2022

ENVIRONMENT AUDIT REPORT

PREPARED FOR:

KANYA MAHA VIDYALAYA, JALANDHAR CITY
(AN AUTONOMOUS COLLEGE)
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Executive Summary

Kanya Maha Vidyala Jalandhar (KMV) acknowledges the importance of Sustainability as an essential resource for successfully meeting its operational objectives. The Institute also realizes the need to use this resource in a responsible manner that is sustainable and complementary to its Environmental Management Policy.

This document explores how the Institute uses resources, outlines its approach to managing water and waste usage and sets targets for Carbon Footprint Reduction. This strategy is intended to sit alongside the other strategies which together make up the Institute's overall sustainability strategy.

The Kanya Maha Vidyala Jalandhar (KMV) is committed to improving sustainability. KMV strives to sustain its local and global environment, organizational health and ability to create a positive, viable future. KMV endeavors to include environmental sustainability principles and targets in all aspects of its decision-making. Through its research, teaching and learning, operations and community engagement, KMV aims to:

Minimize the environmental impact of its operations and move towards restoring environmental integrity

Promote social justice, equity and diversity

Contribute to human health and well-being

Maintain its financial viability

As part of its commitment to sustainability, KMV has developed a Sustainability Framework and Sustainability Strategy. KMV is now developing a series of Sustainability Action Plans on energy and greenhouse, water, transport and waste to support implementation of the framework and strategy. This document deals with Water and Waste Audit at Kanya Maha Vidyala Jalandhar (KMV).

About the Institute

Kanya Maha Vidyalaya, Jalandhar, the First & Only Women College in Punjab with AUTONOMOUS STATUS by UGC, MHRD, Kanya Maha Vidyalaya (Autonomous) has received Top National and State Level Ranking in Times BBA Education Ranking Survey 2022 conducted by prestigious Times of India group. KMV's BBA program has the proud privilege and honour of being ranked among top slot among all the colleges of Punjab & ranked No. 1 in Jalandhar among all the affiliated colleges of Guru Nanak Dev University, Amritsar second time in a row. Heritage is our rich legacy, inherited from the past that we preserve today to bestow to the future generations. With a priceless inheritance of 135 years, Kanya Maha Vidyalaya, Jalandhar, established in 1886, has the proud distinction of being the first educational institution for women in Northern India. Since its inception, it has shaped the destiny of the nation, the society and women through incredible contribution that was not confined only to the sphere of higher education but also encompassed environmental ethics. Kanya Maha Vidyalaya, Jalandhar in its contribution to its mission of clean and green India has taken several initiatives and has adopted numerous green policies. To ensure that the practices followed in the campus are in accordance with the Green Policies adopted by the institution regularly green audit is conducted annually.

The green landscaping, aesthetic elegance of arches and the vibrant pursuit of knowledge by the young aspirants make the environment serene, pleasant and dynamic.

Students joining the institute share the box full of opportunities for professional and personal development through an environment of practical orientation, industrial interaction and student led activities which help the students to develop good communication skills, integrated personality and greater competitive spirit.

Objectives of the Study

The main objective of the environmental audit is to promote the Environment Management and Conservation in the Institute Campus. The purpose of the analysis is to identify, quantify, describe and prioritize framework of Environment Sustainability in compliance with the applicable regulations, policies and standards. The main objectives of carrying out Environmental Audit are:

To introduce and aware students to real concerns of environment and its Sustainability.

To secure the environment and cut down the threats posed to human health by analyzing the pattern and extent of resource use of the campus.

To establish a baseline data to assess future sustainability by avoiding the interruptions in environment that are more difficult to handle and their corrections requiring high cost.

To bring out a status report on environmental compliance.

Audit Inclusions

- Water Audit and Conservation
- Waste Audit and Remediation

Water Audit and Conservation

Definition

Water auditing is a method of quantifying water flows and quality in simple or complex systems, with a view to reducing water usage and often saving money on otherwise unnecessary water use. It provides the deviation existing in the actual water supply to the minimum required water in the respective premises. Also, water auditing is a mechanism for conserving water, which will grow in significance in the future as demand for water increases.

Objective of the Audit

The objective of water audit is to assess the following:

1. Water Required (in accordance with National and/or State Bye Laws)
2. Water Used (as per the Existing Fixtures & Equipment)
3. Physical & Non-physical Losses

4. To identify and priorities areas which need immediate attention for control

Procedure

The different stages of the water audit have been depicted in form of below flow chart. The whole procedure is divided into five phase starting from the site inspection to review of the implemented measures.

Audit Procedure

Phase I: Commencement of Audit

At the beginning of water audit, it is must to observe the supply, storing & consuming facilities are provided on the site. The water audit team commits to:

- Conduct site visit to locate the water points & Map them
- Locate the water usage areas
- Take samples at various location to define water quality
- Mark storage tanks
- Compile the findings during visit
- Notice conditions of fixtures (dirty, stuck, leaking etc.)

