Biotechnology	M.Sc. Nusring	

Doctorate Programs

- Ph.D. Biotechnology
- Ph.D. Food Technology
- Ph.D. CSE
- Ph.D. Botany
- Ph.D. Chemistry
- Ph.D. Microbiology
- Ph.D. Mathematics
- Ph.D. Physics
- Ph.D. Zoology
- Ph.D. Economics
- Ph.D. Management
- Ph.D. English
- Ph.D. Music
- Ph.D. Public Health
- Ph.D. Horticulture(Veg Science)
- Ph.D. Agronomy
- Ph.D. Entomology
- Ph.D. Commerce
- Ph.D. Punjabi
- Ph.D. Genetics & Plant Breeding
- Ph.D. Nursing
- Ph.D. Psychology
- Ph.D. Education

Certificate Courses

- Geriatric Care Assistants
- Mental Health and Substance Abuse

Diploma Courses

- P.G. Diploma in Rehabitation Psychology (PGDRP)

Add-On Courses

- Library Science
- Career Guidance & Counselling

VISION | MISSION

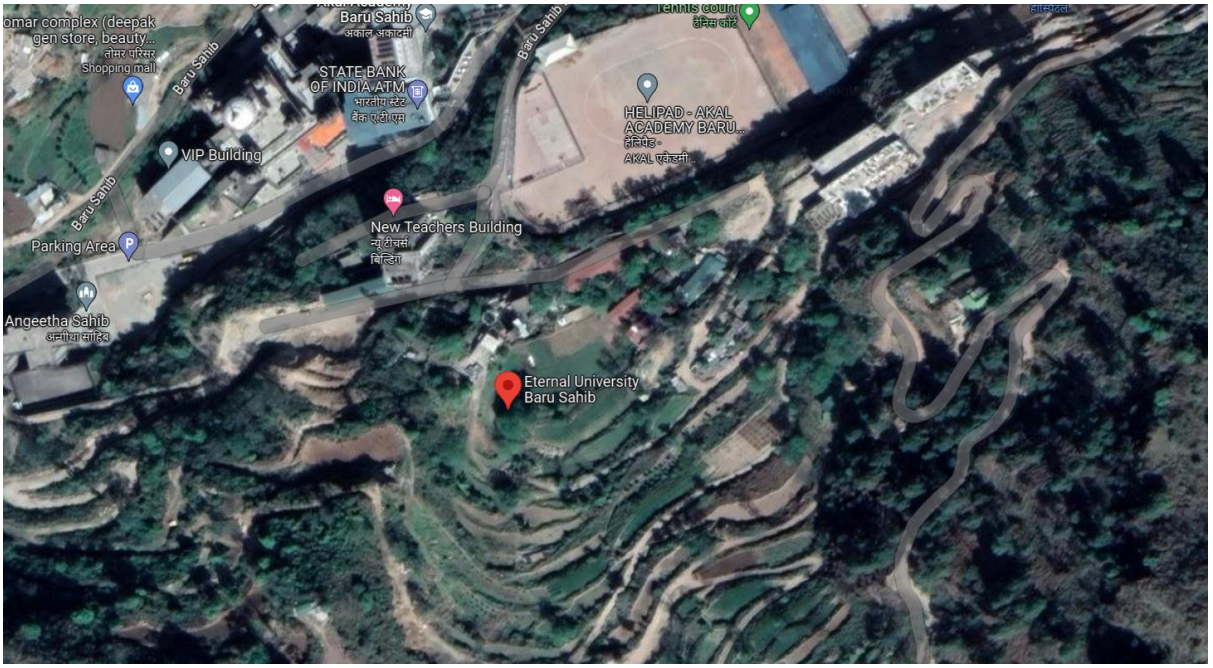
VISION

The relatively young Eternal University with its diverse programs, priorities, commitments, values, and efforts strives to emerge as a world-class women's university with its centre of excellence in science, technology, arts, and management. Major emphases will be focused on developing and strengthening industrial-institution linkages and harnessing the strength of its alumni for skill development, technology transfer, resource generation, and employment opportunities. Its graduates engrossed with holistic development, human values, professional ethics and skills, and entrepreneurship will adapt and earn comfortable livelihoods and serve mankind with love and devotion for its inclusive and sustainable development as our ambassadors of universal brotherhood for world peace."

