ENVIRONMENT AUDIT REPORT

SANT BABA BHAG SINGH UNIVERSITY, JALANDHAR PUNJAB

CONDUCTED BY: R.K. ELECTRICALS & ENERGY AUDIT SERVICES

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Academic Year 2024-2025

CERTIFICATE

This is to certify that the **"R.K. Electricals** & **Energy Audit Services**" had conducted Environment Audit of **"Sant Baba Bhag Singh University, Jalandhar** from 21/07/2025 to 23/07/2025 for the academic year 2024-2025. This audit involved extensive consultation with all the campus team, interactions with key personnel on wide range of issues related to Environmental aspects. The University has Environmental Committee for sustainable use of resources.

The audit team opines that the overall site is maintained well from environmental perspective. The efforts made by staff and students in the areas of environment and sustainability are much appreciated and encouraged.

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Govt. Regd. Valuer & Chartered Engineer

For R.K. Electricals & Energy Audit Services

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1. ACKNOWLEDGEMENTS

R.K. ELECTRICALS & ENEGY AUDIT SERVICES expresses sincere thanks to the followings:

Hon'ble Chancellor	Sant Manmohan Singh ji
Hon'ble Secretary	S. Hardaman Singh Minhas
Hon'ble Vice - Chancellor	Dr. Dharamjit Singh Parmar
Manager Facilities In- Charge	Capt. Sukhdev Singh
Dean Academic	Dr. Vijay Dhir
Registrar	Mr. Rajinder Kumar
Dy. Registrar	Mr. Roop Singh
Director IQAC	Dr. Anil Kumar Singh
Dean UIE	Dr. Aneet Kumar
Dean UIL	Dr. Pooja Bali
Dean UIS	Dr. Shweta Singh
Dean UIET	Dr. Jagdeep Kaur
Dean UIA	Dr. Vikas
HOD Department of Electrical Engineering	Dr. Gurmanik Kaur
HOD Department of Agriculture	Dr. Vikrant Jaryan
Dean of Alumni and Extension Activities	Dr. Indu Sharma

for giving us an opportunity to conduct the Green Audit of SBBSU University, Jalandhar

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The Study team **sincerely** thanks the support staff members of SBBSU University who have rendered their all-possible co-operation and assistance during the entire period of assignment.

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2. EXECUTIVE SUMMARY

An environmental audit is a snap shot in time, in which one assesses campus performance in complying with applicable environmental laws and regulations. Though a helpful benchmark, the audit almost immediately becomes outdated unless there is some mechanism in place to continue the effort of monitoring environmental compliance. The management of the University is conscious with regard to improve sustainability and complementary to its Environmental Policy and aims to Minimize the environmental impact of its operations and move towards restoring environmental integrity

Audit criterion is environmental cognizance, waste minimization and management, biodiversity conservation, water conservation, energy conservation and environmental legislative compliance by the campus.

Environmental audits are crucial for promoting sustainability, reducing pollution, and conserving resources. They also help organizations avoid legal penalties and enhance their reputation by demonstrating environmental responsibility.

A questionnaire is used during audit. This audit report contains observations and recommendations for improvement of environmental consciousness.

The Brief description about Audit is shown below:

Project Title: Environment Audit of Sant Baba Bhag Singh University, **Jalandhar**	
Project Report Number: RKS/ENA-58	
Client: Registrar, Sant Baba Bhag Singh University, Jalandhar	
Contact Person: Director IQAC - Dr. Anil Kumar Singh	
Date of Audit: 21/07/2025 to 23/07/2025	
Report No. RKS/GA/58/2025	**Date of Report:**29.07.2025
***Work Carried out by**:(Team Composition)*	**Er. R.K. Sharma (BEE Certified Energy Auditor) EA-10080 & Indian Green Building Counsil Accredited Professional,** **Er. Paramjeet Singh (BEE Certified Energy Auditor) EA-19322** **Mrs. Savita Sharma (Msc. Ecology and Environment)** **Er. Varun Sharma B. Tech Electrical Engineering**

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3. INTRODUCTION

3.1 Environment Audit is a process of systematic identification, quantification, recording, reporting and analysis of components of environmental diversity of various establishments. It aims to analyze environmental practices within and outside of the concerned sites, which will have an impact on the eco-friendly ambience. Environment audit can be a useful tool for a university to determine how and where they are using the most energy or water or resources; It can also be used to determine the type and volume of waste, which can be used for a recycling project or to improve waste minimization plan. It can create health consciousness and promote environmental awareness, values and ethics. Thus, it is imperative that the University evaluate its own contributions toward a sustainable future. As environmental sustainability is becoming an increasingly important issue for the nation, the role of higher educational institutions in relation to environmental sustainability is more prevalent.