Phase II: Calculation

After completion of site visit, the audit team performed calculation to analyze the acquired data with reference to local bye laws (in India: NBC 2016) as base line. This enables to determine whether the premise is consuming surplus water or not. The results will help to calculate the amount of water wasted or misused. Following goals are kept in mind during the calculation;

a) Estimating water use from different areas and activities of a building.

b) Estimate rate of flow of water from different outlets and inlets.

c) Determine the rate of flow of water for faucets and shower head.

d) Estimating shortage or surplus with reference to NBC 2016.

Based on the calculation, the water management strategies have to be define and implement in the respective premises.

Phase III: Audit Report

The team prepares detailed report based on procedure mentioned above. The audit report consists:

- Observations done during audit
- All the measurements, calculations
- Overview of the current working of water supply system
- Summary and conclusions based on the calculations

Phase IV: Discussion & Implementation

After formation of audit report, the audit team will hold meeting with the respective project team to discuss the current and future scenario towards the water management. The key discussion points are:

a) Possible water conservation measures & their implementation

b) Areas where water can be conserved & wastage of water can be minimized

Later, the project team will implement the measure that are finalized in accordance to the discussion and meetings held with audit team.

Phase V Review

After the implementation of measures, the review and maintenance of the same is much needed. Because, the continuous monitoring of the measures can only justify and revise the water savings occurring in the premises.

The formation of "Sustainable Development Goal (SDG's) Cell aligned with UNDP SDG's" in the premises will help in proper & continuous execution of the measures. This cell is also responsible to educate the occupants regarding effects of water management along with the finding and installing any new techniques at the project site.

Water- Use

This indicator addresses water consumption, water sources, irrigation, storm water, appliances and fixtures. A water analysis is an on-site survey and assessment to determine the water use and hence improving the efficiency of its use.

Water Storage Tank

Water Storage Tank
Total water storage in entire institute campus as per the capacity.

S. No.	Name	Quantity (Nos)	Capacity (Gallon)	Location
1	Over Head Tank	1	1,80,000	Pasricha Block

Observations

The study observed that the Ground water major sources of water in college and hostels. Water is used for drinking purpose and toilets. The waste water being generated in the premises is directed into MC main sewer line.

During the survey, no loss of water is observed, neither by any leakages, nor by over flow of water from overhead tanks.

SURVEY FORM OF CURRENT WATER MANAGEMENT

Sr.No.	PARAMETERS	RESPONSE
1.	SOURCE OF WATER	2
2.	NO. OF WELLS	0
3.	NO. OF MOTORS USED	2
4.	NO. OF WATER TANKS	1
5.	CAPACITY OF TANKS	80,000L
6.	QUANTITY OF WATER PUMPED EVERY DAY	3 times in winter 5 times in summer
7.	ANY WATER WASTAGE/WHY?	-------
8.	WATER USAGE FOR GARDENING	14,000L in summer per week 5000L in winter per week
9.	WASTE WATER SOURCES	Kitchen, hostel mess, washrooms
10.	USE OF WASTE WATER	Gardening
11.	WASTE WATER FROM LABS	-------
12.	WHETHER WASTE WATER FROM LABS MIXED WITH GROUND WATER	No
13.	ANY TREATMENT FOR LAB WATER	Yes
14.	WHETHER ANY GREEN CHEMISTRY METHOD PRACTICED IN LABS	Yes
15.	NO. OF WATER COOLERS	16
16.	RAIN WATER HARVESTING AVAILABLE?	7
17.	NO. OF UNITS AND AMOUNT OF WATER HARVESTED	7
18.	ANY LEAKY TAPS	No
19.	AMOUNT OF WATER LOST PER DAY	18,000 L
20.	ANY WATER MANAGEMENT PLAN USED?	------
21.	ANY WATER SAVING TECHNIQUE FOLLOWS?	Rain water harvesting
22.	ARE THEREANY SIGNS REMINDING PEOPLE TO TURN OFF THE WATER?	16 sign boards

WATER AUDIT FORM

DATA SHEET FOR ENTRY OF WATER USAGE PATERN FOR A LOCATION OR BUILDING

LOCATION: KMV CAMPUS

Sr.no.	Tap no./name	Type of the tap (Plastic/brass/any other)	Condition (Poor/good/moderate)	Average no. of people using per day	Average time per head per day	Average amount of water releasing per min.	Leaking or not	If leaking amount of water loss per minute
1	TOILET TAP	Steel	Good	4200	1	---	No	---
2	WASH BASIN TAP	Steel	Good	4200	1	---	No	---
3	TOILET FLUSH	Plastic	Good	4200	1	---	No	---
4	KITCHEN TAP	Steel	Good	35	---	---	No	---
5	SHOWER	Steel	Good	600	1	---	No	---
6	KITCHEN SINK	Steel	Good	35	---	---	No	---
7	OTHER							

Distribution system in the campus

The ground water is pumped into storage tanks located at different places in the campus. There are five numbers of over- head storage tanks and one Elevated Service Reservoir in the campus. The water is distributed through well laid pipe network. Drinking water after treating in RO plant is supplied through a separate set of distribution pipes and water for all other purpose is supplied through another set of distribution pipes as shown in figure 6. Entire distribution system is well supervised by Civil works committee to ensure that there are no leakages and wastages of precious water through joints, valves etc. Waste usage of water is reduced using low pressure flushes. There is also facility for elevated service reservoir. The water regulation system is supervised by the Water Audit Committee of the institution on regular basis to ensure the effective and economical usage of water.