MISSION

To transform and empower young women's talent through cutting-edge education in science, technology, arts, and management amalgamated with spiritual rejuvenation for their holistic development to serve mankind with compassion and love.

Geo Location



Geo Coordinates from Google Maps: 30.7539376, 77.2970275

AUDIT PARTICIPANTS

On behalf of the University

Name	Designation
Prof. (Dr.) Davinder Singh	Honorable Vice Chancellor
Prof. (Dr.) Amrik Singh Ahluwalia	Honorable Pro-Vice Chancellor
Prof. (Dr.) B. S. Sohal	Controller of Examination and Dean-PGS
Prof. (Dr.) N. P. Singh	Dean, Research
Prof. (Dr.) Tusshar Mahajan	Professor, Management Department
Dr. Puneet Negi	Assistant Professor and HoD, Physics
Mr. B. S. Kapoor	Accounts Officer
Er. Rajeev Thakur	Assistant Professor, CSE
Mr. Sukhwinder Singh	Transport Manager
Er. Hemant Singh	Electrical Engineer
Mr. Santosh Sukla	Solid Waste Management supervisor
Mr. Manoj	Wastewater treatment supervisor

On behalf of EHS Alliance Services

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

EXECUTIVE SUMMARY

Green auditing is an essential step to identify and determine whether the institution's practices are sustainable and ecological. Traditionally, we were upright and efficient users of natural resources. But over the period of time, excessive usage of resources like water, electricity, petrol, etc. has become habitual for everyone especially, in urban and semi-urban areas. It is actually the right time to check if we (our process) are consuming more than the required resources? Whether we are using resources sensibly?

Green audit standardizes all such practices and provides an efficient way to use natural resources. In times of climate change and resource exhaustion, it is necessary to re-check the processes and convert them into green and sustainable. Green audit provides an approach for it. It also increases overall awareness among the folks working in the institution towards the eco-friendly environment. This is the second attempt to conduct a green audit of this university campus for the fulfilment of NAAC criteria. This audit was mainly focused on greening indicators like consumption of energy in terms of electricity and fossil fuel, quality of soil, water usage, vegetation, waste management practices, and the carbon footprint of the campus. Initially, a questionnaire was shared to know about the existing resources of the campus and the resource consumption pattern of the students and staff in the university.

GREEN AUDIT – ANALYSIS

GENERAL INFORMATION

1. Was any Green Audit conducted earlier?

This is the second time a systematic way of monitoring their environmental eminence initiative taken by the University for environment protection.

2. What is the total strength (people count) of the Institute?

Students
Male: 0 Female: 959 Total: 959
Teachers
Male: 48 Female: 58 Total: 106
Non-Teaching Staff
Male: 19 Female: 7 Total: 26

Total Count
Male: 67 Female: 65 Total: 1091

3. What is the total number of working days on your campus in a year?

There are two hundred twenty-two (222) working days in a year.

4. Where is the campus located?

The campus is located at Baru Sahib, Distt Sirmaur, near Rajgarh, Himachal Pradesh 173101

5. Which of the following are available in your institute?

Garden area	*Available*
Playground	*Available*
Kitchen	*Available*
Toilets	*Available*
Garbage Or Waste Store Yard	*Available*
Laboratory	*Yes*
Canteen	*Available*
Hostel Facility	*Yes*
Guest House	*Yes*

6. Which of the following are found near your institute?

Municipal dump yard	*Not in the vicinity of the institute*
Garbage heap	*No Garbage heaps*
Public convenience	*Public convenience is available*
Sewer line	*1 km sewer line within the campus*
Stagnant water	*No stagnant water*
Open drainage	*No*
Industry – (Mention the type)	*No*
Bus / Railway station	*Baru Sahib, Bus stand*
Market / Shopping Complex	*ARY Shopping Complex*

WASTE MINIMIZATION AND RECYCLING

1. Does your institute generate any waste? If so, what are they?

Yes, Solid waste Canteen waste, paper, plastic, horticulture, etc.

