

Report No: GA/RNB/1001

Green Audit

IR Class Systems and Solutions Private
Limited

RNB Global University
Bikaner, Rajasthan, India

Date of Audit Report 25th February 2021

Date of Audit 23rd and 24th February 2021



Table of Contents

Scope and Criteria	3
Audit Administration.....	4
Participation.....	4
Audit Objective(s)	4
Competence and Independence of auditors	4
Audit Methodology	5
Protection of Personal Privacy and Confidentiality	5
Foreword.....	5
Executive Summary.....	6
Environment Operational Control	7
Energy (Electricity, Fossil Fuel) Management as part of Environment and Sustainability Policy:	7
Natural Resources (Water) Management as part of Environment and Sustainability Policy:	9
Waste Management as part of Environment and Sustainability Policy:.....	11
Work Environment (prevention of pollution included) as part of Environment and Sustainability Policy:	12
Emergency Provision, Preparation and Response as a part of Environment and Sustainability Policy:.....	13



Scope and Criteria

Organization	RNB Global University
Physical Location	University Campus, Village: Khara, Bikaner, Rajasthan, India
Business Context	University offers educational programs fulfilling requirements of the award of bachelor's, master's, and doctoral degrees in Commerce, Management, Law, Basic Sciences, and Agriculture
Scope of Audit	Environmental Protection and Sustainability of University Campus, Utility (Energy and Water), Facility (House Keeping, Gardening, Security, Transport and Health Care) and Hostel (Room, Kitchen, Dining, Laundry, Toilet), Academics (Classroom and Laboratory and Offices) and Administration (Procurement, Awareness and Training, matters of Conduct and Discipline).
Audit Criteria	<p>NAAC Criteria effective 2020-21</p> <p>Environmental Consciousness and Sustainability</p> <p>7.1.2-The Institution has facilities for alternate sources of energy and energy conservation measures</p> <p>7.1.3 Facilities in the Institution for the management of types of degradable and non-degradable waste</p> <p>7.1.4 Water conservation facilities available in the Institution:</p> <p>7.1.5 Green campus initiatives</p> <p>7.1.5.1.- The institutional initiatives for greening the campus</p> <p>7.1.6 Quality audits on the environment and energy are regularly undertaken by the institution</p> <p>Environment and Sustainability Policy ver 1.0, part of Annexure of Board of Management meeting No 14th dated 03-09-2019.</p>
Audit Attributes	<p>Relevant Period and Student Enrolment</p> <p>1st July 2020 to 15th February 2021</p> <p>Student enrolment 234 (as of 15th February 2021)</p>



Audit Administration

Days and Date(s) of Audit	23 rd and 24 th February 2021
Date of Report	25 th February 2021

Participation

Sponsor

1	Dr. K.K Bajaj	The Vice Chairperson, Board of Management, RNB Global University, Bikaner
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Environment Committee and Heads of Department/Service Providers

1	Dr.Dipali Gupta	Registrar of the University
2	Mr. Shallendra Singh Barath	Convenor, Environment Committee
3	Mr. Ashok Karnani	Member
4	Mr. Ashok Prem	Member
5	Mr. Umesh Rawat	Utility Head
6	Mr. Mahaveer	Facility Head

Audit Team

1	Krishna Gopal Misra	Auditor, IR Class Systems and Solutions Private Limited
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Audit Objective(s)

By this audit, the RNB Global University aims at gaining confidence of interested parties that it is meeting and will continue to meet their requirements and expectations i.e., contractual and legal obligations and of the commitment (Environment and Sustainability) of the Board of Management.

To detect vulnerability (exposure to risk) before it becomes an actual non-conformity against audit criteria used.

In cases, where commitments are not met or are unlikely to have met, the RNB University identified the gap and has taken effective corrective actions to limit the damage and prevent any reoccurrence.