3.2 Back ground of SBBS University, Jalandhar

The Sant Baba Bhag Singh Memorial Charitable Society, under the dynamic leadership of Sant Baba Malkit Singh Ji, has been providing essential infrastructure facilities to the people living in the vicinity of Dera Sant Pura Jabbar, near Adampur Doaba, Dist. Jalandhar. This includes constructing bridges and roads and providing street lights to villages. The Society began offering formal education by establishing the SBBS Institute of Engineering & Technology in 2003. This was followed by the establishment of SBBS International School in 2004, SBBS Institute of Education in 2005, SBBS Institute of Nursing in 2005, SBBS Research & Development Centre in 2010, SBBS Post Graduate College in 2011, and SBBS Public School, Binjon in 2011. Rural healthcare has been provided through Guru Nanak Sadh Sangat Charitable Hospital, Kalra, since 2003.

In pursuance of the vision: "To encourage each and every child to get educated, acquire knowledge and wisdom so as to learn the art of leading a happy, successful, and meaningful life," all these institutions established their presence in the field of education, leading to their flowering into Sant Baba Bhag Singh University, established under the Sant Baba Bhag Singh University Act, 2014.

The institutions have made significant contributions in the field of education, as evidenced by excellent results and placement records. With state-of-the-art infrastructure catering to the needs of students, a pollution-free and drug-free campus, a focus on excellence in teaching, and the active involvement of students and faculty in co-curricular and extracurricular activities—including NCC, NSS, industrial visits, and a remarkable presence in sports among educational institutions—along with a culture of imbibing ethical values, Sant Baba Bhag Singh University is an ideal choice for quality education.

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A View of SBBS University's Lush Green Campus from Google Earth S/W

4. ENVIRONMENT AUDIT - QUESTIONNAIRE

4.1. BRIEF DESCRIPTION OF UNIVERSITY CAMPUS

Had any Environmental Audit conducted earlier***?***

Yes, this is 2nd time a systematic way of monitoring their environmental eminence initiative taken by, SBBS University Jalandhar for environment protection.

What is the total permanent population of the Institute?

Particulars	Total
Students-Nos.	3990
Teaching & non teaching staff-Nos.	412
Approximate Number of Visitors (Per day)-Nos.	85

Where is the campus located? ->SBBS University is located in Jalandhar

Which of the following are available in your University?

1	Garden area	Yes
2	Play ground	Yes
3	Kitchen	Yes
4	Toilets	Yes
5	Garbage Or Waste Store Yard	No

6	Laboratory	Yes
7	Canteen	Yes
8	Hostel Facility -(numbers)	Yes
9	Guest House and staff residences	Yes

Which of the following are found near your institute?

1	Municipal dump yard	No
2	Garbage heap	No
3	Public convenience	Yes
4	Sewer line Stagnant water	No
5	Open drainage	No
6	Industry – (Mention the type)	
7	Bus / Railway station	Yes
8	Market / Shopping complex / Public halls	Yes

5. WASTE MANAGEMENT

5.1. QUESTIONNAIRE

1	Does your institute generate any waste? If so, what are they?	YES Paper, Packing Material, Food Waste, Plant Waste,	
2	What is the approximate amount of waste generated per day? (In Qntl/month) (approx.)	Dry Waste	Wet Waste
		28 Kg per day	90 kg per day
3	How is the waste generated in the institute managed? By	• Plant waste is used for preparing plant-based composites • Paper and similar waste is sold to local scrap collector • Minimum use of single use plastic • Sewage water treated by STP (600 KLD capacity)	
4	Do you use recycled paper in institute?	Yes	
5	Do you use reused paper in institute?	Yes	
6	How would you spread the message of recycling to others in the community? Have you taken any initiatives? If yes, please specify.	• Organise seminars/ extension activities/ workshops (such as Best out of Waste) to popularize recycling of waste among nearby villages. • No initiatives have been taken in this regard.	

7	Can you achieve zero garbage in your institute? If yes, how?	No, however continuous efforts are being made to minimize garbage output in campus.

5.2. WASTE DISPOSAL: **Waste management or Waste disposal is all the activities and actions required to manage waste from its inception to its final disposal. This includes amongst other things,** the collection, transportation and disposal of garbage, sewage and other waste products together **with monitoring and regulation.**

Green waste dry and fallen leaves are collected and buried in compost pits where after some time, same is converted into manure naturally which is used in agriculture.

A compost pit is a designated area where organic waste, such as kitchen scraps and yard waste, is collected and decomposed into nutrient-rich compost. This process is called composting, and it involves the natural breakdown of organic materials by microorganisms, fungi, and other decomposers.

A Compost Pit for Disposal of Garden / Horticulture Waste Of Campus.