2. What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)

Biodegradable waste - 245 Kg
Non-biodegradable waste - 10 Kg
Hazardous Waste - 5 Kg
Others - >1 Kg

3. How is the waste generated in the institute managed? By Composting, Recycling, Reusing, Others (specify)

Reuse of one side printed Paper for internal communication.
Sewage water is treated by STP with a capacity of 1000 KLD.
Lab waste and medical waste are being treated using ETP of capacity 35 KLD
Two types of Waste bins are provided at the campus for biodegradable and non-biodegradable waste.
Solid waste is segregated and recycled in a waste management plant.
Composting is done for horticulture waste management.

4. Do you use recycled paper in the institute?

Yes, university uses the one-sided printed paper and makes file covers.

5. How would you spread the message of recycling to others in the community?

Various campaigns and webinars by Students to increase awareness

6. Can you achieve zero garbage in your institute? If yes, how?

Yes, by using RRR (Reduce, Reuse, and Recycle)

GREENING THE CAMPUS

1. Is there a garden in your institute?

Yes, about 392040 sq. feet of areas are developed as Gardens.

2. Do students spend time in the garden?

2-4 Hours during winters

3. Total number of Plants in Campus?

Plant type with approx. count

Full grown Trees	*1,822*
Small Trees	*1,387*
Hedge Plants	*44,10*
Grass Cover	*3,92,040 SQFT*

4. Is the university campus having any Horticulture Department? (If yes, give details)

Yes, Total 10 staff deployed in horticulture

5. How many Tree Plantation Drives are organized by campus per annum?

Annually, around 6 times Tree Plantation Drives are Organized by the university. A total of 1350 trees and hedge plants were planted in this Financial Year with more than an 80% survival rate.

6. Is there any Plant Distribution Program for Students and Community?

Yes, Saplings are distributed to Students and visitors at various Occasions. Besides this landscape of some area in the city are developed by the Institute. (Photographs attached in annexure 1)

8. Is there any Plant Ownership Program?

NA

WATER AND WASTEWATER MANAGEMENT

1. List uses of water in your institute

Basic use of water in campus:

***Drinking** – 31.61 KL/month*

***Gardening** – 114.41 Kl/month*

***Kitchen and Toilets** – 207.18 KL/month*

***Others** – 91.12 KL/month*

***Hostel** – 2945.70 KL/Month*

***Total** = 3390.03 KL/Month*

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

Storage: Water is stored in multiple water tanks situated on the roof of the building and then it is transferred to different areas of the university to fulfill the water requirement for different purposes.

Saving Techniques: Avoid overflow of water-controlled valves provided in the water supply system. Close supervision of the water supply system.

3. Locate the point of entry of water and point of exit of wastewater in your institute.

Point of Entry - Natural Spring Water

Point of Exit –

1. *From the Canteen, Toilets, and bathrooms by covered drainage which is connected to (1000 KLD) STP in the campus area.*
2. *From labs and medicals to STP (35 KLD)*
   And, then, transferred to the Agriculture Farms

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

Basic ways:

- *Close the taps after usage*
- *Maintenance and monitoring of valves in the supply system to avoid overflow, leakage, and spillage*
- *Water Conservation awareness for new students*
- *Initiate the installation of waterless urinals*

ANIMAL WELFARE

1. List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)

Birds, Dogs, Cats, Cows, and Squirrels are commonly found on campus. A variety of bird species and other flora and fauna are available, so the institute doing their bit for its conservation.

The university has a veterinary doctor for animal welfare

2. Does your institute have a Biodiversity Program or a KARUNA CLUB?

Yes, the SDG committee actively organizes awareness through campaigns and poster competitions.

