



ગુજરાત કેન્દ્રીય વિશ્વવિદ્યાલય
CENTRAL UNIVERSITY OF GUJARAT

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ENVIRONMENT AUDIT REPORT

2021-2022

PREPARED BY
EHS ALLIANCE SERVICES



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CERTIFICATE



AUDIT CERTIFICATE

PRESENTED TO

CENTRAL UNIVERSITY OF GUJARAT (CUG)

Sector-29 Gandhinagar - 382030

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

ENVIRONMENT AUDIT

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

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

AUDITOR SIGNATURE



10.05.2022

DATE OF AUDIT

EHS ALLIANCE SERVICES, PLOT A-72, SURYA VIHAR, GURUGRAM, 122001
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ACKNOWLEDGEMENT

EHS Alliance Services would like to thank the management of Central University of Gujarat for assigning this important work of Environment Audit. We appreciate the co-operation to the teams for completion of assessment.

We would also like to thank **Prof. Atanu Mohaparta – Director IQAC**, for his Continuous Support and guidance, without which the completion of the project will not be possible. We are also thankful to other staff members who were actively involved while collecting the data and conducting field measurements.

We are also thankful to

Mr. Jay Prakash M. Soni	<i>Deputy Registrar</i>
Mr. Pawan Pathak	<i>Executive Engineer</i>
Mr. Nilesh Kumar	<i>Jr. Engineer (Electrical)</i>
Dr. Rajesh Singh	<i>Assistant Professor – SESD</i>
Prof. Bhawana Pathak	<i>UBA Coordinator</i>
Dr. Rajneesh Kumar Gupta	<i>In-Charge NSS</i>

Last but not the least, we would like to thank **Prof. Rama Shanker Dubey – Hon'ble Vice Chancellor and Prof. H. B. Patel – Registrar, Central University of Gujarat** for giving us an opportunity to evaluate the environmental performance of the campus.



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DISCLAIMER

EHS Alliance Services Audit Team has prepared this report for Central University of Gujarat based on input data submitted by the representatives of 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 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 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 organisation, then all pages must be included.

EHS Alliance, its staff and agents shall keep confidential all information relating to your organisation 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



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CONCEPT AND CONTEXT

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

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

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

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

The ICC defines Environmental Auditing as:

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

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



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INTRODUCTION

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

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

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

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

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



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OVERVIEW OF THE UNIVERSITY

Established by Parliament of India through the Central Universities Act (2009), Central University of Gujarat (CUG) considers its main objectives to be dissemination and advancement of knowledge creation and sharing. The University is committed to make special provisions for integrated and interdisciplinary courses, to educate and train human resources for the country's development, to initiate appropriate measures for promoting innovation in teaching and learning and to pay special attention to improve the social and economic conditions and welfare of the people, especially pertaining to their intellectual, academic and cultural development. The University was ranked overall 60th in India and 2nd among all the Universities in Gujarat in NIRF 2016 rankings. According to NIRF 2017, the University ranked among the top 150 Universities in the country.

MOTTO

Providing a Global Platform for Knowledge and Employability to our Students along with Society and Industry Interface.



Institution's Distinctiveness

Since its inception, Central University of Gujarat has incorporated interdisciplinary and multi-disciplinary approach in its academic curriculum, pedagogy and research. It has unique undergraduate courses like Integrated Social Management and various inter disciplinary Post Graduate courses in Industrial Chemistry, Environmental Science, Nano Technology, Defence



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and Strategic Studies, Social Sciences, International Studies, library science and Education. The University has been encouraging teaching and research not only across the discipline but also across knowledge domain. The University is also encouraging inter-disciplinary research in all schools with a special centre devoted to Diaspora Studies.

The success of the courses is manifested in its achievements where 16 patents were registered for its innovations out of which two are commercialised that are aligned with the Hon'ble Prime Minister's call for Self Reliant India and Vocal for Local. Besides, University has published 1717 research publications in the form of Books, Papers and Chapters in edited books in reputed national and international publication houses.



Facilities

CENTRAL INSTRUMENTATION FACILITY

The Central Instrumentation Facility (CIF) at the University is one of the best in the country. Currently, the CIF has a range of instruments which include 500 CUGz FT-NMR Spectrometer,



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Single Crystal and Powder XRD, Atomic Absorption Spectrophotometer, Elemental Analyzer (CHNS/O) and many more

CENTRAL LIBRARY

The Central Library has a wide collection of resources taking into consideration the course contents and research needs of the university. Library's learning resource collections are developed aiming at providing the highest level of research and teaching support to the programmes and research thrust areas. Collection is reviewed every year in order to be relevant to the emerging and developing areas of research. The Library is growing in its breadth and depth it holds about 30,000 plus books, and subscribes to over 66 print journals and magazines and over 8000+ e-journals. The Library has KOHA software and computerized library facilities.