5.3. Details of dustbin at SBBS University Jalandhar

SBBS University, Jalandhar has placed waste bins for proper segregation of solid wastes in the different locations of the campus

Item	Nos.
Dust Bin 15 lts Plastic (Green)	45
Dust Bin 15 lts Plastic (Blue)	45

Dustbins Placed Inside Campus separate for each kind of waste

For taking care of Solid waste (Dry and Wet) from various buildings, kitchens, canteens, hostels etc, SBBS University Jalandhar has tie up for lifting garbage and waste from campus with a local Municipal contractor. The waste collection vehicle of this contractor visits the campus daily for collection of waste which is already separated in **green and blue dustbins** (separate for wet and dry waste). Approximate waste collection to the tunes of 100Kg per month.

Segregating dry and wet waste is an essential practice for promoting environmental sustainability and efficiency. Here are some key benefits:

1. **Enhanced Recycling**: Separating dry waste (like paper, plastic, and metal) from wet waste (like food scraps and garden waste) makes it easier to recycle materials. Recyclable materials can be processed and reused, reducing the need for raw materials.

2. **Reduced Landfill Waste**: Proper segregation can significantly decrease the amount of waste sent to landfills. Wet waste, which is biodegradable, can be composted and turned into valuable fertilizer, while dry waste can be recycled.

3. **Improved Waste Management**: Segregated waste is easier and more efficient to handle, process, and dispose of. It helps waste management facilities operate more effectively.

4. **Minimized Contamination**: Mixing wet and dry waste can contaminate recyclable materials, making them unsuitable for recycling. Segregation ensures that materials remain clean and usable.

5. **Cost Savings**: Efficient waste management can reduce the costs associated with waste collection, transportation, and disposal. Composting wet waste can also save money on fertilizers and soil conditioners.

6. **Environmental Protection**: Proper waste segregation reduces the emission of greenhouse gases from landfills and minimizes soil and water pollution. Composting wet waste also enriches the soil, improving its structure and fertility.

7. **Public Health Improvement**: Effective waste segregation reduces the proliferation of pests and harmful bacteria, leading to a cleaner and healthier environment.

8. **Community Awareness**: Practicing waste segregation raises awareness about the importance of recycling and sustainable living, encouraging communities to adopt more environmentally friendly habits.

By implementing waste segregation, we can collectively make a significant positive impact on our environment and society.

5.4. Sewage Treatment

The campus has a full fledge functional Sewage Treatment Plant (STP) where waste water from Washrooms, kitchens, grounds etc is collected and treated for further use for agriculture or landscape watering. The capacity of SBBU Campus's MBBR type STP is 600 KLD. The plant runs 24 hours a day with three operators working in shift system.

MBBR (Moving Bed Biofilm Reactor) is a type of **Sewage Treatment Plant (STP)** that uses a biological process to treat wastewater. Here's a brief overview:

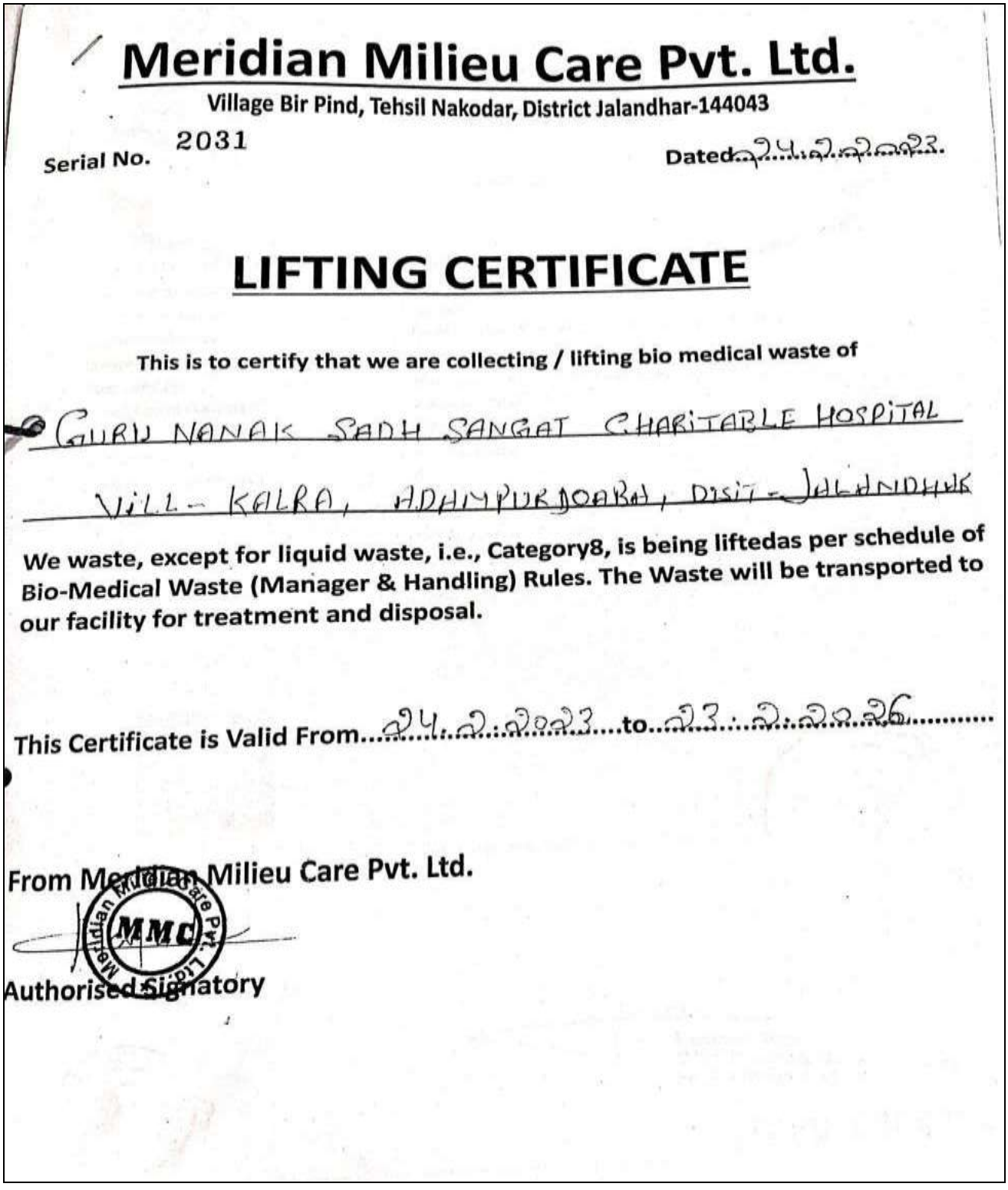
Working of MBBR:

1. **Biofilm Formation**: Microorganisms grow on small plastic carriers (media) that move freely within the aeration tank.
2. **Aeration**: Air is supplied to the tank, providing oxygen for the microorganisms to break down organic matter in the wastewater.
3. **Nitrification and Denitrification**: The process involves converting ammonium into nitrate (nitrification) and then nitrate into nitrogen gas (denitrification), which is released into the atmosphere.
4. **Benefits of MBBR STP:**

- **Efficient Treatment**: Effective removal of organic substances, nitrogen, and other pollutants.
- **Compact Design**: Requ.ires less space compared to traditional treatment methods.
- **Low Maintenance**: Easy to operate and maintain.
- **Cost-Effective**: Lower capital and operational costs.
- **Flexibility**: Can handle variations in wastewater flow and load

A 600 KLD MBBR Type STP Working Efficiently in SBBS University Campus

Bio-Medical Waste Disposal MOU – An MOU has been signed between Guru Nanak Sadh Sangat Charitable Hospital, Kalra and Deptt of Life Sciences & Allied Health Sciences and Deptt of Physiotherapy, SBBS University, Jalandhar thru Meridian Milieu Cate Pvt Ltd.



Meridian Milieu Care Pvt. Ltd.

Village Bir Pind, Tehsil Nakodar, District Jalandhar-144043

Serial No. 2031 Dated 24.11.2023.

LIFTING CERTIFICATE

This is to certify that we are collecting / lifting bio medical waste of

GURU NANAK SADH SANGAT CHARITABLE HOSPITAL

VILL- KALRA, ADHAMPUR DOABA, DISTT- JALANDHAR

We waste, except for liquid waste, i.e., Category8, is being liftedas per schedule of Bio-Medical Waste (Manager & Handling) Rules. The Waste will be transported to our facility for treatment and disposal.

This Certificate is Valid From...24.11.2023....to...23.11.2026.....

From Meridian Milieu Care Pvt. Ltd.

Meridian Milieu Care Pvt. Ltd. MMC

Authorised Signatory

E-Waste Disposal / Takeoff Agreement has been signed between SBBU Jalandhar and Spreco Recycling, Ludhiana for disposal and further recycling of E-Waste, thus

preventing hazardous materials like lead, mercury, and cadmium from contaminating the soil, water, and air.

INDIA NON JUDICIAL

Government of Punjab

e-Stamp

Certificate No.	:	IN-PB02952865370712X
Certificate Issued Date	:	31-Jan-2025 02:58 PM
Certificate Issued By	:	pbishsetu
Account Reference	:	NEWIMPACC (SV)/ pb7075804/ JALANDHAR/ PB-JL
Unique Doc. Reference	:	SUBIN-PBPB70758040487195158503X
Purchased by	:	ARVINDER GILL
Description of Document	:	Article 5(d) Agreement - if not otherwise provided for
Property Description	:	Not Applicable
Area of Property	:	Not Applicable
Consideration Price (Rs.)	:	0 (Zero)
First Party	:	K J RECYCLERS
Second Party	:	Not Applicable
Stamp Duty Paid By	:	K J RECYCLERS
Stamp Duty Amount(Rs.)	:	100 (One Hundred only)
Social Infrastructure Cess(Rs.)	:	0 (Zero)
Total Stamp Duty Amount(Rs.)	:	100 (One Hundred only)

9061

ARVINDER KUMAR SETIA * JALANDHAR

This stamp paper forms an integral part of E-Waste Service agreement between 2 parties **K.J. Recyclers** and **Sant Baba Bhag Singh Memorial Charitable Society** for the period of 3 Year beginning from 31ST January 2025

Secretary
SANT BABA BHAG SINGH
MEMORIAL CHARITABLE SOCIETY
Vill. Manko, Distt. Jalandhar, Punjab

K.J. RECYCLERS
Auth. Signatory

0027599475

Statutory Alert:
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

E-Waste Takeoff Agreement (First Page for Ref.)