Rainwater Harvesting

Rainwater Harvesting is a simple technique of catching and holding rainwater where its falls. Either, we can store it in tanks or we can use it to recharge groundwater.

Rain water is use to recharge ground water as well as stored in water tanks as mentioned in table below.

S. No	Name	Quantity (Nos)	Location
1	Rain water harvesting	2	Main ground
2	Rain water harvesting	-	Pasricha block
3	Rain water harvesting	3	New Building

Figure. Rain Water Harvesting in College Campus

Water Conservation Measures (Recommended)

Water Meter

A water meter is a device that use for measuring the amount of water flowing through the pipe. Water meter can help to measure how much water is utilized and also help to maintain water consumption record. With the help of water meter, aware of water consumption and therefore a fine way on how can cut down their utility expenses while saving water at the same time.

Institute has installed water meter on each bore well. Presently, Institute has collecting water consumption data and on the basis of data collection and analysis university have the information

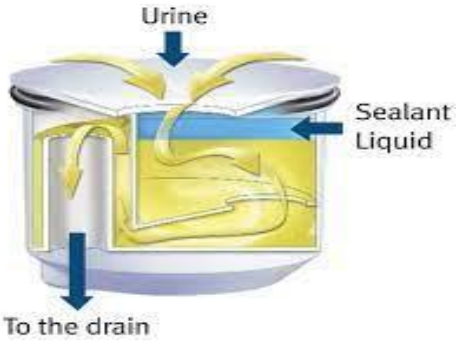
to understand their water usage, fix leaks, change behaviors and better manage this precious resource. All of this is now available in a cost effective and user-friendly platform.

Water Saving fixtures

It is suggested to display specific water consumption numbers in terms of domestic use at the entrance of each blocks to create awareness among all students and stakeholders visiting the facility.

Waterless urinals:

Waterless urinals look like regular urinals without a pipe for water intake. Men use them normally, but the urinals don't flush. Instead, they drain by gravity. Their outflow pipes connect to a building's conventional plumbing system. In other words, unlike a composting toilet, which leaves you to deal with your waste, these urinals send the urine to a water treatment plant.



Waterless Urinal

Foam taps

Conventional taps are used in the hand wash areas which results in wastage of large quantities of fresh water. Foam taps are a better fit in these high consumption areas. They consume 25-30% less water than conventional taps.

Foam taps

Spring loaded Push taps

Spring loaded push type tap is an alternate device for minimizing hand wash water. The spring-loaded push taps operate with the simple mechanism of pressing the knob for water. The knob is automatically released back to close position in 5-7 seconds. This saves about 30-40% of water compared to the conventional taps

Spring loaded Push taps

Summary – Water Audit

The water audit was conducted by a team of experts and recommendations have been shared in the report above. The report is an analysis of the water inflows and outflows, and presents opportunities to save water across the facility. Incorporation of the measures suggested in this report shall bring up the water efficiency in the campus and would be a step further in rendering the education campus among the leading institutions in water efficiency. A summary of the identified water conservation measures is given below:

Water Conservation Measures details (Recommended)

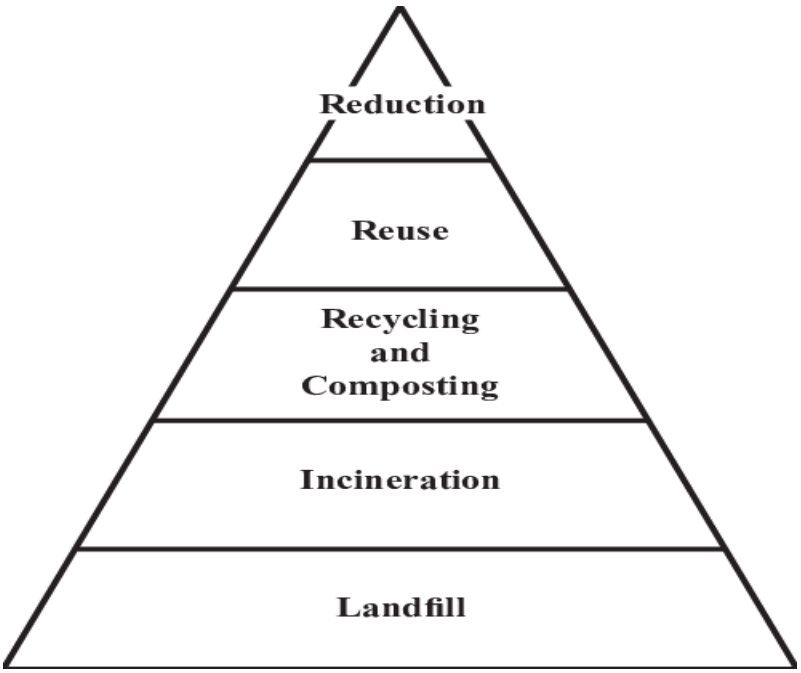
WCM	Description	Remarks
1.	Foam taps	25-30% saving of water as compared to conventional taps.
2.	Spring loaded Push taps	30-40% saving of water as compared to the conventional taps.
3.	Use of Irrigation System	40 % savings in landscaping water usage
4.	Prevention of leakages in building taps	100 % Savings in leakages

Waste Audit and Conservation

Questionnaire

1.	Does your institute generate any waste? If so, what are they?	Yes, Solid waste Canteen waste, paper, plastic, Horticulture Waste, E-waste, Bio-waste etc.
2.	How is the waste generated in the institute managed? By 1 Composting 2 Recycling 3 Reusing 4 Others (specify)	• Reuse of one side printed Paper for internal communication instead shredding • • Domestic Waste is given to Municipal Corporation. • Institute assigned a company for Bio Medical Waste management. Agreement copy attached in Annexure-A.
3.	Do you use recycled paper in institute?	No
4.	Do you use reused paper in institute?	Yes
5.	Can you achieve zero garbage in your Institute? If yes, how?	Not yet achieved. Possible through waste management plan.

Solid Waste and Recycling



Waste Hierarchy

EXISTING WASTE MANAGEMENT METHODS PRACTICED

- cleaning the campus on daily basis.
- Segregation of waste into degradable and non-degradable by the cleaning staff.
- Waste bin's in placed in corridors, office and staff rooms.
- Incinerators to burn sanitary napkins
- E-waste and plastic waste disposal at municipal collection center and Junk Collector
- Campaigns for reduce, reuse and recycle by different clubs.
- Cotton carry bag stitching and distribution by Fashion Design dept.

Waste measure and its disposal

S. No	Waste	Disposal
1	E- Waste computers, electrical and electronic parts	Disposal by selling &
2	Plastic waste	Disposal by selling& Reusing

3	Chemical wastes/ Laboratory waste/ Maintenance activities (paints, etc.).	Collected in Special Drums
4	Glass waste	Disposed to Municipal waste
5	Napkin incinerator	Disposed to Municipal waste
6	Solid wastes – Damaged furniture	Reused & disposed off
7	Food wastes	The food waste generated from the canteen and mess is collected and given to gaushala near college and animals (Cats & Dogs) Birds, Peacocks etc. inside the campus.
8	paper waste	Shredding Machine& Disposal to Junk Collector

Quantity of waste generated

S. No	waste generated	Quantity
1	Bio degradable (canteen5-7 kg per day & Mess30-35 kg per day)	40 kg per day
2	Non-bio- degradable (Canteen 2-3 kg per day& Mess15-17) kg per day	20 kg per day
3	Hazardous waste	Nil
4	Radioactive Waste (Physics Lab	Negligible (Approved from BRC) agency
5	Textile waste (Fashion Design dept.)	Half kg pre consumer waste and up-cycled with crazy quilting and patch work
6	Chemical waste (Science Labs)	Negligible
7	Bio-Medical waste (Dispensary in Hostel)	Negligible

SOLID WASTE MANGEMENT

Solid waste management system in K.M.V. Campus includes segregation, composting, Incineration and disposal with help of M.C.J. There are 100 dustbins have been placed all over campus. Solid waste is generated by all sorts of routine activities carried out in the college that includes paper, plastic, glass, metals food etc.

Waste Segregation

The campus is provided with a complete set of garbage bins for different types of bios- and non-bio degradable. (Wet and dry waste). Different colored bins are placed in order to collect and segregate various types of waste- plastic waste, paper waste, bio-waste etc.

Figure: Bins for segregation of waste

Composting

A composting pit is highly essential for the treatment of bio degradable waste generated from the canteen, hostels, food leftover by students and staff, office, vegetable garden and from the college campus cleaning process. Different methods such as pit composting, vermi-composting, bacterial composting using bacterial consortium is used at KMV College to treat the bio degradable waste. There are three composting and eight vermi compost pits to handle garden remains, waste food and vegetables are treated in compost pits by inoculation of E.M. solutions (effective microorganism). This manure is used by agriculture dept. of the college as an eco-friendly alternative to chemical counterparts.

Figure: Vermi Compost pits for Bio Degradable Waste Management

Honeycomb Pits for Bio Degradable Waste Management

Green waste management by Vermin-Composting and its usage for Horticulture

Vermicomposting, or worm composting, turns kitchen scraps and other green waste into a rich, dark soil loaded with the microorganisms that create and maintain healthy soil.