CARBON FOOTPRINT - EMISSION & ABSORPTION

1. Electricity used per year CO2 emission

(Electricity used per year in kWh/1000) x 0.84
237776 kWh/1000 x 0.84
=199.73 tons

2. Per year CO2 emission from LPG used for cooking in Hostel and Canteen or Mess

(LPG used per year in Kgs/1000) x 2.68
21600 Kgs/1000 x 2.68
=57.89 tons

3. Per year CO2 emission from Diesel used in DG sets as an alternate energy source

(Diesel used per year in Liters/1000) x 2.99
14400/1000 x 2.99
=43.06 tons

4. Transportation per year (Bus) CO2 emission from transportation (Bus)

(Number of the shuttle bus in our university x total shuttle bus service each day x approximate distance traveled by the vehicle inside the campus in kilometers x 222 /100) x 0.01
=5x2x2x222/100x0.01
=0.44 tons
**222 working days per year, 0.01 is the coefficient to calculate the emission in metric tons per 100*

5. Transportation per year (car) CO2 emission from transportation (car)

(Number of cars entering the University campus x 2 x approximate distance traveled by the vehicle inside the campus in kilometers x 225/100) x 0.02
=10x4x2x222/100x0.02
=3.55 tons

Total CO2 emission per year cumulative by electricity usage + LPG usages + Diesel usage + bus transportation + car transportation (199.73+57.89+43.06+ 0.44+3.55) = 304.67 tons

CARBON FOOTPRINT – CO_2 ABSORPTION BY FLORA IN THE INSTITUTION

There are 1822 full grown trees and 1387 semi grown trees of different species, on the campus spread over 45 Bighas.

The carbon absorption capacity of one full-grown tree is 22 kg CO_2 Therefore Carbon absorption capacity of 1822 full-grown trees is 1656 x 22 kg CO_2 40044 kg of CO2 40.08 tons of CO_2.

The carbon absorption capacity of 1387 semi-grown trees is 40% of that of full-grown trees. Hence the carbon absorption 1387 x 6.8 kg of CO_2 = 9431.60 kg of CO_2 = 9.43 tons of CO_2

There are approximately Hedge Plants 4410 of various species being raised in the gardens and grown in the areas where no buildings are built Carbon absorption of bush plants varies widely with their species. Certain bushes absorb very high levels of CO_2 whereas some others absorb very low levels of CO_2. In the absence of a detailed scientific study, 200g of CO, absorption is taken per bush (in consultation with Environmental Science specialists). Based on this, total carbon absorption of bushes is 4410 x 200 g, = 882 kg =0.88 tons of CO_2

The lawns on the campus have buffalo grass, Mexican grass, and indigenous grass species and cover a total area of 302040 sq. ft. Carbon absorption capacity of a 10 sq. ft. area of lawn is 1 g per day Therefore, carbon absorption by lawn area 302040 x 365 x 0.1 g CO_2 = 14309.46 kg CO_2 per year, Total carbon absorption per year is 14.31 tons of CO_2.

There are 45 Bighas Ridge area on the hill that belongs to Eternal University. Considering the climate, rainfall, and type of tree/grass/shrubs in Himachal hills, there is a carbon absorption capacity of 22.50 Tons.

The grand total carbon absorption capacity of the campus is 87.21 tons. The university is doing its best towards carbon neutrality.

SOLAR INSTALLATION DETAILS

The Solar Water Heater system at Eternal University comprises of 2 types a) Flat Plate Collector b) Evacuated Tube Collector. The total capacity is 18000 liters per day. There are 3 water tanks connected to the system. The total capacity of Water tanks is 11000 Litres. Heated water is used for the purpose of bathing in the hostel and cooking in the kitchen.

SOLAR PV SYSTEM 200 KWP

This Solar PV Plant was installed in the year 2012 under the subsidy scheme of the Ministry of New and Renewable Energy. It was one of the highest Solar PV installations worked under the scheme. The plant has 800 Solar Plates of size 250 kWp each. 4 Inverters of size 50 kWp each convert the DC electricity into the AC electricity. The produced electricity from the plant is fed into the Distribution system for the electrification inside the buildings.