6. GREENING THE CAMPUS

6.1. QUESTIONNAIRE

1	Is there a garden in your institute?	Yes	
2	Do students spend time in the garden?	Yes	
3	Total number of Plants in Campus	Plant type	Approx. number
		Seasonal	560
		others	289
		Trees	270
4	Suggest plants for your campus. (Trees, vegetables, herbs, etc.)	Aromatic Plants, Medicinal Plants, Spices Air purifying plants	
5	Does the campus have any Horticulture Department	Yes	
	Number of Staff working in Horticulture department	8	
6	Number of Tree Plantation Drives organized by university per annum. (If Any)	4	
7	Number of Trees Planted in Last FY.	Approx 500	
	Survival Rate	Approx 75%	
8	Plant Distribution Program for Students and Community	Yes	
9	Plant Ownership Program	Yes	

6.2. Existing Environment Policy

An Environmental Policy is a formal statement made by an organization, government, or business that outlines its commitments and objectives regarding environmental protection and sustainability. These policies provide a framework for decision-making and set the standards for environmental performance. Environmental policies are essential for driving sustainable practices and ensuring that organizations contribute positively to the health and well-being of the planet.

SBBS University has a well planned and defined Environment Sustainability to take care of healthy environment around campus which has been enclosed Annexure A in the end of this report.

7. ENERGY CONSERVATION

7.1. QUESTIONNAIRE

1	List ways that you use energy in your institute. (Electricity, LPG, firewood, others). Using this list, try to think of ways that you could use less energy every day.	Electrical energy, LPG, Solar Pannel, Heat energy, Thermal energy
2	Are there any energy saving methods employed in your institute? If yes, please specify. If no, suggest some	Solar Panel in campus and LED bulbs have been installed in campus.
3	How many CFL/LED bulbs has your institute installed?	More than 1000 CFL / LED lamps have been replaced.
4	Are any alternative energy sources employed / installed in your institute? (photovoltaic cells for solar energy, windmill, energy efficient stoves, etc.,) Specify.	Photovoltaic cells for solar energy, Induction stove for cooking, Energy saving five-star AC are being installed.
5	Do you run "switch off" drills at institute?	Yes
6	Are your computers and other equipment's put-on power-saving mode?	Yes
7	Does your machinery (TV, AC, Computer, weighing balance, printers, etc.) run on standby modes most of the time? If yes, how many hours?	No