Figure: Honeycomb pits for bio degradable waste management

Figure: Green waste management by students of agriculture dept and making of green cutlery

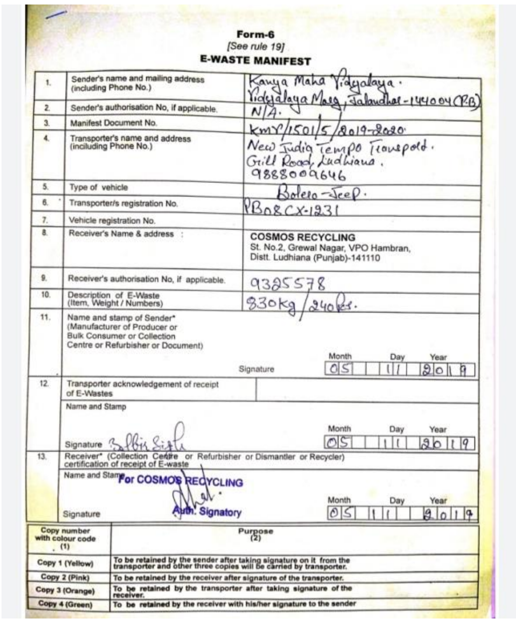
Figure: Recycling of Fruit and generating bio enzyme organically by students of biotechnology dept

Figure: Reuse of Plastic Bottles for Storing Bio Enzyme Generated Organically by Students of Biotechnology Dept

E- Waste

1 e-waste is collected and disposed through government licensed vendors.

2. Innovative e- waste management, The College has come up with several ideas to utilize e-waste by converting it into some art objects. (Pics from Harpreet)



Form-6
[See rule 19]
E-WASTE MANIFEST

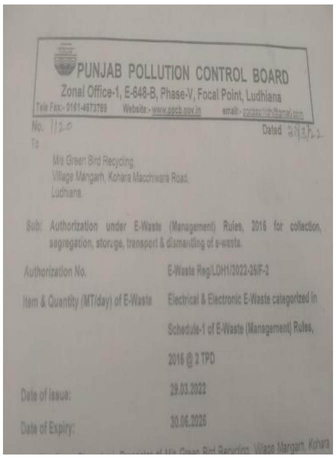
1.	Sender's name and mailing address (including Phone No.)	Kanya Maha Vidyalaya. Vidyalaya Marg, Jalandhar-144004 (P.B)
2.	Sender's authorisation No, if applicable.	N/A.
3.	Manifest Document No.	KMV/1501/5/2019-2020
4.	Transporter's name and address (inciluding Phone No.)	New India Tempo Transport. Grill Road, Ludhiana. 9888009646
5.	Type of vehicle	Bolero-Jeep.
6.	Transporter/s registration No.	PB08CX-1231
7.	Vehicle registration No.	
8.	Receiver's Name & address :	COSMOS RECYCLING St. No.2, Grewal Nagar, VPO Hambran, Distt. Ludhiana (Punjab)-141110
9.	Receiver's authorisation No, if applicable.	9325578
10.	Description of E-Waste (Item, Weight / Numbers)	830kg/240Pcs.
11.	Name and stamp of Sender* (Manufacturer of Producer or Bulk Consumer or Collection Centre or Refurbisher or Document)	Signature — Month 05 Day 11 Year 2019
12.	Transporter acknowledgement of receipt of E-Wastes. Name and Stamp	Signature Balbir Singh — Month 05 Day 11 Year 2019
13.	Receiver* (Collection Centre or Refurbisher or Dismantler or Recycler) certification of receipt of E-waste. Name and Stamp For COSMOS RECYCLING Auth. Signatory	Signature — Month 05 Day 11 Year 2019

Copy number with colour code (1)	Purpose (2)
Copy 1 (Yellow)	To be retained by the sender after taking signature on it from the transporter and other three copies will be carried by transporter.
Copy 2 (Pink)	To be retained by the receiver after signature of the transporter.
Copy 3 (Orange)	To be retained by the transporter after taking signature of the receiver.
Copy 4 (Green)	To be retained by the receiver with his/her signature to the sender

Figure: Certificate of e-waste management

figure: Certificate of Recycle &Disposal

Figure: Meeting with Ludhiana (Punjab) based company for management of e-waste and other stuff for re-cycling



PUNJAB POLLUTION CONTROL BOARD
Zonal Office-1, E-648-B, Phase-V, Focal Point, Ludhiana
Tele Fax:- 0161-4673789 Website:- www.ppcb.gov.in email:- [illegible]

No. 1120 Dated 28/3/22

To
M/s Green Bird Recycling,
Village Mangarh, Kohara Macchiwara Road,
Ludhiana.

Sub: Authorization under E-Waste (Management) Rules, 2016 for collection, segregation, storage, transport & dismantling of e-waste.

Authorization No.	E-Waste Reg/LDH1/2022-26/F-2
Item & Quantity (MT/day) of E-Waste	Electrical & Electronic E-Waste categorized in Schedule-1 of E-Waste (Management) Rules, 2016 @ 2 TPD
Date of Issue:	29.03.2022
Date of Expiry:	30.06.2026

Figure: Pamphlets and other documents of company

Steps for sanitary wastage under sanitary waste guideline 2018

Figure: Automatic Sanitary Napkin Vending Machine and Incinerator at ladies waiting room and girls' hostel

Figure: Automatic Sanitary Napkin Vending Machine

Figure: Five set of Automatic Sanitary Napkin Vending Machine

Waste management of Papers

Step1: Minimum usage of Paper.

1 Think before you print
2 Paper less notes on smart phone/ note pad
3 correspondences by email, WhatsApp
4 Filing& documentation stored in google drive

Step-2 Paper are often disposed of to junk collector but due to lock down and work from home there was zero material for disposing off.

Training in Waste Management and Disposal

Periodical training in health & hygiene, waste management and disposal, green healthy practices may inculcate a positive attitude for a clean and healthy living. There should be proper sign boards displayed to tell students where to go for the disposal of other recyclables, plastics and hazardous wastes.

Chemical Waste from Chemistry Labs & Other Laboratories

Chemistry lab is installed with proper chemical disposing unit in form of specialized drums for collecting acid etc... Chemistry department works on the lines of green chemistry and follows set of principles that reduces or eliminates the use or generation of hazardous substances in the design, manufacture and application of chemical products. At present in different laboratories of all science streams, following categories of chemicals are in use: Oxidizers, Oxidizing acids, Flammable liquids, Basic flammable liquids, Inorganic bases, Organic bases, Acidic Flammable Liquids, Organic Acids, Inorganic acids, Poisons (Toxic chemicals), Sulphides, Water-reactive, Water-Reactive acids and Non-Hazardous or nonregulated chemicals.

Figure: Disposal of Chemical wastage in chemistry lab

Figure: Disposal of Chemical wastage in microbiology lab

The handling and storage are strictly done according to the “Chemicals Waste Management Guidelines”. It is stored in separate appropriate containers. As part of the hazardous waste management, the laboratories strictly follow following steps: -

1 To minimize the quantity of waste, set up a satellite accumulation area, properly label all waste containers

2. Close the waste containers to minimize exposure to atmosphere, and contact the collaborating waste disposal agency for a pick up.

3. Laboratories purchase the smallest quantities of chemicals for particular purposes, and share surplus chemicals with other laboratories.

4, Laboratories perform minimum scale experiments

5. Keep software assisted chemical storage data to avoid duplicate purchases

Plastic waste management

Figure: Plastic Free Zone

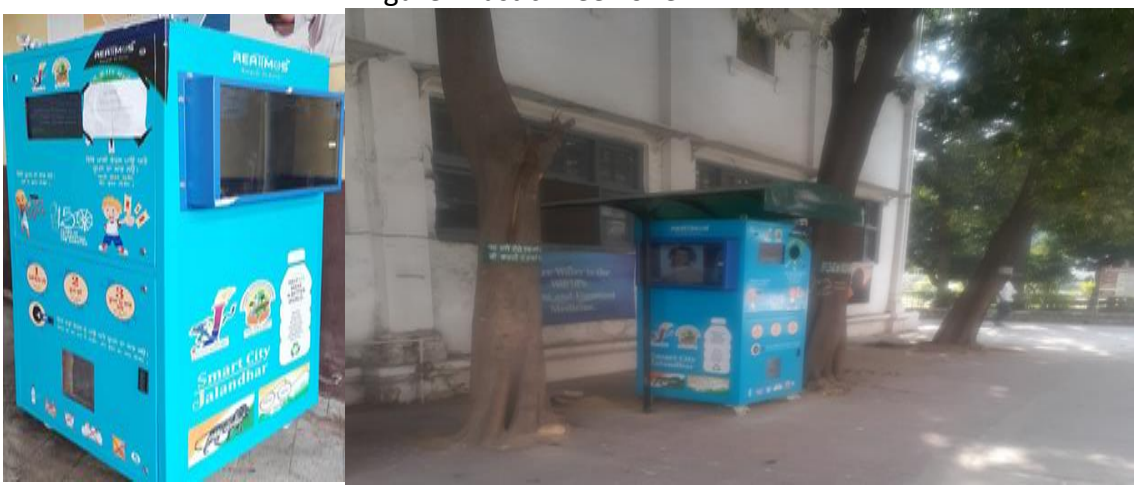


Figure: Plastic Bottle Crusher Machine in college campus.

Project in process on touch less switches and stagnant waste water problem. Sept 11, 2021

In the on-going time of pandemic, students have realized the need of frequent sanitization. With this objective student have developed touchless hand sanitizing machine which will be installed in the entrance of their class rooms. Furth prototype of touchless switches and touchless attendance system has been developed with an objective that students while entering or leaving the class room can turn lights and fans ON/OFF without even touching switches and can get themselves sanitized too. Attendance of students will be automatically marked by just passing across the switch

Figure: Touchless Hand Sanitizer Dispenser and Contactless Switches


m

Figure: Project on Stagnant Waste Water Problem.

Management of Bio- Medical Waste

Bio- Medical Waste: - There is negligible amount of bio medical waste generated by hostel dispensary. The collection, segregation and disposal of bio-medical waste is outsourced to an agency in Jalandhar that is authorized by Punjab state pollution control board for waste treatment facilities relating to bio-medical waste using Autoclave/Microwave/ Incinerator shredders etc.

EXISTING WASTE MANAGEMENT METHODS PRACTICED

- Cleaning the campus on daily basis.
- Segregation of waste into degradable and non-degradable by the cleaning staff.
- Waste bin's in placed in corridors, office and staff rooms.
- Incinerators to burn sanitary napkins
- E-waste and plastic waste disposal at municipal collection center and Junk Collector
- Campaigns for reduce, reuse and recycle by different clubs.
- Cotton carry bag stitching and distribution by Fashion Design dept.

Figure: Monthly supervision by officers of Municipal cooperation Jalandhar to audit waste management

Existing Green Campus Policy

Eco-friendly practices and educational resources combine in a Green Campus to promote sustainable practices. It allows institutions to re-define their environmental culture and develop new paradigms for solving the social, economic, and environmental problems of mankind by utilizing a Green Campus concept.

Objectives of the Policy

- To safeguard the environment within and around the campus.
- To keep the campus clean and environment friendly.
- To motivate all stake holders to ensure judicious use of scarce natural resources.
- To increase awareness among staff and students regarding different issue and possible solutions related to environment and motivate them to adopt good practices for protection of environment.
- To frame the green policies that will enhance the ecological efficiency in the campus.
- To continually improve the efficient use of all natural resources including water and energy.
- To make sustainable efforts to make the campus plastic free and tobacco free.
- To improve resource use through reduction in material use by reducing waste and to identify recycling opportunities for west generated such as metal scrap, paper, e-waste etc.
- To conduct in house environmental and energy audits from time to time.
- To make the campus self-reliant in energy using solar energy and to make the campus net zero.
- To recycle west water and utilize it for landscape irrigation.

Scope of the Policy

Green Campus develops new extracurricular and co-curricular practices that allow students to take leadership roles in creating positive change. As a result of these initiatives, all infrastructural and administrative activities will be reviewed from the viewpoints of energy, efficiency, sustainability, and environment.

The focus areas of the policy are

- Green Campus Initiatives
- Clean Campus Initiatives
- Tobacco free Campus
- Net Zero Campus
- Water Conservation Initiatives
- Waste Management Initiatives

Existing Plastic Ban Policy

The pollution of the environment by plastics has now been identified as a global problem. A quick-term advantage and ease of use have made plastic and plastic goods wildly popular. Plastic has grown more and more popular over the past century, outpacing trash management as a result. Our environment, as well as our health and well-being, suffer from plastic pollution. We have all contributed, consciously or unwittingly, to this issue, and we must work together to minimize and eradicate plastic pollution.

The government has chosen to implement a plastic ban on a nationwide scale in order to address the environmental dangers created by the widespread usage of plastic. Educational institutions must take the lead in this national effort. Educational institutions must take a leadership role in the fight to phase out single-use plastics.

Guidelines

The guideline aims to assist Indian higher education institutions in achieving a plastic-free campus. It is not intended to be comprehensive, but rather to offer basic guidelines and suggestions relevant to all institutions. The recommendations urge institutions to implement policies and practices that promote a more environmentally friendly and plastic-free campus environment.

- The institute will educate stakeholders about the need of reducing, reusing, and recycling plastic.

- All stakeholders are encouraged to reduce their reliance on plastic bags on campus.
- Stakeholders must adhere to rigorous waste segregation guidelines.
- As far as feasible, students should recycle the resources available for creative work at college festivals.
- Conducting events and poster contests, among other things, to promote the creation of ecological and environmentally friendly products in order to reduce the use of single- use plastic.