Competence and Independence of auditors

Auditors for the audit are competent, hold ethical value and are independent/ have no conflict of interest

Audit Methodology

Interviews, records, and physical observations are part of the evidences for the purpose of this audit.

Audit is on a sampling basis and on basis of materials provided. This report gives a reasonably fair view but, it has a limitation that it is possible that it cannot detect all vulnerabilities.

One Non-Conformity found in Operation is sufficient to believe that there would be/can be many similar reoccurrences as existing weaknesses in processes multiply it.

Protection of Personal Privacy and Confidentiality

To protect privacy of individuals, no personal names disclosed in this report, as the scenarios of non-conformity/vulnerability explained are good enough for the purpose.

This audit report is for INTERNAL USE, in GOOD FAITH and CONFIDENTIAL between auditors and management, and not for any unauthorized disclosure and uses.

This report cannot be used in a Court of Law or evidence in cases of any disputes.

Foreword

The RNB Global University established by an act No 20 of 2015 of the Rajasthan Legislative Assembly and notified by state of Rajasthan on 27/04/2015.

The university offers educational program fulfilling requirement for award of bachelor's, master's and doctoral degree in Commerce, Management, Law, Basic Sciences, and Agriculture, with the approval of University Grants Commission (UGC), India.

Campus (86 acres) in which RNB Global University is situated, is 20 Km from Bikaner city in rural area. Near campus, there is no river and natural forest. Indira Gandhi canal distributaries is at a distance of 8 km. No military or defence establishment is nearby with any of their environmental or security obligations.

Bikaner is part of arid zone of India. Groundwater is hard in nature and found below 450 ft. Water comes from Indira Gandhi Canal and is supplied to University campus by tankers. Water for use of residents purchased. Temperature variation between winter and summer is extreme (0 to 50 degrees Celcius). The campus has a topography suitable for rainwater harvesting/underground water recharge.

Currently, 252 (Session 2020-21) students enrolled in the University. It has about 50 faculty and staff. The campus is about 80% open space with greenery and 20% used for construction. Faculty staff, students and employees commute from their residences on their own vehicles usually by carpooling, and by the bus service provided by the service provider with whom the university has a contract. Separate hostel accommodation for boys and girls is available. The campus has five blocks a. Buses can't enter campus. Admin b. Academic c. Boys hostel and d. Girls hostel and e. Sports complex.

Here is the list of functions and processes that are relevant to Environment and Sustainability Policy.



Scope of the Application of Environment & Sustainability Policy																				
Names of Processes and Functions:																				
Admin block			Academic Bloc					Hostel					Utility		Facilities					
Administration	Conference/Seminar Hall	Library	Dean Office	Class Room	Laboratory	Kitchen	Dining	Common room	Kitchen	Dining	Toilet	Room	Laundry	Power	Water	Security	Housekeeping	Sport Complex	Transport	Health Care
Registrar			Dean-Academics					Hostel Warden					Utility Head		Facility Head					

Executive Summary

RNB Global University has a vision. The Board of Management took stewardship of Environment and Sustainability Policy and established a Governing body to ensure effective implementation and reporting results to the Board. The University using environmental and energy management system achieves the said Environment and Sustainability Policy. Success of the Policy is praise worthy.

Here are the observations, audit findings and suggestion for improvement

The University has a large land bank in the campus to expand its construction area in the future when it needs to add new institutions. In period from March 2020 to 21st February 2021, now, it is in normal operation.

Data of power and water consumptions are regularly collected, specific energy use and specific water use per enrolled students measured and unusual variations analysed.

Timer sensors are installed for streetlights, air conditioning plants to detect and stop misuse of electricity. 50 KW solar PV is proposed to be installed in the year 2021 and it will be connected to grid for power trading and exchange.

Given these practices, data of electricity consumption is not comparable due to covid period. SEU (per enrolled student) is 28 KWh in Jul 2020 and 23 Kwh in Feb 2021. For water consumption, data of specific water use in winter and summer is not established (measurement is by number of tanker refill that needs further analysis). Operational controls are planned and being implemented. The year 2022-23 can be a benchmark year with which improvement year by year compared. We expect that enrolments will rise and figures of efficiency of energy and water use per unit of enrolled person will gradually improve.

This is a rural area and there is no municipal agency for sewage collection. The university has installed Sewage Treatment Plant of 55 KLD. The sewage treatment plant is currently not in operation. As number of students in hostel will fill capacity, it will be in operation. Until this, sewage drained in septic tank.

The university depends on purchased water. It comes in tankers and is stored in underground water tank (for prevention of evaporation loss). For regular use, water is drawn from these tanks. The underground water tank was cleaned prior to the last two years. The record was not found but this information was provided by staff. Risk in this area can be assessed and a suitable period is determined as to when should underground water tank need cleaning. The campus has drip irrigation facilities.

So far, there is no report of an emergency in campus or any accident/injury. Wellness centres operate in campus satisfactorily. Fire safety is in hands of m/s Cease Fire, a reputed fire safety service organization. Parameters of fire drill are unknown as no record of the drill kept. In case of actual fire, the drills and tested parameters could have proved useful and helpful to save lives and prevent injury.

The university has been awarded by Forest Department, Bikaner (Raj) for their plantation

Environment Operational Control

Energy (Electricity, Fossil Fuel) Management as part of Environment and Sustainability Policy:

Source and Use and Objective (Accounting of Efficiency)

Focus Area	Source	Use	Account and Monitoring
Electricity	Grid Electricity (sanctioned load 1000KW) Proposed Installation of Solar PV Diesel fuel operated Electricity Generation – rarely used	Room light and street light Air conditioning Charging of carts (for in-campus movement)	Specific Energy Use (total KWh/per enrolled student) Energy usage monitored daily from electricity meters and updated in excel sheets and brought in control limit. Record of electricity bill and daily meter reading kept. Any unusual variation analysed and action taken.
Liquefied Petroleum Gas LPG	Responsibility of service provider. They Purchase LPG from suppliers in 14 kg cylinders	LPG used in kitchen. Skilled persons ensure optimal uses of LPG and take care of equipment, and safety of workers. Agreement with Service provider specifies selection criteria of service provider terms and condition of use of service	Gas usage monitored daily and brought in control limit. Consumption below 200 kg per month is accepted. No control on purchase of LPG use in kitchen as it is an outsourced activity.



Diesel and Petrol	Purchased from Fuel stations.	Automobiles used for transport. Bus service for commuting of students and staff is an outsourced activity. Students and staff use own transport/ vehicles, and they use car pool for saving fuel as well as cost.	Student and faculty or any other users of automobile and service provider of bus transport have their own responsibility of fuel consumption. Diesel used in DG set for production of electricity in emergency and is insignificant.
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Operation Control

Sl No	Name of Operation/ Project	Project Attributes (Completion date, Budget, ROI)	Responsibility	Reference of SOP if any/ performed by licensed contractor/ technicians	Accounting: Record, Data to collect and frequency of Report
1	Motion sensors to be installed in classrooms and conference halls to stop electrical appliances when no motion detected.	Not Available	Utility Head	ITI Electrician	Reading from Electric Meters Record daily meter reading in Excel Sheets. Log books for DG set – for fuel used
2	Streetlights have timer based centralized control to switch it off as per program.	Not Available	Utility Head	ITI Electrician	Automated
3	Smart energy management system installed for controlled air conditioning at each classroom to control temperature according to pre-programmed timetable.	Not Available	Utility Head	ITI Electrician	Automated