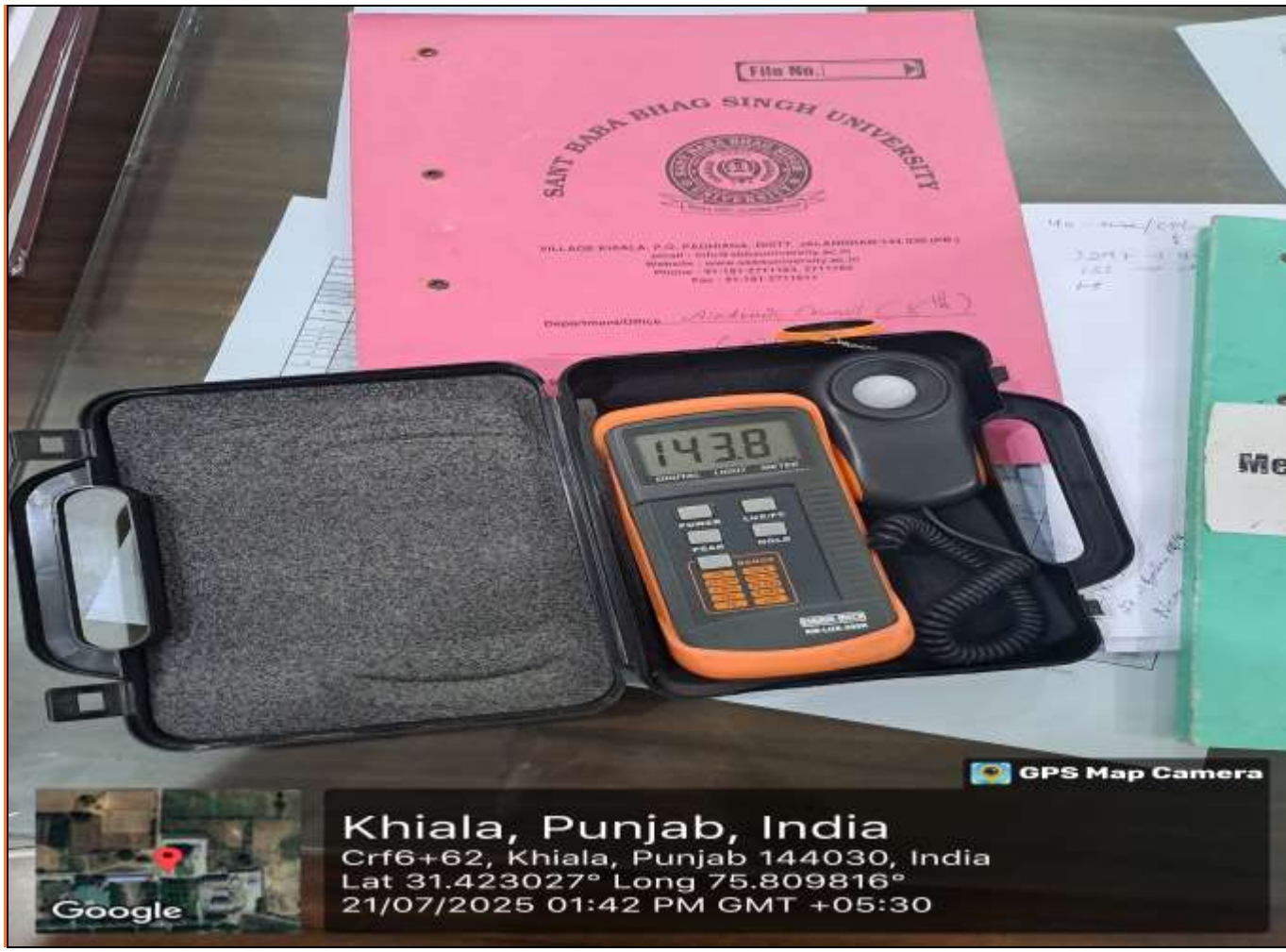
Rooftop Solar Power Plant At SBBS University, Jalandhar

7.2. Energy conservation measures:

7.2.1. LED lights: About 1000 nos. conventional lighting has been replaced with LED lighting thus lowering the electricity consumption in the campus

Conventional FTL Are Being Replaced with Energy Efficient LED Lights In Campus

SBBS University Has Installed a Rooftop Solar Power Plant of Capacity (55+45)=100 KWP



8. WATER MANAGEMENT

8.1. QUESTIONNAIRE

1	List four uses of water in your institute	1. Drinking 2. Bathing /Toilets 3. Irrigation 4. Washing
2	How does your institute store water? Are there any water saving techniques followed in your institute?	Yes There are 25 overhead water storage tanks with capacity of 2000 litres and 1 main overhead water tank with capacity of 5 lakh litres
3	If there is water wastage, specify why and how can the wastage be	University ensures to prevent water wastage by use of auto- push taps and regular check for

	prevented / stopped?	leakage. If water leakage is detected than immediate steps are to stop it.
4	Locate the point of entry of water and point of exit of waste water in your institute. Entry- Exit-	**Entry**- Underground 7 bore wells **Exit**- From canteen, hostels, laboratories, toilets etc via covered drainage to 600 KLD STP located within campus area
5	Write down four ways that could reduce the amount of water used in your institute	• Proper maintenance and monitoring of water supply system to avoid overflow and leakage. • Installation of auto push taps to reduce water wastage. • Close taps after uses. • Displaying banners highlighting importance of water near water taps
6	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.	Drinking – 118.85 KL/month Gardening – 840.88 KL/month Kitchen and Toilets – 764.76 KL/ month Hostel – 3250.87 KL/month Miscellaneous – 378.70 KL/month Total – 5354.06 KL/month
7	Does your institute harvest rain water?	Yes
8	Is there any water recycling System.	Yes, through MBBR Type STP

8.2. Water quality and conservation

SBBS University Jalandhar utilizes approx. 5300 K Litres of Water per day approximately. Ground water is extracted using Submersible Water pumps and pumped to overhead tanks after storing in a tank near canteen area.

8.3. Drinking water: Reverse Osmosis Plant - Reverse osmosis (RO) is a membrane separation process, driven by a pressure gradient, in which the membrane separates the solvent (generally water) from other components of a solution. The membrane configuration is usually cross-flow. The campus has provided purified R.O. drinking water to all the students and staff residing in the campus by setting up the R.O filters. In additional to drinking purpose, R.O water is provided to the hostel mess for cooking foods.

Existing RO Filter connected with water cooler in Campus

Measuring pH and TDS of Drinking water In Campus during Audit

Auditors checked the quality of the drinking water after it is treated from RO Plant and the results are as under:

SR NO.	Particulars of checked item	Value	Remarks
1	Sample of drinking water for testing PH Value	**7.8**	Good
2	Sample of drinking water for testing TDS (total dissolved solids) Value	**196 ppm**	Fair

Thus, as per above table the water is safe for drinking.