The Cyber Library provides seamless access to e-journals available at the university. Its main aim is to provide access to computers and internet to the students coming from economically weaker sections who are not able to buy computers/laptop individually. It has over 29 Pentium workstations with broadband internet access. CUG has successfully migrated towards the internet age by adding 8000+ online journals to its collection. The Library also provides access to several databases.

WI-FI AND ICT FACILITY

The University is wi-fi enabled and students can access the internet on the basis of a personal id and password provided by the University. The University also has a CyberLab that enables students to access a large variety of resources on the web that includes journals, databases, and books.





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HOSTEL FACILITY

Limited Hostel accommodation both for men and women is available on a first come first allotment basis. The hostel fees are stipulated as per the norms of the University. Private accommodation on a shared basis is available in the city of Gandhinagar at reasonable rates.

GAMES AND SPORTS

The University is aware of the importance of physical activities and organised sports and games programmes, which should be combined with the students academic pursuits. Keeping in view the limited space available at the present location of the University, basic sports facilities are available in the campus.

CANTEEN

The University offers a canteen facility where snacks, tea, coffee/dining in facility is available.

TRANSPORT FACILITY

The University has its own AC bus which is available for the students and University staff for their convenience

CONFERENCE FACILITY

The University has well-equipped facilities for conferences, workshops and seminars with seating capacity ranging from 45 to 170 persons.

VISION

The vision of CUG is to establish itself as a centre of excellence with social commitment by integrating modern, scientific and technological knowledge and skills with the basic human ethos and values. The University shall set forth a model in teaching, research and personality development and create skilled human resource with a sense of responsiveness towards society, the country and the world at large..

MISSION

The mission of CUG is to provide access to quality education and create opportunities for encouraging students to effectively engage with emerging innovations and technological challenges, international competitiveness and leadership in thought as well as in action. CUG is also conscious of the importance of developing entrepreneurial and scholastic abilities for creation of knowledge, wealth and prosperity for the country as well as peace and happiness for human beings.



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OBJECTIVE

The primary objectives of CUG are

- Dissemination and advancement of knowledge by providing instructional and research facilities in various branches of learning.
- Making special provisions for integrated courses in humanities, social sciences, science and technology in educational programmes.
- Taking appropriate measures for promoting innovations in teaching-learning methods and interdisciplinary training and research.
- Educating and training human resource for the country's development.
- Establishing academic-industries partnership to promote advancements in science and technology.
- Paying special attention to the improvement of social and economic conditions and welfare of the people, especially pertaining to their intellectual, academic and cultural development.

Geo Location

Geo Coordinates from Google maps:

28.6926368, 77.2102818



AUDIT PARTICIPANTS

On behalf of University

Name - Designation/Department

Prof. Atanu Mohaparta	<i>Director – IQAC</i>
Mr. Jay Prakash M. Soni	<i>Deputy Registrar</i>
Mr. Pawan Pathak	<i>Executive Engineer</i>



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Mr. Nilesh Kumar	<i>Jr. Engineer (Electrical)</i>
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Dr. Rajneesh Kumar Gupta	<i>In-Charge NSS</i>