4	Transport within campus area uses battery operated cart instead of fossil fuel based automobiles.	Electric Vehicle -6 seater Make - AK Auto, Mumbai Purchase price INR 510000.00 2-5-2015		Licensed Driver No vehicle registration required for battery operated carts	Log book e-cart
5	Bus for transport of student and employees from Bikaner city to Campus	Service Provider(M/s Om ji)	Utility Head	Agreement with Service provider specifies selection criteria of service provider terms and condition of use of service	Log book, attendance in bus, bus route and gate entry record, Feedback book-Safety of passengers (students and employees) by number of accidents and adverse feedback
6	Students and staff use own transport/ vehicles,	Not in scope of Environment policy	Not Required	car pool for saving fuel as well as cost.	No data kept
7	LPG used in kitchen.	Responsibility of service provider. They Purchase LPG from suppliers in 14 kg cylinders	Utility Head Prices regulated by government.	Skilled persons ensure optimal uses of LPG and take care of equipment, and safety of workers.	Gas usage monitored daily and brought in control limit. Consumption below 200 kg per month is accepted. No control on purchase of LPG use in kitchen as it is an outsourced activity

Natural Resources (Water) Management as part of Environment and Sustainability Policy

Source and Use and Objective (Accounting of Efficiency)

Focus Area	Source	Use	Account and Monitoring
Water	Purchased in tankers (4000 lit/tanker)	Treat it by Reverse Osmosis system for Drinking water and use in Kitchen Wash room and garden	Specific Water Use (total KL/per enrolled student) Bills for purchase of water tankers

Water	Rain water	Rain water harvesting/ recharge well	Stored in tanks & used for irrigation. Recharge of rain water
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Operation Control

Sl No	Name of Operation/ Project	Project Attributes (Completion date, Budget, ROI)	Responsibility	Reference of SOP if any/ performed by licenced contractor/ technicians	Accounting: Record, Data to collect and frequency of Report
1	Water purchased in tankers filled in underground tanks (2 x 12x15x25ft, 56KL x2). Water purified by RO system used for kitchen and drinking.	Service Provider	Utility Head	Agreement with Service provider specifies selection criteria of service provider terms and condition of use of service	Purchase bills for water tankers
2	Water test facility is available in-house. Tests held daily, report (TDS) fulfils drinking water quality.	Not available	Utility Head	Staff – trained in checking water quality and use of equipment	TDS Manually monitored and register is maintained for water quality
3	Record of Cleaning of underground Water tank	Special Service provider	Utility Head	Agreement with Service provider specifies selection criteria of service provider terms and condition of use of service	Record of cleaning of underground water tanks
4	When water level falls below a specified limit (3/4th) in underground tanks, order for purchase of water tanker released.	Not Available	Utility Head		Measurement of water level in ground water tank
5	Waste water from RO plant collected and used for floor washing			Staff – house keeping	Daily Monitoring Record keeping not necessary



	and fountain (for aesthetics).				
6	Sprinklers used to conserve water in irrigation of plants to save water.	Available	Utility Head	Gardner – trained in irrigation and use of equipment and water	Daily Monitoring Record keeping not necessary
7	Sewage treatment plant STP installed for treatment of sewage and treated water was recycled. It is not operational since COVID as students were not in campus. It will start after occupancy of hostel is sufficient to run it. Until this time, waste material filled in septic tank.	Available	Utility Head	Agreement with Service provider specifies selection criteria of service provider terms and condition of use of service	STP Log Book maintained for quantity of water treated.



Waste Management as part of Environment and Sustainability Policy:

Source and Use and Objective (Accounting of Efficiency)

Focus Area	Source	Use	Account and Monitoring
Biodegradable and hazardous waste cause pollution to environment. Smoking tobacco is also a pollution.	Kitchen waste Sewage Waste Electronic waste	Composting of Kitchen waste Sewage Treatment and recycling of water	Internal Audit Log book of STP – see policy on Water. Kitchen waste is used by gardeners in plants as organic manure

Operation Control

Sl No	Name of Operation/ Project	Project Attributes (Completion date, Budget, ROI)	Responsibility	Reference of SOP if any/ performed by licenced contractor/ technicians	Accounting: Record, Data to collect and frequency of Report
1	Controlled disposal of electronic waste for authorized recyclers.		Facility Head	Agreement with Service provider specifies selection	E-waste manifest – delivered by E-waste

				criteria of service provider terms and condition of use of service	Service Provider
2	Ban on plastic. No smoking. Zero tolerance for tobacco and alcohol uses.		Security Head	See Policy of Conduct and Discipline in students, faculty and employee	Daily Monitoring Record keeping not necessary
3	Composting of Kitchen waste and plant waste to reuse nutritional value.		Facility Head		Daily Monitoring Record keeping not necessary
4	Awareness, identification, segregation/separation, collection, treatment, recycle for different types of waste and controlled disposal		Facility Head	Housekeeping staff – training in work and use of equipment	Attendance Record of training of Staff and students on environment policy and methods.

Work Environment (prevention of pollution included) as part of Environment and Sustainability Policy:

Source and Use and Objective (Accounting of Efficiency)

Focus Area	Account and Monitoring
Physical work environment; Free of noise, comfortable and safe.	Internal Audit
Social and psychological work environment.	Internal Audit

Operation Control

Sl No	Name of Operation/ Project	Project Attributes (Completion date, Budget, ROI)	Responsibility	Reference of SOP if any/ performed by licenced contractor/ technicians	Accounting: Record, Data to collect and frequency of Report
1	Noise to be below legal limit for institution,		Facility Head	Noise monitoring – staff can use mobile phone	Daily Monitoring Record

				application for noise monitoring	keeping not necessary
2	Ambient air quality in class room is at safe level and air conditioning (toxins, temperature and humidity)		Facility Head	Air conditioning	Annual Monitoring of ambient air quality.
3	Ergonomic design of furniture and sound system of class room so that students can easily interact and read the black board/ screen. Building and staircases of University are suitable for use by differently abled people.		Facility Head	Infrastructure suitable	Annual or complaints based for Ergonomic controls. CCTV records for annual verifications of facilities.
4	For in-campus movement of staff and students, carts (battery operated) are available.		Facility Head	See Energy	
5	Students can use bicycles for in-campus movement.		Not Applicable	Voluntary	Daily Monitoring Record keeping not necessary
6	Awareness and disciplinary control of ragging/bullying and sexual harassment		Registrar		Legal Compliance report
7	Student Help Desk Awareness and disciplinary/counselling of students due to stress of studies, examination, issues from teacher/staff and time table		Registrar – under grievance Redressal committee	People in Administration have required experience and skills to address these issues.	Proctorial Board Records for cases of indiscipline. Counsellor's record for counselling of distressed students

Emergency Provision, Preparation and Response as a part of Environment and Sustainability Policy:

Operation Control

Sl No	Name of Operation/ Project	Project Attributes (Completion	Responsibility	Reference of SOP if any/ performed by	Accounting: Record, Data to collect
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		date, Budget, ROI)		licenced contractor/ technicians	and frequency of Report
1	Provision (equipment and resources and legally complaint) of Fire and Electrical safety. Fire station (20 km, Telephone number on notice board)		Facility Head	Fire Safety Audit Check List	Fire Safety Audit Check List Annual
2	Third party audit and fire drill – at least once in 12 months.	Special Service Provider	Facility Head	Cease Fire – service provider is specialized in fire safety	Record of Fire safety drill - annually
3	Provision of First aid available. Medical treatment given to patient in university's wellness centre		Head of Medical wellness centre at Academic Block & hostel	Medical staff – sufficient and well trained for using methods and medicines/equipment	Patient Record Register
4	Record of accident, near miss and corrective action maintained as regulatory requirement.		Registrar	Registrar – is responsible for reporting of incident of ill health or Injury/accident to parents and to regulatory bodies.	Accident report

.. End of the report

Client Signature:



Mrs Dipali Gupta,

Registrar, RNB Global University, Bikaner



Auditor Signature:


Krishna Gopal Misra