8.4. Utilization of Waste water*:* All the main buildings in SBBS University campus are connected with underground tanks which store the rain water flowing from parks, pathways, roads and rooftops, which is further utilized for watering the landscape areas in campus, thus maximizing the use of natural resources.

AN Underground Rain Water Harvesting Tank in SBBSU Campus

9. AIR QUALITY ASSESMENT

9.1. QUESTIONNAIRE

1	Are you aware of any environmental Laws Pertaining to different aspects of environmental management?	Yes
2	Does your institute have any rules / made initiatives to protect the environment	Yes, Ban of plastic and efforts gave been made to minimize the pollution.
3	Is Environmental Ambient Air Quality monitoring conducted by the institute?	No
4	Dose Environmental Water and Wastewater Quality monitoring conducted by the Institute?	No

5	Dose stack monitoring of DG sets conducted by the Institute?	No
6	Is any warning notice, letter issued by state Government bodies?	No
7	Dose any Hazardous waste generated by the Institute? If yes explain its category and disposal method	No
8	Is any Bio medical waste generated by the Institute? If yes explain its category and disposal method	Yes, MOU of disposal of Biomedical waste has been signed with designated agency.

9.2. INDOOR ENVIORONMENTAL QUALITY

Health and comfortable life is the top most priority of every building user. Corresponding to health and wellbeing, the quality of a built environment for its occupant inside a building is referred to as in door environmental quality. Indoor environmental quality involves noise disturbance, occupant density, in door lighting, day lighting, ventilation, room temperature, cleanliness and indoor humidity. All these factors add up and form indoor environmental quality.

Auditors measured some parameters at different locations in the buildings of SBBS University campus as under:

AQI (µg/m3)	PM 10 (µg/m3)	PM 2.5 (µg/m3)	CO (ppm)	NO2 (ppb)	O3 (ppb)	SO2 (ppb)
336	362.87	236.8	2.04	94.55	14.94	8.95

Sr No.	Location	CO2	TVOC	HCHO	Temperature In ºC	Relative Humidity in %
1	Block 5 GF	405	0.021	0.000	21	57
2	Block 8 FF	406	0.021	0.001	21	57
3	Near Main Gate	405	0.021	0.001	22	58
4	Near Law Deptt.	405	0.021	0.001	21	57

From the Above table, it is found that the room temperature and relative humidity are in comfortable limits. Also, the ventilation and day lighting are in good conditions. But various environmental aspects like AQI, CO2 etc are in not healthy limits. It is advised that more pollution control measures need to be adopted in and around the campus.

Monitoring AQI And Other Environmental Parameters Inside SBBS University Campus

With growth of campus population by increase in the student's intake and further augmentation of infrastructure, share of university campus carbon foot prints likely to increase in future.