SOLAR WATER HEATER

The Solar Water Heater system at Eternal University comprises 2 types
a) Flat Plate Collector
b) Evacuated Tube Collector
The total capacity is 18000 liters per day. There are 3 water tanks connected to the system. The total capacity of Water tanks is 11000 Liters. Heated water is used for the purpose of bathing in the hostel and cooking in the kitchen.

CONCENTRATED SOLAR THERMAL SYSTEM (CST)

CST Plants on the Campus are used for community cooking for 5500 persons. It was one of the largest plants in North India at the time of Installation in the year 2017. CST plant utilizes the thermic fluid for its operation for the necessary generation of the steam, which is utilized in cooking. The Net impact of the CST Plant results in savings of 18250 LPG cylinders in a year. Each cylinder is 19 kg, therefore total (18250 x19) = 346750 kg of LPG is saved in a year.

GREEN INITIATIVES BY CAMPUS

- **Renewable Energy** - A solar power plant of capacity 200 KW is installed on building roofs and hills that will supply approx. 30-35% of total power on campus.
- **Solar Water Heater** – The University has installed a solar oil/water heater with a capacity of 12,000 Liters, that helps to save electricity or LPG as well as carbon emission.
- **Biodiversity Conservation** – Flora and fauna conservation program and awareness campaign organized as per the local geography.
- **Tree Plantation Drives** - 6 Drives Annually as well and Every Guest is honored by Tree Plantation at Campus.
- **Air Pollution Reduction** - Personal Vehicles (Students) are not allowed at the university campus.
- **Traditional Bulb to LED** - The University has installed 360 LED bulbs/ Tube lights as a replacement of the traditional lighting system.
- **Solid Waste Management** -Waste segregation & management using Waste treatment plant, STP & ETP.
- **Environment Committee** – The SDG committee/Environment committee is headed by Dr. Pritesh Vyas
- **Recycling The Waste** – The University is converting waste plastic into bricks and pots, and they recycle used paper to make file covers.
- **Drip Irrigation Technique** – The University Garden Committee has adopted this technique to save water.

RECOMMENDATIONS

- Water Meters should be installed at every building of the institute for monitoring of water consumption per capita.
- The university should go for a water balancing/audit to monitor the use and wastage of water.
- Increase in display of environment-conscious posters/paintings/slogans in the building for spreading awareness amongst students.
- Eco-friendly parameters should be included in the purchase of articles and goods for the university campus.
- Reduction in use of paperwork by going digital system for teaching and examinations.
- The usage of curtains should be restricted in the time in order to get maximum natural light in classrooms.
- Dishwashers and washing machines should be adopted in the mess and hostel to save water.

CONCLUSION

This audit involved extensive consultation with the Eternal University team and interactions with key personnel on a wide range of issues related to Environmental aspects. Eternal University has an SDG Committee for the sustainable use of resources. Overall, 80% of the University campus is for landscaping. The audit has identified several observations for making the campus premises more environmentally friendly. The recommendations are also mentioned with observations for the University campus team to initiate actions. The audit team opines that the overall site is maintained well from an environmental perspective. There are no major observations but a few things are important to initiate urgently are the installation of water meters and the water balancing report.

REFERENCE:

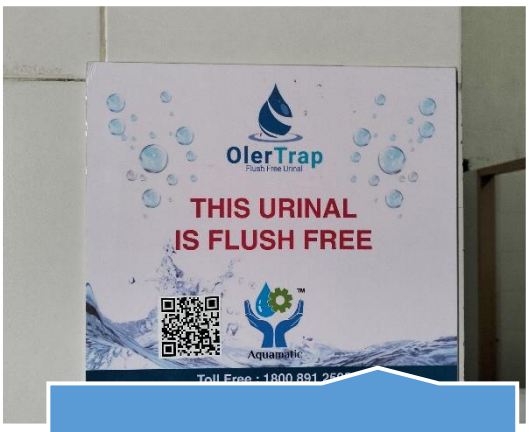
- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010)
- The Petroleum Act: 1934 – The Petroleum Rules: 2002
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle
- Rules:1989 (Amended in 2005)
- Energy Conservation Act 2010.
- The Water [Prevention & 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 – ENVIRONMENT CONSIOUSNESS PHOTOGRAPHS

Lush Green Campus

Neat and Clean Campus

Air Purifying Plants



Water Conservation Posters

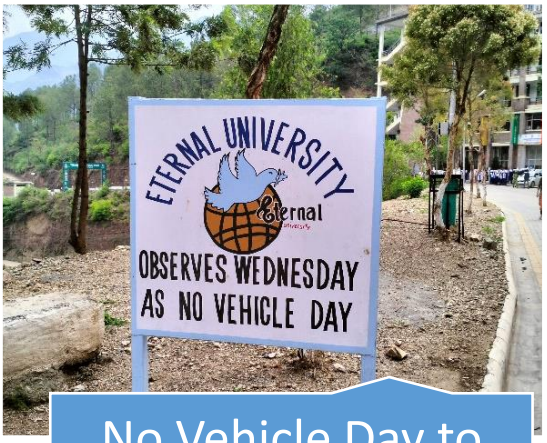
Sports Ground

Color Coded Dustbins

Plantation Drive by Students

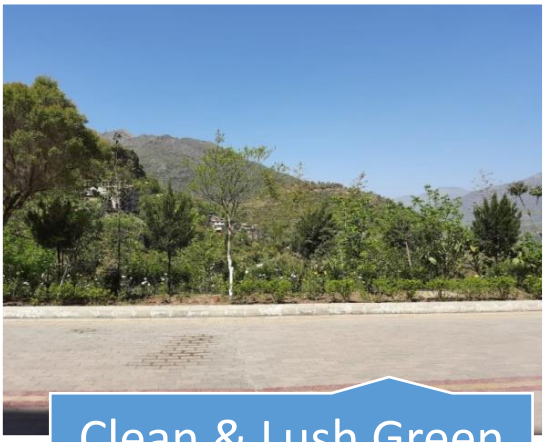
Seminar Hall

Awareness Posters



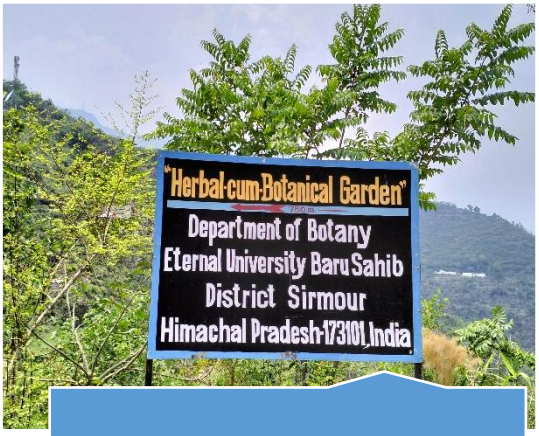
No Vehicle Day to Reduce Pollution

Push Taps



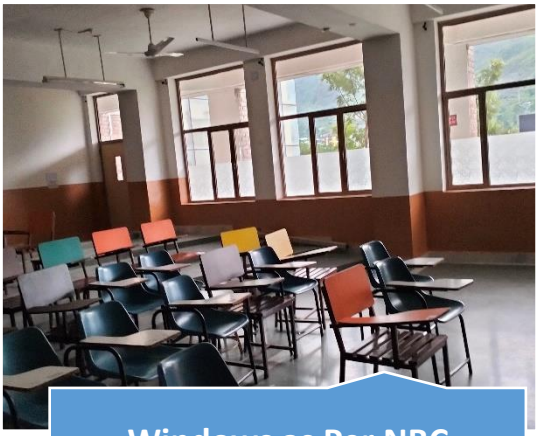
Clean & Lush Green Campus

Drip Irrigation



Herbal Garden

Waterless Urinals to Save Water



Windows as Per NBC Guidelines

Strom Water Drainage

Green Building Design

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