On behalf of EHS Alliance Services

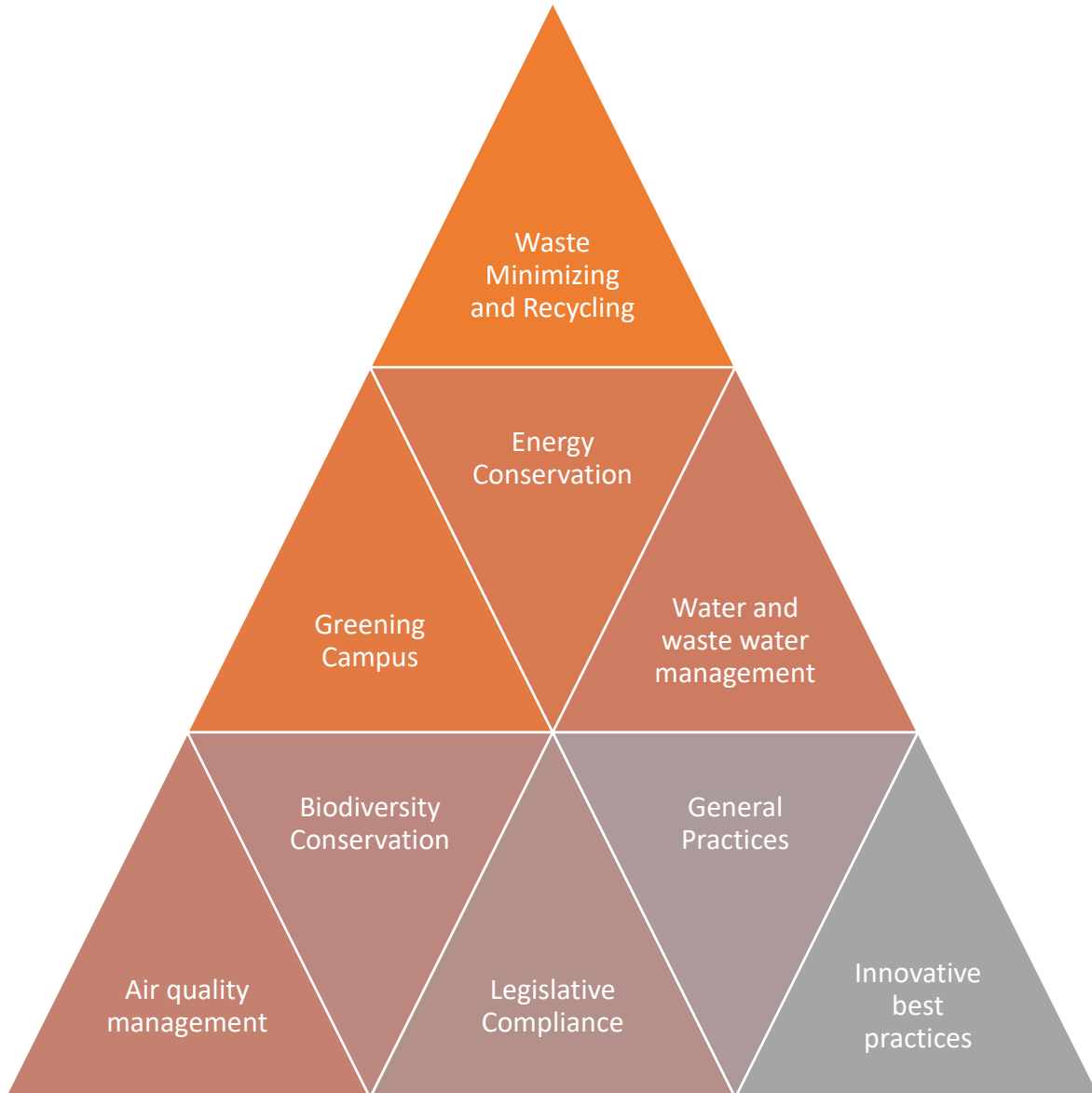
Name	Position	Qualifications
Dr. Uday Pratap	Lead Auditor	<i>Ph.D. , PDIS, QCI – WASH, Lead Auditor ISO 14001:2015</i>
Ms. Pooja Kaushik	Co-Auditor	<i>M.Sc, Field Expert, QCI – WASH</i>

EXECUTIVE SUMMARY

The environment audit is a snapshot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes out-dated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. Our approach to promote a Green Campus to inculcate the sustainable value systems among the students, so that they carry the learning and practices them in their future endeavours. This will ensure that Sustainability and Environmental practices get embedded in all the institutions and organizations in the country.

A Green Campus is a place where environmentally friendly practices and education combine to promote sustainability in the campus which ultimately offers an institution the opportunity to take the lead in redefining its environmental culture and developing new paradigms by creating sustainable solutions to environmental, social and economic needs of the mankind.

This is very first environment audit of University for doing their bit towards environmental protection and environmental awareness at local and global front. Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus. A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.



WASTE MANAGEMENT

TYPES OF WASTE ON UNIVERSITY CAMPUS

To create effective waste management plans, Institution first need to know the types of waste they produce. Below, we have compiled a list of various kinds of waste commonly generated on institutional campus:



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1. **FOOD WASTE** - University campus generates food waste. The average mess and canteen generates approximately 10 kg of food waste a day. The reasons for food waste on an educational campus may be over purchasing food to ensure a sufficient supply and then throwing it away, especially in all hostel messes where plentiful stores are essential. And in the cafeteria or hostel mess, students may pile food onto their ample trays, find it unappealing once they sit down and dutifully scrape it into the garbage. Immediate attention is given to the food waste minimization techniques.
2. **RECYCLABLE PAPER, CARDBOARD, PLASTIC, GLASS AND CANS** - Campus tends to produce vast quantities of these recyclables. Even in the digital age, many students, professors and staff members still prefer handwritten notes and end up with piles of unwanted paper once their courses and projects are complete. The snacks so essential to late-night studying or socializing tend to come in recyclable plastic, glass or aluminium containers. And shipments of necessary items throughout the year are likely to arrive in recyclable plastic and cardboard packaging. The same is sold/auctioned to the scrap vendors time to time.
3. **STUDENT CLOTHES AND HOUSEWARES** - As we have mentioned above, many students find it more convenient to throw away their clothes and dorm furnishings at the end of the year than donate or recycle them.
4. **E-WASTE** - Student and facility electronics often form a large portion of a campus's waste — As campus continually upgrade their computing facilities and office computers to keep up with the latest technology, the old computers have to go somewhere. So do old printers, phones, copy machines and other electronics that receive upgrades over the years. Discarded student electronics often become part of a University's waste stream as well. Students may throw away old phones, TVs, tablets, laptops and printers, along with cords and other accessories. Recycling is a much more eco-friendly option — the metals in old electronics often have a high reuse value. University has tie-up with external authorised agency details mentioned in legislation compliances.
5. **CHEMICAL WASTE** - Chemical waste on a University campus may come from numerous sources. Campus laboratories generate waste chemicals, as do cleaning services. The detergents used in campus laundry rooms eventually become waste as well. Much of these chemical substances are hazardous waste under Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989 and must undergo specific disposal processes according to state environmental rules and regulations.
6. **MAINTENANCE WASTE** - In the maintenance department, spent paints, solvents, adhesives and lubricants all form potentially hazardous waste. Because they are difficult to recycle, spent incandescent light bulbs usually become landfill waste. Spent fluorescent light bulbs, which contain small amounts of mercury, typically require special handling because of the environmental and health risks they pose.