10. TRANSPORT

10.1. QUESTIONNAIRE

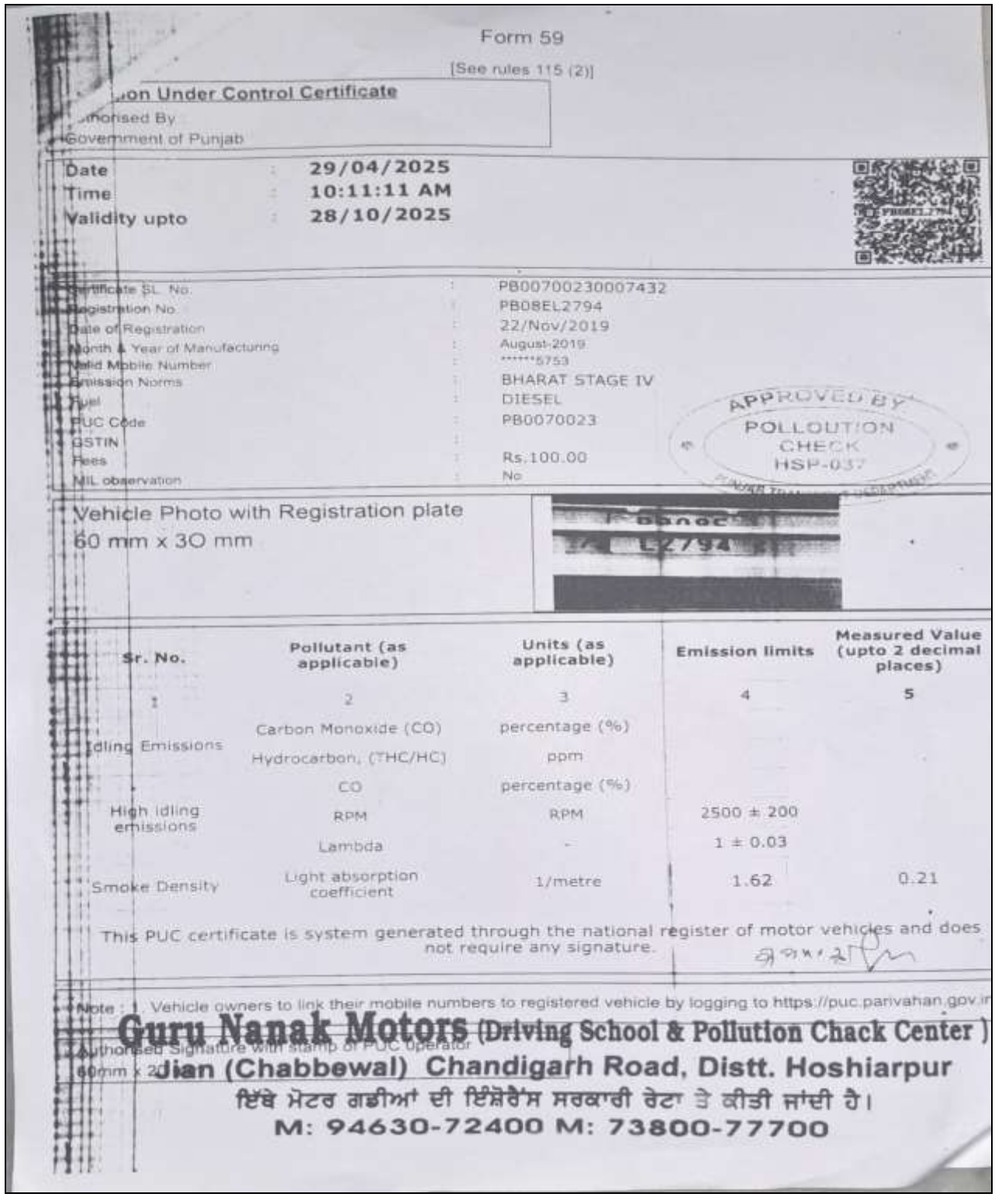
1	Does Campus has own or contracted vehicles?	Yes	A combination of campus-owned and operator-owned vehicles			
2	Provide details of campus owned / hired motorized Vehicles?	Cars	Bus	Vans	Bike +Other	Total
	No. of vehicles	15	19	1	1	26
	No. of vehicles more than five years old	0	0	0	0	0
	No. of non-air-conditioned vehicles	0	19	1	1	21
	PUC done	Yes	Yes	Yes	Yes	
3	Specify the type of fuel used by your College's vehicles:					
	Diesel	15	19	1	0	25
	Petrol + CNG	0	0	0	0	0
	CNG	0	0	0	0	0
	LPG	0	0	0	0	0
	Petrol	0	0	0	0	0
4	Electrical	0	0	0	1	1

Transport accounts for alongside local government and planning authorities is also crucial to optimize local public transport solutions.

10.2. Internal Campus Transport

SBBS University Jalandhar campus cover large areas, so transport to and from university campus are unavoidable. However, the method of transport is a choice and, rather than only thinking of the quickest way, campus needs to consider the greenest way. While cars can sometimes prove necessary, cycling and walking is strongly encouraged.

Keeping in view the CO2 emissions from transports, the auditors checked pollution and fitness certificates of some vehicles as a test check. Two of such fitness certificates are shown in below:



Form 59

[See rules 115 (2)]

...on Under Control Certificate

...horised By
Government of Punjab

Date	:	29/04/2025
Time	:	10:11:11 AM
Validity upto	:	28/10/2025

...rtificate SL. No.	:	PB00700230007432
...egistration No.	:	PB08EL2794
Date of Registration	:	22/Nov/2019
Month & Year of Manufacturing	:	August-2019
...alid Mobile Number	:	******5753
Emission Norms	:	BHARAT STAGE IV
Fuel	:	DIESEL
PUC Code	:	PB0070023
GSTIN	:	
Fees	:	Rs.100.00
NIL observation	:	No

APPROVED BY POLLOUTION CHECK HSP-037

Vehicle Photo with Registration plate
60 mm x 30 mm

Sr. No.	Pollutant (as applicable)	Units (as applicable)	Emission limits	Measured Value (upto 2 decimal places)
1	2	3	4	5
Idling Emissions	Carbon Monoxide (CO)	percentage (%)		
	Hydrocarbon, (THC/HC)	ppm		
	CO	percentage (%)		
High idling emissions	RPM	RPM	2500 ± 200	
	Lambda	-	1 ± 0.03	
Smoke Density	Light absorption coefficient	1/metre	1.62	0.21

This PUC certificate is system generated through the national register of motor vehicles and does not require any signature.

Note : 1. Vehicle owners to link their mobile numbers to registered vehicle by logging to https://puc.parivahan.gov.in

Authorised Signature with stamp of PUC operator

60mm x 20...

Guru Nanak Motors (Driving School & Pollution Chack Center)
...dian (Chabbewal) Chandigarh Road, