# GREEN AUDIT REPORT



## Jagan Nath University

Campus-I: NH-12, Chaksu Bypass, Tonk Road, Jaipur (Rajasthan), PIN-303901

Campus-II: IP-2&3 Sitapura Industrial Area, Jaipur (Rajasthan), PIN-302022



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Jagan Nath University, Jaicur



## **SUPREME ENVIRO ENGINEERS & CONSULTANTS**

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#### I - WASTE MINIMIZATION AND RECYCLING

1.	Does your institute/campus generate any waste? If so, what are they?	Yes, Solid waste, Canteen waste, paper and plastic, Horticulture Waste, Bio-medical waste, e-waste etc.		
2.	What is the approximate amount of waste generated per day? (in Kilograms/month) (approx.)	Bio Non- Hazardous others  Degradable Biodegradable  3450 kg 600 kg <1kg <40kg		
3.	How is the waste generated in the institute managed? By  Composting Recycling Reusing Others (specify)	Reuse of one side printed Paper for internal communication. Sewage water is treated in-house STP and water is reused in campus for various purpose. Domestic Waste from Sitapura Campus is given to Municipal Corporation. Two types of Waste bins are provided at campus for biodegradable and non biodegradable waste. Vermicomposting is initiated by campus for organic compost. Electronic gadgets are exchanged for new under buyback system.		
4.	Do you use recycled paper in institute/campus?	Yes, Notice to offices for reuse of one side blank paper for rough work. Further the waste paper is channelized only to actual paper recyclers and an undertaking is taken from recycler.		
5.	Do you use reused paper in institute/campus?	Yes		
6.	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	Yes, Green Committee carried out numerous activities. Recycling campaigns, e waste management, Antiplastic campaigns, Varsha Vriksharopan, sustainable goal awareness programme, Zero Car Day, World Environment Day, Painting Competitions, Environment Quiz and Group Discussions etc.		
7.	Can you achieve zero garbage in your institute? If yes, how?	Not yet achieved. A waste management plan is implemented for phase wise reduction in waste generation.		

## II - GREENING THE CAMPUS

8.	Is there a garden in your institute?	Yes, about 45% areas of the university campuis developed as Gardens.			
9.	Do students spend time in the garden?	2-4 Hours during winters			
10.	Total number of Plants in Campus	Plant type	Approx. number		
		Trees	2500		
		Ornamentals	5500		
		Grass Cover	8 Acres		
		Others	33.4 Acre Agriculture crops as per season		
11.	Suggest plants for your campus. (Trees, vegetables, herbs, etc.)	Ashoka, Ficus Religeosa, Boganvellia, Alovera, Eucalyptus, Azadirachta and many more as per geographical regime. Medicinal Plants nursery also maintained by Horticulture Department in the premises.			
12.	Is the university campus have any Horticulture  Department	Yes			
	Number of Staff working in Horticulture  Department	Tree Gardeners, One Horticulture Manager and Services of External Experts are also taken. (16 Staff in department)			
13.	Number of Tree Plantation Drives organized by campus per annum. (If Any)	Yes, Seven Tree Plantation Drives are Organized Annually. Approx 600 trees and 1000 shrubs planted in this financial year. (photographs attached)			
14.	Number of Trees Planted in Last FY.	350			
	Survival Rate	70%			
15.	Plant Distribution Program for Students and Community	YES, Under UBA scheme of Government of India. University adopted 5 villages & among all other activities tree plantation is also an activity. (photographs attached)			
16	Plant Ownership Program  Various Trees are Planted under Program. Further plots are students by Department of Agractice. Students are evaluate ownership program.		ots are allotted to		

#### III-ENERGY

17.	Ways that you use energy in your Campus.	Area of Uses			
	Electricity	Academic Blocks, Classrooms & Labs, Administrative Block, Hostels and Road Lights Mess/ Canteen			
	LPG/Propane				
	Fuel Oil	Vehicles/ DG Set			
	Any Other	Solar Water Geyser and Solar Electric Plant			
18.	Reduction in Energy Uses	Last Year(2019-20)	Current Year(2020-21)		
	Electricity	100695 Unit	40189 Unit*		
	LPG/Propane	1825	578*		
	Fuel Oil	35.5 Lac	24.5 Lac*		
	Any Other	No	No		
	*The high reduction in Energy Uses during FY 2020-21 is due to Pandemic Covid -19				
19.	How many LED bulbs has your institute/campus installed?	100 % of Total Conventional bulbs are replaced by LED Lights.			
20.	Are any alternative energy sources employed / installed in your institute? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.	Yes, 200 KW photov energy and 8000 Ltr of installed.	oltaic cells for solar capacity Solar heater is		
21.	Do you run "switch off" drills at institute/campus?	Yes, "Switch off" drill is carried out on half yearly basis.			
22.	Are your computers and other equipment's put on power-saving mode?	Yes, In Practice			
23.	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?		s from administrations to ents for sustainable use ent		

#### IV-WATER CONSERVATION

24.	List four uses of water in your institute	Basic usage of water in campus are; Drinking, Gardening, Kitchen & Toilets, and Others. And total consumption is 1500 KL/month		
24.	How does your institute store water? Are there any water saving techniques followed in your institute?	23 Overhead Water Tanks, 52 Plastic Tanks and 03 Underground Water tank installed for storage of water. Avoid overflow of water controlled valves are provided in water supply system. Close supervision for water supply system.		
26.	If there is water wastage, specify why and How can the wastage be prevented / stopped?	Not any wastage, preventative maintenance of water supply system is being done by administration of campus. In case of emergency like spillage, leakage the 24 hour availability of civil team equipped with skilled technicians and machinery.		
27.	Locate the point of entry of water and point of exit of waste water in your institute.  Entry- Exit-	Entry- Water comes from the open Well through Submersible Pumps at campus  Exit- From Water Drainage System to STP and then used for irrigation and gardening.		
28.	Write down four ways that could reduce the amount of water used in your institute	Basic Four ways:  1. Close the taps after usage  2. Maintenance and monitoring of valves in supply system to avoid overflow, leakage and spillage  3. Water Conservation awareness for new Students		
29.	Record water use from the institute water meter for six months (record at the same time of each day). At the end of the period, compile a table to show how many litres of water have been used.	Water Meters are available only at main well supply line for calculation of usage of total quantity only.		
30.	Does your institute/campus harvest rain water?	3 Nos of Modern rain water harvesting system are available.		
31.	Is there any water recycling System.	Yes, Full functioning STP in the both premises to adopt Zero Discharge.		

### V-CLEAN AIR

32.	Are the Rooms in Campus are Well Ventilated?	Yes, Mechanical ventilation system is also provided in the buildings of campus		so		
33.	Window Floor ratio of the Rooms	Exceller	cellent, as per NBC codes			
34.	What is the ownership of the vehicles used by your school? (Please Tick ✓ only one)		Yes			
			Operator	-owned ve	hicles	
			University-owned vehicles			
			A combination of campus-owned and operator-owned vehicles			
35.	Provide details of school-owned motorised vehicles?	Buses	Cars	Vans	Other	Total
	No. of vehicles	07	02	02	02	13
	No. of vehicles more than five years old	07	02	02	-	11
	No. of Air conditioned vehicles		02			02
	PUC done	07	02	02	02	13
36.	Specify the type of fuel used by your school's vehicles:	То	tal			
	Diesel		11			
	Petrol		02			
	CNG					
	LPG		-			
	Electric					
37.	Air Quality Monitoring Program (If Any)	situated	A in-house Meteorological Laboratory is ed within the plant for Wind Velocity & direction monitoring.			
38.	Students suffer from respiratory ailments? (If Any)	No				
39.	Details of Genset	Yes,4 Kirlosker Silent DG Set of 125, 125,82.5 & 82.5 KVA				

# BEST PRACTICES/ INITIATIVES FOR ENVIRONMENT

A	Renewable Energy	Solar water Heater (8000 liter) at JNU campus A clean source of energy is utilized at campus. Efforts towards Carbon Neutrality, The capacity of 200 KW Solar plant on building roofs is operational since last two years.			
В	Biodiversity Conservation  Flora and fauna conservation	It is in schedule plan of Campus Environment committee			
C	Tree Plantation Drives	Seven Drives Annually for campus as well as nearby village.			
d	Ground Water Recharge	Yes, 2 units of Rain Water Harvesting System.			
E	Pollution Reduction	Personal Vehicles (Students) not allowed at campus, Reduction in Air Pollution through vehicular emission.			
F	E Waste Management	Old Electronics are disposed off through buy back system.			
G	Solid Waste Management	Lifting of garbage from JNU, Sitapura campus on alternate day by Municipal Corporation and Vermi Composting System at Chaksu Campus.			
H	Adoption of Village	YES, Under UBA scheme of Government of India. University adopted 5 villages & among all other activities tree plantation is also an activity.			
I	Water Conservation	Yes, The STP treated water used for Gardening in campus.			
J	<b>Environment Awareness</b>	Various Essay writing, Painting Competition, Nukkar-Natak conducted by students in locality for spreading awareness.			
K	Housekeeping Derives	Swatch Bharat Movement adopted by campus			
L	Avoid Plastic Uses	Painting competition on Harms of Plastic			

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## CONCLUSION

This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The Jagan Nath University has Environmental Committee for sustainable use of resources. Overall, more than 66% of university campus is for landscaping. The University has established systems for waste minimization and recycling, greening the campus, use of solar energy, water conservation and recycling, compliance to environmental legislations, and overall maintenance of the campus. The quality of air is very good and pollution free environment exists on the campus. However, for further strengthening the green campus initiatives, the Audit Committee has identified some area of improvement for making the campus premise more environmental friendly. The recommendations are also mentioned with observations for university campus team to initiate actions.

The audit team opines that the overall site is maintained well from environmental perspective. There is no major observations but few things are important to initiate urgently are waste management records by monthly inventory of hazardous waste, rainwater harvesting recharge; water balance cycle and periodic inspection of buildings; environment policy and initiation of composting at campus.