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7. **BIOLOGICAL WASTE** - Biological waste from laboratories will require special handling and disposal as per BMW Rules, 2016. Tissue from biology labs forms biological waste, as do tissue samples, contaminated bandages and used sharps from medical facilities.
8. **FURNITURE** - Furniture waste on a University campus has a couple different sources. The campus itself may also get rid of old furniture as it modernizes its classrooms, cafeterias, computer labs and study spaces. Annually sold to junk dealer.
9. **BOOKS/MAGAZINES/NEWSPAPERS** - Books accounted for solid waste generation and University often generate tons of textbook waste. As courses upgrade to new editions, they may end up throwing their newly obsolete textbooks into the garbage if donation programs cannot use them.
10. **C & D WASTE** - Due to expansion of University campus building and renovation works result significant amount of construction and demolition waste that should be either used for back filling or disposed off through authorised dumping site by CPCB/SPCB.
11. **SOLID WASTE** - The University is managing solid waste by providing it to the Municipal Corporation.
12. **HORTICULTURE WASTE** – University campus has lavish greenery and grounds that results significant horticulture waste which is managed by in-house composting system.

ENERGY CONSERVATION

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

University uses electricity for fans, AC, lights, printers, computers, etc. LPG is used for cooking food in hostel mess and canteen. Diesel is being used in DG sets.

Saving methods

- *Solar power plant – 5KW installed, to save electricity*
- *Electricity saves by use of LED bulbs for illumination*
- *Motion sensor based lights are installed in washrooms for energy saving*
- *LPG saves by use of Pressure cookers for cooking food.*
- *Solar heaters usage in kitchens and hostels*



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

Yes, Renewable source of energy through 5 KW solar panel is operational

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

Approx 50 % of Total Conventional bulbs and tubelights are replaced by LED/CFL Lights.

4. Do you run “switch off” drills at institute?

Yes

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

Yes

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

Yes, approx. 6 hours

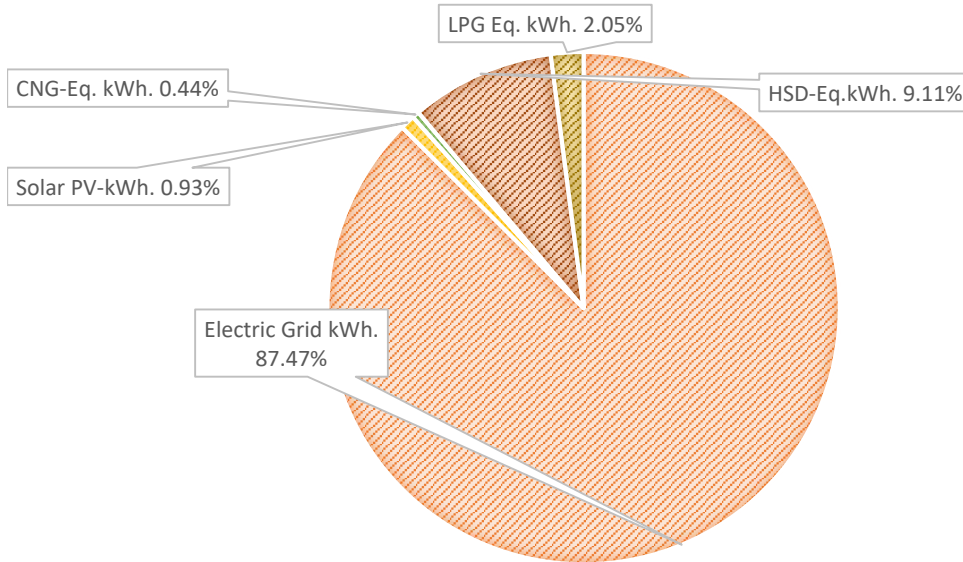
Energy Share	kWh	Percentage
Electric Grid kWh	678684.00	87.47%
Solar PV-kWh	7200.00	0.93%
CNG-Eq. kWh	3410.85	0.44%
HSD-Eq.kWh	70670.08	9.11%
LPG Eq. kWh	15914.40	2.05%
Total -kWh	775879.33	100%

