

ENVIRONMENT AND ENERGY POLICY



Invertis University is dedicated to maintain, and wherever possible, improve the quality of its environment. It's for both, the people who live and work in the University and for the wider community. Therefore, the environment Policy of Invertis University seeks to make the most adequate and efficient use of all University resources, to conduct all academic and extra-curricular activities as well as services within the Campus and in designated areas outside the Campus. So, as to minimize any adverse environmental impact, and to comply with relevant legislations, it encourages all members of the University community to develop a continuous approach to their work and lifestyle.

Scope

The Environment Policy applies at each stage of development of academics and extracurricular activities as well as services, from research through to full -scale operation, in its entire domain. It applies to every stage in the life cycle of the process and services i.e. a cradle to grave assessment. It applies to new as well as existing processes and services.

Implementation

A. In implementing the Environment Policy, Invertis University encourages

- Review and continuous improved processes, performance of services and operations as measured by their environmental impact.
- Use standards of environmental safety, which are scientifically sustainable and commonly acceptable.
- Work in cooperation with members of fraternity, government agencies, relevant environmental bodies, suppliers, transporters, caterers and service providers to promote achievement of high standards in environmental care.
- Promote responsibly, and show case real advantages it has achieved without making false or misleading claims on environmental protection.

B. Invertis University will initiate and begin

- To operate the best practices in accordance with guidelines produced by Invertis University or an appropriate body.
- To analyze the University's environmental footprint and initiate changes necessary to improve the University's environmental performance.
- To comply with all local and national environmental laws and regulations.
- To cooperate and interact with national and local authorities concerned with protection of the environment.
- To comply with all government guidelines and codes of practice.

- To operate the University in a manner which demonstrate awareness about the nature and extent of the impact on the environment.
- To maintain effective procedures, consistent with available technology, to prevent environmental incidents.
- To participate, whenever possible, with consultative bodies advising on environmental legislation and thereby substantially contribute to provide and enhance local knowledge and experience.
- To appoint and empower a member of Invertis University to inspect all environmental matters and to manage relevant communication both internally and externally.

- To store and use chemicals or other materials in a safe manner and in such a way as to minimize risks of pollution incidents.
- To minimize usage of raw materials through optimization of process controls, especially in chemical and fuel related operations.
- To fully assess the environmental impact of new processes completely at the design stage.

- To provide appropriate training for user groups, emphasizing individual responsibilities for sound environmental management.
- To carry out internal audits to ensure compliance with policy and local and national regulations.

- To practice good housekeeping which is fundamental for a sound environmental management system.
- To maintain procedures enabling quick response in the event of a hazardous accident, thereby minimizing environmental damage or nuisance.
- To maximize the energy efficiency of processes, thereby minimizing emission of carbon dioxide and other gases and discharging them in a safe way.
- To recycle waste or recover economically useful materials from waste as far as is reasonably practicable.
- To maintain procedures for the investigations of all environmental incidents, requests and complaints and to take reasonably practicable action in order to prevent or minimize its recurrence.
- To obtain raw materials of precise chemical composition from material suppliers to design good disposal techniques after its end-use.

C. The Policy will be implemented at the operating level. The overall responsibility for implementation and maintaining standards of the Environment Policy rests with the Safety Officer. She/he will

- Ensure that in the implementation of the policy, Invertis University is able to call upon expertise available from suitable specialists within or outside the University campus.
- Take steps in protecting the environment through continuous improvement in the environment impact of Invertis University operations.
- Increase environmental awareness by appropriate training of user groups.

- Meet or exceed the requirement of legislation.

All individuals are given specific responsibility for the implementation of the policy in areas of their control. They are required to ensure that all activities are conducted in a responsible manner, which is well suited with the objectives of the Invertis University Environment Policy.

All individuals have a duty to observe rules and practices, which apply to the job or work area in which they are employed, and to report any faults or malpractice to their immediate supervisor. They should be aware of any action which may have an effect on environmental issues and at all times must co-operate with Invertis University to ensure that legal requirements, the Environmental Policy and internal procedures are satisfied.