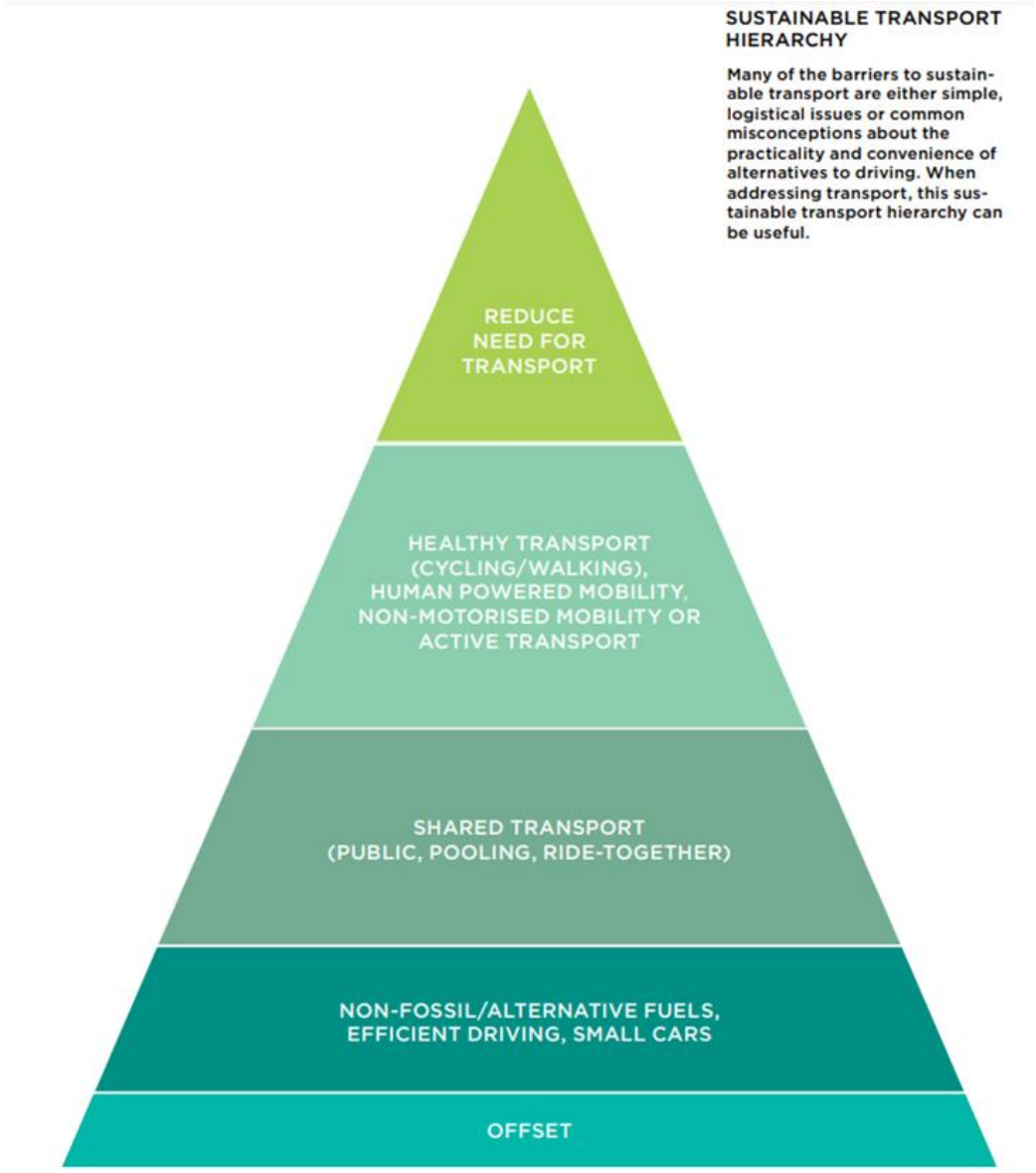
Transport

Transport accounts for a significant and growing share of an Institute's carbon footprint. An increasing demand for international collaboration and knowledge sharing has led to rising CO2 emissions, with international flights being by far the biggest contributor to CO2 emissions from transport at universities.

To create healthier options, an overall campus plan needs to include transportation, and conflicts of overall objectives have to be taken into account, critically analyzed, and communicated transparently. Working alongside local government and planning authorities is also crucial to optimize local public transport solutions.

DETAILS OF FUEL USE

S.No.	Transportation Type	Quantity (Nos)	Distance travelled/Route	Fuel Type	Mileage
1	Car	70	40 K.M Per Day	Diesel/Petrol	14 K.M Per Litre
2	Bus	14	50 K.M Per Day	Diesel	6 K.M Per Litre
3	Motorcycle/scooters	150	20 K.M Per Day	Petrol	40 K.M Per Litre



The internal campus transport of students majorly takes place through walking as the paths are well shaded. It's the most preferable mode of transport. Saving a tons of emission and adding to the Sustainable strategy of the Institute.

Annexure A

Regn. No. EA-11751

Certificate No. 6254

National Productivity Council

(National Certifying Agency)

PROVISIONAL CERTIFICATE

This is to certify that Mr. / Ms. Balkar Singh

son / daughter of Mr. S. Balwant Singh

has passed the National Certification Examination for Energy Auditors held in October - 2011, conducted on behalf of the Bureau of Energy Efficiency, Ministry of Power, Government of India.

He / She is qualified as **Certified Energy Manager** *as well as* **Certified Energy Auditor.**

He / She shall be entitled to practice as Energy Auditor under the Energy Conservation Act 2001, subject to the fulfillment of qualifications for the Accredited Energy Auditor and issue of certificate of Accreditation by the Bureau of Energy Efficiency under the said Act.

This certificate is valid till the issuance of an official certificate by the Bureau of Energy Efficiency.

Place : Chennai, India

Date : 1st February, 2012

Controller of Examination

Annexure B

Confederation of Indian Industry
CII-Sohrabji Godrej Green Business Centre

Indian Green Building Council
Greening India since 2001

The Indian Green Building Council

hereby certifies that

Ashmita Rupal

has successfully demonstrated knowledge on the Green Building Design & Construction, Building Standards & Codes, IGBC Resources & Processes and Green Design Strategies & their Impacts, required to be awarded the title of

IGBC Accredited Professional

K S Venkatagiri
Executive Director
CII-Godrej GBC

20-Aug-16

Dr Prem C Jain
Chairman
Indian Green Building Council

161490

End of Report

Let’s Build a Better Planet