*Solar power plant is not operational because of the ongoing pandemic restrictions



ENERGY SHARE IN KWH

Electric Grid kWh Solar PV-kWh CNG-Eq. kWh HSD-Eq.kWh LPG Eq. kWh



WATER AND WASTE-WATER MANAGEMENT

1. List uses of water in your institute

Basic use of water in campus:

Drinking – 46.44 KL/month

Gardening – 990.00 Kl/month

Kitchen and Toilets – 304.98 KL/month

Others – 111.02 KL/month

Hostel – 1671.30 KL/Month

Total – 3123.75 KL/Month



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

- There are total 35 tanks of 1000 litres tanks on terrace.
- Along with this, there are underground tanks of capacity 25000 litres and 40000 litres

Saving Techniques

- Avoid overflow of water controlled valves are provided in water supply system.
- Close supervision for water supply system.
- Water Conservation awareness for new students
- Initiated sprinklers usage for gardening and grass cover

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

Entry - Water comes from Municipal corporation and 2 bore wells

Exit- From Canteen, Toilets, bathrooms, Hostels and Laboratories through covered drainage which is connected to sewage

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

Basic ways:

- Sprinklers usage for gardening and grass cover
- Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage
- Water Conservation awareness for new students
- Push taps are installed in new building structures and newly purchased appliances

5. Does your institute harvest rainwater?

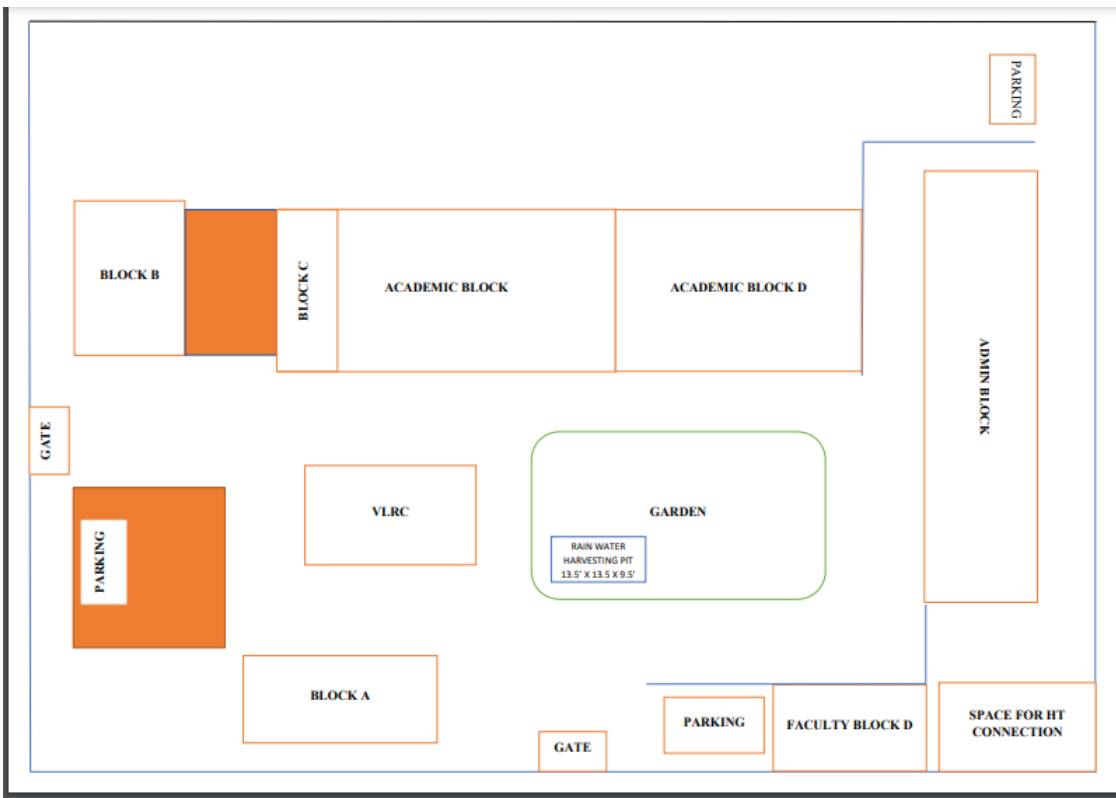
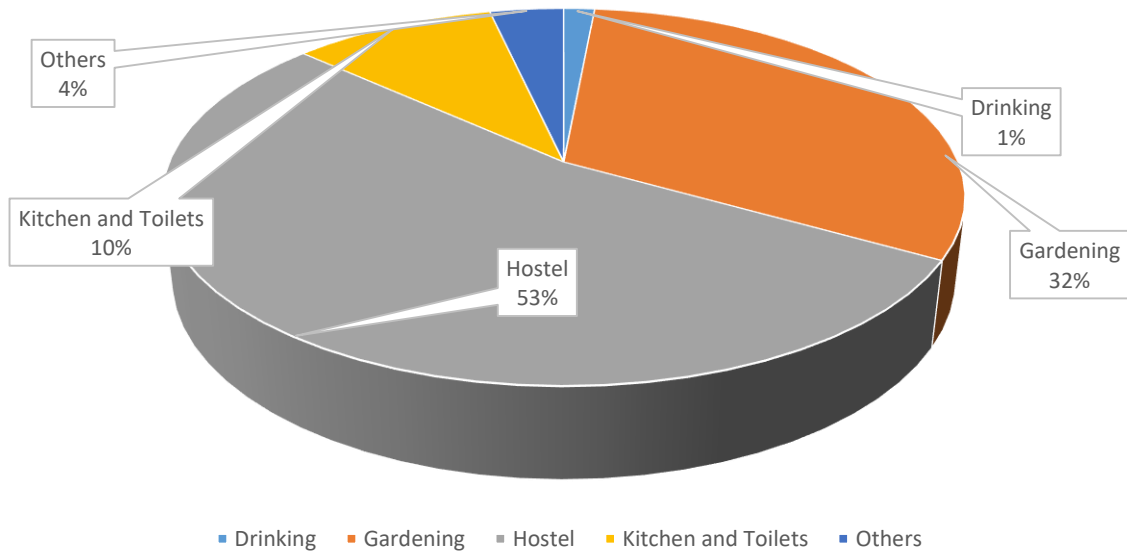
University is collecting rain water in two large underground storage tank with capacity of 2 lacs litres each. Drawing of the same is shown below.

6. Is there any water recycling System?

No



Water Consumption (KL per Month)



The drawing of Rainwater storage tank



AIR QUALITY MANAGEMENT

1. Are the Rooms in Campus Well Ventilated?

Yes, as per National Building Code, guidelines

2. Window Floor ratio of the Rooms?

Very Good, ample daylight utilization because of big windows.

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

University owns a total of 7 vehicles which includes 2 buses, 3 cars, and 2 vans. Buses and 2 cars run on diesel, 1 car and 1 van runs on petrol and 1 van is CNG based vehicle.

4. PUC done?

Yes

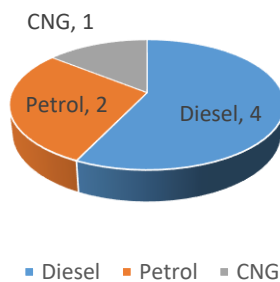
5. Specify the type of fuel used by your campus's vehicles

2 Buses and 2 cars run on diesel, 1 car and 1 van runs on petrol and 1 van is CNG based vehicle.

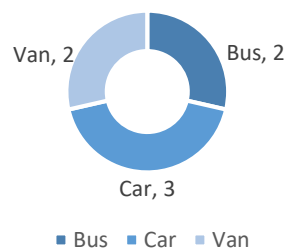
6. Air Quality Monitoring Program (If, Any)

Yes

Vehicle count based on fuel type



Vehicle count based on vehicle type





ENVIRONMENT LEGISLATIVE COMPLAANCE

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

Yes, faculty members and administrative team is well aware of national environmental laws.

- 1) Segregation and recycling of Waste (Solid Waste Management Rules 2016)*
- 2) De-concretization of trees (National Green Tribunal Act, 2010)*
- 3) Reduce Noise on campus (Noise pollution (regulation and control) rule, 2000)*
- 4) Reduce single use of plastic, and recycling of plastic (Plastic Waste Management Rules, 2016)*
- 5) Recycling of electronic waste (e-waste Management and Handling Rules 2011)*

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

Yes, the eco club of CUG is conscious about the environment protection and takes proper measures in terms of awareness campaigns, activities, webinar, seminars, etc.

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

Yes

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

Yes, managing with internal labs

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

No

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

No



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7. Does any Hazardous waste generated by the Institute?

Yes, lab waste is managed properly by the university

GENERAL INFORMATION

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

Yes, CUG eco club carries out different workshops, campaigns, awareness programmes for environment protection in campus.

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

Yes, various awareness campaigns like plantation, energy conservation, pollution reduction campaigns carried out by University

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

Yes, World Environment Day, Ozone Day, Earth Day, World water day, World Tobacco Day, International Yoga Day and more are celebrated by campus.