ENERGY AUDIT REPORT

2019-2020

23/December/2019



Invertis University

Bareilly-Lucknow National Highway, NH-24, Bareilly,

Uttar Pradesh 243123



Invertis University
Bareilly-Lucknow National Highway, NH-24, Bareilly,
Uttar Pradesh 243123
ENERGY AUDIT ASSESSMENT TEAM

Sr. No.	Constitution		Designation
1	Sh. L. P. Mishra	Director Administration, Invertis University	Chairman
2	Mr. Anil pandey	Assistant Professor, Department of computer Science, Invertis University	Co-ordinator (IQAC)
3	Mr. Amritansh Mishra	Assistant Professor, Dept. of Professional Communication, Invertis University	Co-ordinator Audit Assessment Team
4	Dr. Ankur Rai	Assistant Professor, Electrical Engineering	Member
5	Mr. Ankit Kumar	Assistant Professor, Civil Engineering	Member
6	Dr. Dheeraj Sagar	Assistant Professor, Mechanical Engineering	Member
7	Dr. Abhinav Nath	Assistant Professor, Department of Management	Member
8	Ms. Shelly Sharma	Administrative Executive	Member

Content

Sr. No.	Title
1	Introduction
2	Objectives of Energy Audit
3	Energy Auditing Methodology
4	Steps of Energy Audit
5	Geographical Location of Invertis University
6	Solar plant of Invertis University
7	Major Findings
8	Recommendations

1. INTRODUCTION

Energy Audit needs to be done to Identify Energy saving Opportunities in a facility or areas with excess use of Energy compared with set up standards. Energy audit is an effective tool of energy management to use Energy effectively and efficiently. Energy today has become a key factor in deciding the product cost at micro level as well as in dictating the inflation and the debt burden at the macro level. Energy cost is a significant factor in economic activity at par with factors of production like capital, land and labour. The imperatives of an energy shortage situation calls for energy conservation measure, which essentially mean using less energy for the same level of activity. Energy Audit attempts to balance the total energy inputs with its use and serves to identify all the energy streams in the systems and quantifies energy usages according to its discrete function. Energy Audit helps in energy cost optimization, pollution control, safety aspects and suggests the methods to improve the operating & maintenance practices of the system. It is instrumental in coping with the situation of variation in energy cost availability, reliability of energy supply, decision on appropriate energy mix, decision on using improved energy conservation equipment's, instrumentation's and technology.

1. OBJECTIVES OF ENERGY AUDIT

An energy audit is an inspection survey and analysis of energy flows for energy conservation in a building and in an organization. It may include a process or system to reduce the amount of energy input into the system without negatively affecting the output.

The specific objectives of Energy audit are:

- Verify the steps adopted for energy management in the campus
- Spot the inefficient or inadequate practices, if any
- Improve the energy preserving measures and methods
- Identify potential energy saving opportunities
- Formulate feasible steps and measures to be adopted in the campus

2. ENERGY AUDIT METHODOLOGY

Energy audits are primarily classified into:

- Preliminary Audit
- Detailed Audit

A Preliminary Audit uses existing data to look extensively at the existing energy consumption patterns and identifies the areas for improvement, sets “reference points”, and identifies areas for more in-depth study. A Detailed Audit is more comprehensive and is carried out in phases, evaluating all major energy using systems. It estimates energy savings and cost, and accounts for the energy use of all major equipments. Since the Detailed Audit is meant for industry, and because of the limited size and the amount of energy consumption of the institution, the Preliminary Audit method was chosen for this year.

3. STEPS OF ENERGY AUDIT

Phase I

- Collections of data on operational parameters, energy consumption both normal and electrical.

- Study of the specific energy consumption.
- Study of the power sources, distribution system and drive controls, load factor and efficiency of large motors (above 10 kW), process automations, plant illuminations etc.
- Collection of requisite data and analysis and identification of specific areas with potential for conservation of electrical energy.
- Study of limitations, if any, in the optimal use of electrical energy.
- Formulation of specific recommendations along with broad system concept for conservation of electrical energy.
- Formulating tentative time schedule for implementation of the recommendation.
- Undertaking broad cost benefit analysis in terms of savings in energy consumption per unit of production and pay-back period.

Phase II

- Compiling the data in order to produce a draft report.
- Re-examining of the data collected for the final report.
- Preparing an action plan based on the outcome, where there is a need for improvement.
- Implementing strategies for further action plan based on the final report of green audit.

4. GEOGRAPHICAL LOCATION OF INVERTIS UNIVERSITY

Invertis University is situated on Bareilly-Lucknow NH-24, equidistant from the national capital Delhi and state capital Lucknow. It is situated within the geo-position between latitude 28.2923317⁰N and longitude 79.4915667⁰E in Bareilly, Uttar Pradesh India. The campus is just 12km

away from the Bareilly Railway Station and Roadways Bus Stand equally. The campus has built over an area of 23.5 acres of land.



5. SOLAR PLANT OF INVERTIS UNIVERSITY

Invertis University is contributing to the larger picture of effective energy management and conservation as we have a massive number of solar panels on every building and most of the requirement of the electricity we are collecting from there only. Here we have some specification of our solar plant agreement:

Solar Plant Agreement: Uttaranchal Welfare Society and Siddhesh Multi Commodities LLP.

Capacity: 800 kW

Commissioned date: 30 March 2017

The Plant consists of 29 inverters and 13 meters for reading. Solar panels are from Vikram Solar and the panel model number is 320.

Extra Solar power generated is exported to Madhayanchal Vidhut Nigam through Net Metering system.

We also ensures the regular maintenance and working of the solar plant and highly committed to contributing to save energy and its resources to which we as one nation can allocate the saved resources in the development of our country.



6. Major Findings

I. Establish and identify the energy consumption in the organization:

- The computer labs and engineering workshops record the highest consumption based on end use.
- The computer Block records the highest rate of consumption.



- Laboratory equipments show the highest rate of consumption equipment-wise.
- The month of March shows the peak in consumption.
- The time slots in the Afternoon record the highest consumption on a normal working day.
- Major part of electric consumption is depending on solar panels.
- There are a number of unused sockets and redundant power points causing power wastage.
- There seem to be a lack of judicious use of power among students and staff. During the study, it was found that lights, fans and computers were kept on working mode in many rooms, without a single person present.

Estimate the scope for saving: The study could identify a large scope for saving energy in the campus, including.



Recommendations

- Updating of technologies in laboratory equipments.
- Replacing old electrical cables and pipelines.

- Replacing incandescent bulbs with LEDs.
- Ensuring even lighting facilities in rooms.
- Replacing old gadgets with new advance electronic gadgets.
- Encouraging students and staff to switch off electrical gadgets and turn off the water taps when not in use.
- Replace old pipelines with new ones, and latest motors for pumping water.
- New buildings to be constructed should follow the pattern and assure natural light and air passage, to reduce loss of energy.
- Replace old electrical cables with new ones.



GREEN AUDIT REPORT
2019-2020
25/November/2019



Invertis University
Bareilly-Lucknow National Highway, NH-24, Bareilly,
Uttar Pradesh 243123



Invertis University
Bareilly-Lucknow National Highway, NH-24, Bareilly,
Uttar Pradesh 243123

GREEN AUDIT ASSESSMENT TEAM

Sr. No.	Constitution		Designation
1	Sh. L. P. Mishra	Director Administration, Invertis University	Chairman
2	Mr. Anil pandey	Assistant Professor, Department of computer Science, Invertis University	Co-ordinator (IQAC)
3	Mr. Amritansh Mishra	Assistant Professor, Dept. of Professional Communication, Invertis University	Co-ordinator Audit Assessment Team
4	Dr. Mudita Verma	Assistant Professor, Department of Agriculture	Member
5	Ms. Pankaj Rai	Assistant Professor, Department of Biotechnology	Member
6	Dr. Himanshu Joshi	HOD, Department of Pharmaceuticals	Member
7	Dr. Surya Pratap Gautam	Assistant Professor, Department of Applied Science and Humanities	Member
8	Mr. Kedar	Warden, Boys Hostel	Member

Content

Sr. No.	Titles
1	Introduction
2	Objectives of Green Audit
3	Green Auditing Methodology
4	Steps of Green Audit
5	Geographical Location of Invertis University
6	Tree Diversity of Invertis University
7	Faunal Diversity
8	Major Findings
9	Recommendations

1. INTRODUCTION

Green Audit is a procedure of methodical recognizable proof, evaluation, recording, reporting and investigation of parts of ecological assorted variety of different foundations. It intends to investigate ecological practices inside and outside of the concerned parts, which will affect the eco-accommodating climate.

It has been observed that green review can be a helpful device for a university to decide how and where they are utilizing the most vitality or water or assets; the university would then be able to consider how to execute changes and make reserve funds. It can likewise be utilized to decide the sort and volume of waste, which can be utilized for a reusing venture or to improve squander minimization plan. It can make wellbeing cognizance and advance ecological mindfulness, qualities and morals. It gives faculties and students better comprehension of Green effect nearby.

If self-enquiry is a characteristic and essential outgrowth of quality instruction, it could likewise be expressed that institutional self-enquiry is a characteristic and vital outgrowth of a quality instructive organization. In this manner it is basic that the university assesses its own commitments toward a maintainable future. As natural maintainability is turning into an undeniably significant issue for the country, the job of higher instructive establishments corresponding to ecological manageability is progressively common.

The fast urbanization and monetary advancement at neighborhood, local and worldwide level has prompted a few natural and biological emergencies. On this foundation it gets fundamental to embrace the arrangement of the Green Campus for the organizations which will lead for supportable turn of events and simultaneously diminish a sizable measure of air carbon-di-oxide from nature. The National Assessment and Accreditation Council, New Delhi (NAAC) has made it

obligatory that all Higher Educational Institutions ought to present a yearly Green Audit Report.

For the sake of our environment it is essential for the Higher Educational Institutions to guarantee that they contribute towards the decrease of a global warming thereby creating a healthy environment.

2 . OBJECTIVES OF GREEN AUDIT

The current scenario lay emphasis on green management practices thereby the Green Audit of a university has become prime importance of the time.

It has been turning into a central significant for self-appraisal of the university which mirrors the role of the establishment in moderating the present ecological issues.

Invertis University has been investing amounts of energy to keep our condition clean since its commencement. The objective of the University for the Green Audit Process is to recognize, evaluate, portray and organize structure of Environment Sustainability in consistence with the relevant guidelines, strategies and measures.

The fundamental goals of doing Green Audit are:

- To promote greenery and promote monitoring of the related activities by introducing well planned practices.
- To document the ambient environmental condition of air, water and noise of the university.
- To report the flower and faunal assorted variety of the university.
- To acquaint faculties and staffs with genuine worries of condition and its maintainability.
- Framing environmental policies for plantation on a regular basis to provide healthily environment for everyone.

3 GREEN AUDIT METHODOLOGY

The reason for the green audit process of Invertis University is to guarantee that the practices that are followed are as per the Green Policy received by the organization.

Green audit methodology include: readiness and topping off of survey, physical examination of the grounds, perception and audit of the documentation, talking with key people and information investigation, estimations and proposals.

4. STEPS OF GREEN AUDIT

Invertis University recognized the fact that conducting a green audit is one of the important steps towards making our environment eco-friendly. Thereby the process of green audit is conducted in different steps i.e. pre-audit and post-audit so that the data recorded in the whole process can be utilized later for better and improved outcome.

A team is selected for the purpose of auditing so as to introspect the campus and create the report as per the objectives.

In the process of pre-auditing a raw data is collected by the team members on different practices that come under this process. Once the data is collected a final report is made that underlines all the measures taken by the university to create healthy environment. Apart from this the practices for further action for improvement are highlighted and implemented later.

PRE-AUDIT

- Planning of the green- audit.
- Selecting the team for the audit- process.
- Scheduling the facilities to be used for the report.
- Collecting available information so as to use it for further compliance of the data.
- Defining and mentioning major parts of the campus for the audit survey.

POST- AUDIT

- Compiling the data in order to produce a draft report.
- Re-examining of the data collected for the final report.
- Preparing an action plan based on the outcome, where there is a need for improvement.
- Implementing strategies for further action plan based on the final report of green audit.

5. GEOGRAPHICAL LOCATION OF INVERTIS UNIVERSITY

Invertis University is situated on Bareilly-Lucknow NH-24, equidistant from the national capital Delhi and state capital Lucknow. It is situated within the ge-position between latitude 28.2923317° N and longitude 79.4915667° E in Bareilly, Uttar Pradesh India. The campus is just 12km away from the Bareilly Railway Station and Roadways Bus Stand equally. The campus has built over an area of 23.5 acres of land.

6. TREE DIVERSITY OF INVERTIS UNIVERSITY

Invertis University is situated in the outskirts of the town surrounded with greenery. The campus has diverse variety of tree categories playing significant role in making the environment clean.

After and adequate collection of data it was found that the campus is home to numerous varieties of trees and plants.

The Responsible Invertian club ensures the regular plantation and monitoring of plants with the help of the Department of agriculture and committed to plant 500-600 trees every year.



The tree species are planted in various timeframes through different estate programs sorted out by the power and have become a vital piece of the university. The trees of the university have expanded the quality of life, not only within the campus but also for the people around the campus as it has added to our condition by giving oxygen, improving air quality, atmosphere improvement, preservation of water, protecting soil, and supporting natural life, controlling atmosphere by directing the impacts of the sun, rain and wind.

These trees absorb and channel the sun's brilliant vitality, keeping surroundings cool in summer. Numerous species of birds are reliant on these trees mostly for food and shelter.

Trees not only create a healthy environment but also help in completing the food chains. They play numerous roles thereby balancing the ecology. The nectar of blossoms and plants is fed by birds and insects. Leaf – secured branches keep numerous animals, for example, feathered creatures and squirrels, far from predators.

Various species show an apparently perpetual assortment of shapes, structures, surface and lively hues. Indeed, even individual trees differ their appearance over the span of the year as the seasons change. The quality, long life expectancy and superb height of trees give them a landmark – like quality.

A thick belt of huge obscure trees in the outskirts of the university have seen as cutting down dust and storms.

7. FAUNAL DIVERSITY

Invertis University is located in Bareilly, Uttar Pradesh. The city is on the Ramganga, with seven other rivers passing through the district. The lower Himalayas are 40 kilometres (25 mi) north of the river. The city has a humid subtropical climate with hot summers and cool winters. The average temperature for the year is 25 °C. June, with an average temperature of 32.8 °C is the warmest month, while the coolest month of the year is January, with an average temperature of 15 °C. It receives 1038.9 mm precipitation for the year on average. The month with the most precipitation on average is July with 307.3 mm of precipitation, while November is the month with the least precipitation on average, with an average of 5.1 mm. The summer is noticeably wetter than the winter, although rain falls throughout the year.

The climatic state of the Bareilly area and Invertis University specifically is entirely reasonable for a wide variety of flora and fauna to help its rich biodiversity.



During the green audit the faunal diversity of the university was studied and was founded that the campus is the home to numerous birds and animals. Insects like spiders, bugs, butterflies and moths, dragonflies etc feed on the variety of fauna. The diversity also includes birds like pigeons, doves, peacocks, woodpeckers, cranes etc.

8. MAJOR FINDINGS:

The Green Auditing of Invertis University led to various findings that can further be carried out to lay more emphasis on the aspects to be improved.

- It was found that the campus is home to various assortments of trees and plants.
- The trees in the university have added to our condition by giving oxygen, improving air quality, air improvement, safeguarding of water, ensuring soil, and supporting regular life.
- The campus is furnished with sufficient water supplies in order to irrigate the fields.
- Sprinkler water tubes are additionally kept up in order to equally water all the green fields.
- It was additionally found that Invertis University is home to faunal diversity due to the variety of trees that are a home to various flying creatures.

9. RECOMMENDATIONS:

On the basis of the Green Audit report following points can be recommended for further improvement:

- More plants need to be planted that are essential for purifying the air.
- Though there are hundreds of trees, there is a need to focus on planting medicinal plants more.
- More indoor plants like snake plants, areca palm, bamboo palm, croton etc. can be placed inside the buildings also as they are capable of filtering

harmful toxins and pollutants from the air within our most occupied indoor spaces.

- More water supplies need to be equipped in the playing area so as to effectively irrigate the fields.
- We need to implement green cleaning, pest control, and maintenance policies for a healthy and non-toxic environment. The campus can be outfitted with air quality meters that will check any serious air quality Issues, such as high CO2 levels, etc.

ENVIRONMENT AUDIT REPORT

2019-2020

16/September/2019



Invertis University

Bareilly-Lucknow National Highway, NH-24, Bareilly,

Uttar Pradesh 243123



Invertis University
Bareilly-Lucknow National Highway, NH-24, Bareilly,
Uttar Pradesh 243123

ENVIRONMENT AUDIT ASSESSMENT TEAM

Sr. No.	Constitution		Designation
1	Sh. L. P. Mishra	Director Administration, Invertis University	Chairman
2	Mr. Anil pandey	Assistant Professor, Department of computer Science, Invertis University	Co-ordinator (IQAC)
3	Mr. Amritansh Mishra	Assistant Professor, Dept. of Professional Communication, Invertis University	Co-ordinator Audit Assessment Team
4	Ms. ZoyaAbrar	Assistant Professor, Department of Journalism	Member
5	Dr. Neetika Mishra	Assistant Professor, Department Pharmaceuticals	Member
6	Dr. Sandeepan Maity	Assistant Professor, Department of Applied Science and Humanities	Member
7	Mr. Saurabh Saxena	Assistant Professor, Computer Application	Member
8	Mr. Ram Prakash Sharma	Store Incharge	Member

Content

Sr. No.	Title
1	Introduction
2	Objectives of Environment Audit
3	Waste Management
4	Procurement
5	Inter-university electronic systems: Invertis ERP
6	Cleaning Supplies
7	Dining Services
8	Building Construction
9	Geographical Location of Invertis University
10	Concluding Assessment

1. INTRODUCTION

An environmental audit is a type of evaluation intended to identify environmental compliance and management system implementation gaps, along with related corrective actions.

Environmental audit is defined as basic management tool which comprises a systematic, documented, periodic and objective evaluation of how well organization, management systems and equipments are performing.

A good environment management policy requires that there should be a constant effort to analyze and monitor various industrial working system and processes to generate and transmit this information for the inspecting authority such as exercise which generates necessary information on analysis of pollution being generated or will be generated and completion of annual estimate has been termed as environmental audit.

Each spring the Environmental Science and Policy completes a campus environmental and sustainability audit with the goal of providing Invertis with a document that not only collected available data, but provided actionable solutions to a variety of issues. The initial 2015 audit looked at ten topics, and each subsequent audit dives deeper into two of the original audit topics for a more in-depth analysis.

Ultimately, the Environmental Sustainability Audit provides information on specific areas of campus life and operations with regards to the level of sustainability they maintain. The information provided serves as a baseline for future generations of students and administration to reflect

upon when considering growth at Invertis University and topics covered range from course curriculum to energy use to transportation to waste management.

2. OBJECTIVES OF ENVIRONMENT AUDIT

There are three main types of audits which are environmental compliance audits, environmental management audits to verify whether an organization meets its stated objectives, and, functional environmental audits such as for water and electricity.

The key objectives of an environmental audit therefore are to: determine how well the environmental management systems and equipment are performing, verify compliance with the relevant national, local or other laws and regulations, minimize human exposure to risks from environmental, health and safety problems.

The specific objectives of Environment audit are:

- Improve the environment preserving measures and methods
- It helps in pollution control, improves production safety and health conservations of nocturnal resources by the way of ensuring waste prevention and reduction, assessing compliance with regulatory requirement, placing environmental information to the public
- Verify the steps adopted for environment management in the campus
- Spot the inefficient or inadequate practices, if any
- Formulate feasible steps and measures to be adopted in the campus
- Provide an up to date environmental data to the inspecting authority.

3.WASTE MANAGEMENT

Analyzing Invertis waste management programs is an important part of an environmental audit because waste can affect the University's environmental impact and campus safety, especially hazardous waste. From an economic perspective, knowing how waste is managed can help the University develop waste reduction strategies that can increase cost savings while also becoming more sustainable.



From 2011 to 2019, Invertis University improved its waste management programs using a variety of strategies which include the development of student and faculty sustainability committees and new staff positions that directly involve managing the University's waste. Over this eight-year period we increase the number of blue/red recycle bins. Invertis advanced the most in the area of waste reduction by implementing a number of educational and management programs.

Hazardous –Waste that is dangerous or potentially harmful to our health or the environment. Examples of hazardous waste include fluorescent bulbs, chemical products, and batteries.

Non-hazardous –Better known as municipal solid waste (MSW) or garbage.

Consists of items we utilize and dispose of every day such as product packaging, plastic bottles, and food scraps. This category also includes construction debris and medical waste.

In order to properly dispose or recycle all waste materials, both categories of waste must be divided into sub-groups.

3. PROCUREMENT

Procurement holds an important role in supporting sustainable development. Purchasing decisions should aim for efficient natural resource use, reduced energy consumption and carbon dioxide emissions, waste minimization, fair and ethical trade, and economic stability. Additionally, Invertis university benefit from sustainable procurement practices by receiving good value for their money, protecting and enhancing the environment, improving their efficiency of resource use, supporting innovation, creating a diverse and flexible supply chain, and gaining a competitive edge as a leader university.

4 INTER-UNIVERSITY ELECTRONIC SYSTEMS: INVERTIS ERP

To reduce the over-ordering of paper and resulting waste, the University uses several electronic systems namely; Invertis ERP in place of conventional paperwork and filing. This enables students and faculty members to work without paper and submit and collect the required information electronically. Similarly, The Office of Human Resources has switched from an all-paper to an all-electronic form of job applications and employee benefits system. This system is completely online and sends confirmation through e-mail. Additionally, Invertis University has a portal site for students, faculty, and staff. The site requires a login and provides links to numerous University resources.

Welcome Amritansh Mishra , PCINVU005 [Assistant Professor] Wednesday, July 8, 2020 1:53:50 PM

Odd Sem Results Even sem Results One View Result(17-18 onwards)

Your Last Login was :: 5/28/2020 9:15:39 AM Visit Invertis University WebSite 0 :NSAC

352 : Online Users

Announcement					Circulars				
Title	Published_Date	From	Uploaded_by		Title	Published_Date	From	Uploaded_by	
NOTICE REGARDING RESEARCH PAPERS PUBLICATION IN PHD	07 Jul 2020	Registrar	SANTOSH KUMAR	⇅	CIRCULAR REGARDING RESEARCH PAPERS PUBLICATION IN PHD	07 Jul 2020	Circular	SANTOSH KUMAR	⇅
RESULT REEVALUATION ODD SEMESTER 2019-20	01 Jul 2020	Announcement	DR. RAJEEV BHATIA	⇅	CIRCULAR REGARDING INFORMING CORONA LIKE SYMPTOMS	04 Jul 2020	Circular	SANTOSH KUMAR	⇅
NEWSLETTER - " HAR PAL " JUNE 2020 EDITION FROM IMAGES CLUB	27 Jun 2020	Abhiruchi	SUPRIYA SAXENA	⇅	CIRCULAR REGARDING DELAY IN ASSIGNED DUTY	03 Jul 2020	Circular	SANTOSH KUMAR	⇅
NOTICE REGARDING UNIFORM FOR READMITTED SUDENTS OF INVERTIS UNIV	23 Jun 2020	Registrar	SANTOSH KUMAR	⇅	CIRCULAR REGARDING USE OF LIBRARY FOR ACADEMIC DISCUSSION	23 Jun 2020	Circular	SANTOSH KUMAR	⇅
REGARDING- EVENT					CIRCULAR REGARDING APPLYING FOR NET EXAM 2020	23 Jun 2020	Circular	SANTOSH KUMAR	⇅

5. CLEANING SUPPLIES

Spring wave contracts usually last about 5 years from 2015-2020 currently operates on a contractual monthly basis service of spring wave including disposables, such as liquid soap, paper, toilet paper, hand sanitizers and other cleaning and sanitization services including cleaning supplies per month, such as floor wax and tools such as mops, brooms etc.

Additionally, Invertis University takes steps to ensure that its employees are implementing proper sustainable practices. These include using more sustainable products instead of conventional cleaning products that seem to be more effective but are actually more environmentally degrading. Cleaning products can also have a significant effect to the health of indoor



7. BUILDING CONSTRUCTION

As a concept, ‘sustainable building’ integrates multiple strategies into the design, construction, and operation of buildings. Sustainable building, or ‘green building’ represents a dynamic and healthy balance between environmental, social, and economic benefits. The goal is to use fewer resources and less non-renewable energy and water. This is achieved by using recycled materials, minimizing waste, and improving indoor air quality.

Green building and campus planning contribute directly towards sustainability at Invertis, as the built environment has a direct and profound impact on the natural environment.

Attention to the campus plan, layout, and infrastructural systems impacts resource consumption and emissions. Sustainable building practices make the campus a vital and more productive community with healthy indoor and outdoor spaces, and

reduced energy use and utility costs. As Invertis University campus continues to expand to accommodate more students and faculty, it is important to implement 'green building' awareness in decision making.

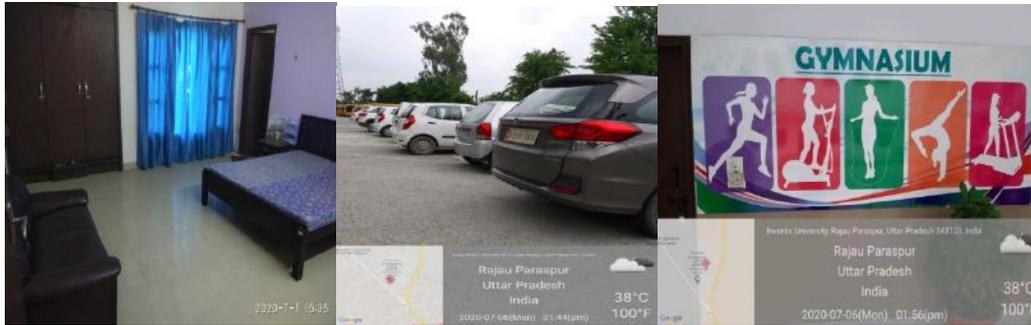


The objectives are to:

- Discuss the current status of sustainable building practices at Invertis.
- Explain resources available to improve building designs and operations.
- Provide examples and case studies of green building designs.
- Provide recommendations to increase building efficiencies and improve campus-wide.

FINDINGS

- Invertis is doing well to promote a sustainable culture by promoting alternative transportation, providing bicycle racks, gymnasium etc.



- All new buildings and major renovations projects are alert to the chemical off-gassing of interior wall paints/sealants and use only non-toxic products.
- All buildings are equipped with fire preventing system.
- To optimize cost saving and material saving, Invertis University is implementing a comprehensive database of retrofits performed, suppliers and materials used, to observe and document outcomes.
- Invertis University incorporates designs and energy system requirements.