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

Yes, University participated in following activities

- *Swatch Bharat Abhiyan by students at campus*
- *University is participating in UBA and facilitating the Social and Environmental awareness in five villages (KakaNuTarapur; Lekawada; Titoda; Pundrasan; Adraj Moti) near Gandhinagar district.*
- *Central University of Gujarat, Unnat Bharat Abhiyan (CUG-UBA) is organizing Coronavirus disease Awareness online quiz programme to sensitize and*
- *increase awareness about COVID-19.*



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- The Central University of Gujarat, Gandhinagar organised a panel discussion under the aegis of the Unnat Bharat Abhiyan, a flagship programme of MHRD at Central University of Gujarat and deliberated on a very pertinent and promising theme of Atma Nirbhar Bharat – Prospects and Opportunities in Rural Ecosystem on July 22, 2020 through a webinar.

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

Certificates are attached in annexure I

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

This is the first external audit carried out by the University.

8. Has the institution been audited /accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?

Yes, University is accredited as NAAC B++ rated

INITIATIVES CARRIED OUT BY UNIVERSITY

- CUG has adopted five villages (Kaka Nu Tarapur, Titoda, Adraj Moti Pundrasan, and Lekhawara) near Gandhinagar district under Unnat Bharat Abhiyan.
- University is actively participating in UBA and facilitating the Social and Environmental awareness in five villages (KakaNuTarapur; Lekawada; Titoda; Pundrasan; Adraj Moti) near Gandhinagar district.

Based on Technology identification and Proposing Solution: Two projects formulation under Technology Development and Customization of solution is approved with financial support.

Sustainable Agriculture System - Groundwater treatment and purification using solar distillation System in Kakanu- Tarapur village, Gujarat (Rs 50,000/)



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Water Resource Management - CETP-solid waste treatment and its conversion into biofertilizer (Rs 80,000)

- Group of faculty members and students visited selected villages and interacted with Village Sarpanch, Talati, School principals, students and other people to understand village ecosystem and different issues to find out scientific solution. Also discussed the developmental activities to be introduced in the village to facilitate with the help of University students and faculties.
- Webinar was organized on Responding The Challenges of Covid-19 : Awareness & Prevention
- Central University of Gujarat, NSS organized association with (EBSB & Yoga Club) celebrated World No Tobacco day by organising a webinar on 31st May 2021
- Online training session for common yoga protocol practice for celebration of 7th International Day of Yoga from 21st May to 21st June 2021
- CUG Observes World Environment Day, and organise Webinar on Environment Restoration on 5th June 2021
- The webinar on 'Swastha Jivan Shaili: Yoga, Pranayam and Dhyana' was organized by EBSB, CUG on 29th July 2021
- On 75th Independence of India several activities were conducted by EBSB, NSS and Yoga Club.
- Swachhata Pakhwada was jointly organized by EBSB and NSS of CUG during 8th to 15th September. About two hundred participants had extended their participation in the event. As part of the event, a seminar on 'Water Conservation: Awareness and Responsibility' was also held.
- Vigilance Awareness Week was jointly organized by EBSB and NSS of CUG from 26th October to 1st November 2021.



RECOMMENDATIONS

- Eco-friendly parameters should be included in the purchase of articles and goods for the campus.
- Car-pooling practices can be adopted by campus to minimise air pollution.
- The periodic maintenance schedule for renewable sources of energy to achieve optimised efficiencies.
- Environmental Monitoring i.e. (Ambient Air Quality monitoring, Stack Monitoring of DG sets, Water monitoring need to be conducted by State Pollution Control Committee, approved laboratory) should be conducted periodically.
- Agreement with third party authorised vendors should be done for different types of waste management, such as e-waste, BMW, Plastic waste, etc.

CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on a wide range of issues related to environmental aspects. Overall 40% of University campus is for landscaping and around 16% is green cover. Central University of Gujarat is dedicated to promote the environment management and conservation in the campus and community. The audit has identified some suggestions for making the campus premise more environment friendly. The recommendations and suggestions are mentioned for campus to initiate actions.

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



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REFERENCES

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




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ANNEXURE I – ENVIRONMENTAL RECOGNITION AND COMPLIANCE



BMW AUTHORIZATION FORM-III(Rule 10)

Reserch Laboratory, Central University of Gujarat (Gandhinagar) (391357)

Gujarat Pollution Control Board
Paryavaran Bhavan
Sector 10/A , GANDHINAGAR-382010
Tele :

Under the Rule-10 of the Biomedical waste (Management and Handling) Rules, 2016 framed under the EPACT'86

Authorization for operating a facility for Collection,Generation,Segregation,Storage,Treatment OR processing OR conversion of biomedical wastes.

BMW AUTH NO :BMW-333587, VALID UPTO : 31/12/2075

Application Inward No : 36456 , Date: 28/06/2017

PCB Id : 0
BMW Id : 391357

CCA No: ()

File No : , (Out No : 15148)

No of Beds : 0, Investment(in lakh) : 5.00, Act : B
No of H.W : 0, Water Consumption(klpd) : 0.00, Scale : S

In exercise of power conferred by this Board and after scrutiny of above referred application, Superintendent / Incharge of Reserch Laboratory, Central University of Gujarat (Gandhinagar) at Nr. Jhulelal Mandir,,Sector-30, Gandhinagar , Gandhinagar Tal : Gandhinagar Dist : Gandhinagar. is here by granted an Authorisation to operate Health Care facility for Collection,Generation,Segregation,Storage,Treatment OR processing OR conversion of biomedical wastes on the premises of M/S. E.Coil Waste Management System (Unit-2) situated at Estate B/H Asopalav Hotel,Ta: Bhiloda, Dist- Sabarkantha. Dist : SABARKANTHA Under CBWTF Reg. No : GAN -02-02723, Valid Upto :

1.The Authorisation is granted for 0 nos. of beds with generation of

Type of Waste Category (Kgs/Month)	YELLOW	WHITE (Translucent)	RED	BLUE
Qty permitted for Handling	85.00	5.00	10.00	3.00

category of biomedical wastes. (Unit - Kgs/Month)

2.This BMW Authorisation shall be in force for a period of (year, Valid Upto 31/12/2075)(LifeTime)

3.This Authorisation is subject to the conditions stated in the Annexure-I attached here with and to such other conditions as may be specified in the Rules for the time being in force under the Environment (Protection) Act 1986.

4. The authorization shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.

5. The authorization or its renewal shall be produced for inspection at the request of an officer authorised by the prescribed authority.

Di: 28/06/2021 Granted on : 10/07/2017 11:58:03 TPAV # 3V38R4CLD1



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ANNEXURE II – PHOTOGRAPHS OF ENVIRONMENTAL INITIATIVES



Awareness program



Awareness drive at nearby school



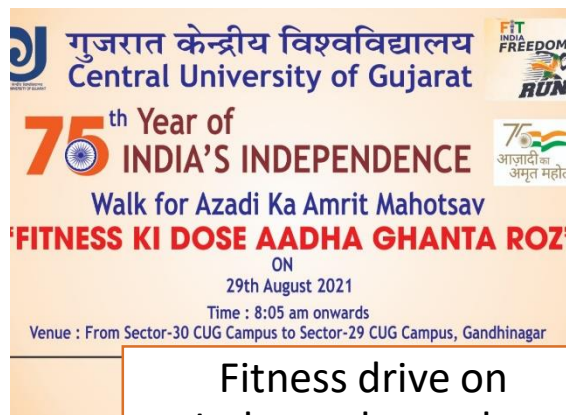
Awareness program



Azadi ka amrit mahotsav celebration at campus



Plantation drive



Fitness drive on Independence day



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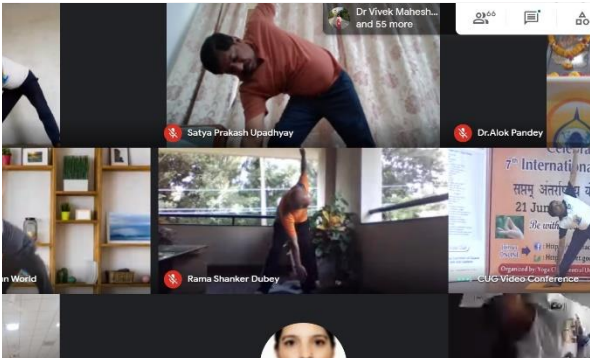
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Yoga session on International Yoga Day



Marathon - An initiative for fitness



Online International Yoga Day Celebration



Motion sensor based lights in washrooms of the campus



Temporary Composting pit



Incinerator for sanitary waste management



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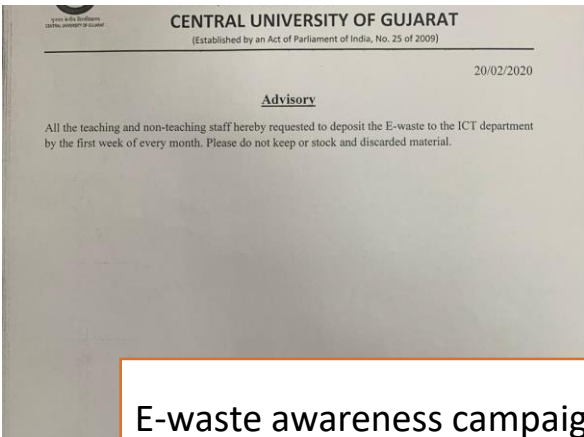
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Temporay rainwater storage tank



World water day celebration - slogan writing competition



E-waste awareness campaign



Swachhata Pakhwada



Plantation on Environment Day



World Environment Day celebration

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