8. DINING SERVICES

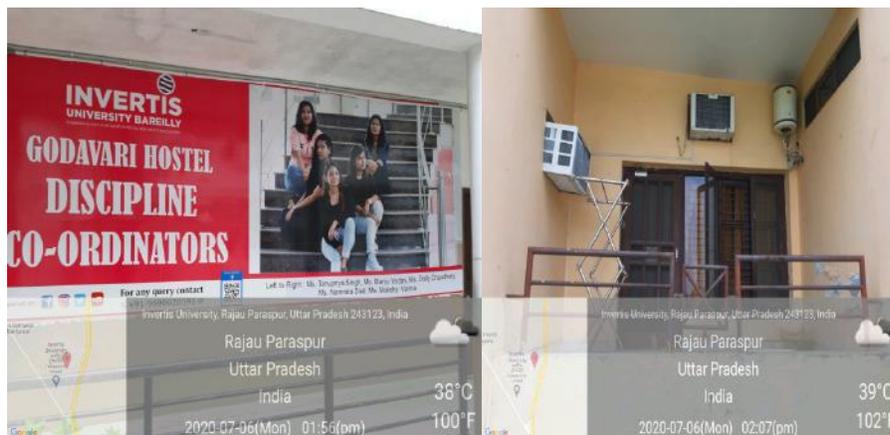
This audit will provide an overview of how Invertis University in recent years has made progress towards sustainability in dining services and initiatives. The following topics will be covered in addition to any possible recommendations and existing gaps in knowledge by the audit team:

Available Resources:

- 4 Boys hostel and 3 girls hostel having 750+ rooms
- 3 dining locations (Mess) namely; Annapurna are available boys-girls separate.



- Separate gardens/Gym/sports facilities for hostels.
- Outing facility once in a week with free transportation.
- Regular visit of doctors in hostel (Twice in a week)
- Regular food quality assessment by wardens and Director Administration.
- Student opinion of dining services and sustainability.
- Students mess committee (Boys & Girls) to ensure quality of food, availability, preparation of menu as per student's choice.



- AC rooms are available as per choice of the students.
- Warm water available during winters.
- 24 hour power supply.
- Amusement and entertainment available like; Movie hall, Indoor games etc.
- Cafeteria facility till 8PM.
- Customized security day/night for all the hostels.
- 24 hour CCTV surveillance.
- Water coolers available on all floors.
- Provide food donations from Invertis students to local food banks.

RECOMMENDATIONS:

- Only vegetarian food is available.
- Special outing facility is available in day time only.
- Special programmes needs to be conducted for waste management awareness.
- Lack of adequate storage capacity for the composted waste.
- University's kitchen garden can be developed.
- Start a competition between dining halls to see who leaves the fewest pounds of waste during a lunch period in the Dining Hall.
- Explain to students that dishes can be customized in the cafeteria to fit specific wants. One possibility may be asking the chefs to obtain feedback about how diners prefer their dishes.
- Label every food or meal option provided in all dining areas on campus as locally grown or sustainably harvested and transported. Also provide the environmental impact of various food choices.
- Provide incentives to students who bring reusable containers to take leftovers back to resident halls that would otherwise be thrown away.
- Provide and promote on-campus internship opportunities in food sustainability and preparation for course credit.

- Create a section dedicated to food and campus sustainability.

9. GEOGRAPHICAL LOCATION OF INVERTIS UNIVERSITY

Invertis University is situated on Bareilly-Lucknow NH-24, equidistant from the national capital Delhi and state capital Lucknow. It is situated within the geo-position between latitude 28.2923317° N and longitude 79.4915667° E in Bareilly, Uttar Pradesh India. The campus is just 12km away from the Bareilly Railway Station and Roadways Bus Stand equally. The campus has built over an area of 23.5 acres of land.

CONCLUDING ASSESSMENT

Invertis University environment services in the past ten years have continued to become sustainable. This has improved student environmental awareness, although further progress in this area can be made. Invertis is working to increase awareness and decrease pre and post-consumer waste. The move to green ware and going tray less supported these efforts in accordance with recommended food facility. Farms and the creation of a campus garden further shows efforts to consume locally grown goods and gain student involvement.

Invertis University is highly committed to increase transparency in the food supply chain at Invertis and allow the students to investigate and understand where their food is coming from and what the environmental implications of their meal choices are.

Increased student awareness and appreciation towards the changes going on in environment areas and through various contracts would improve the campus sustainability mind-set as well. If more education as to why sustainability is important was provided to students, they would be more likely to take action at Invertis.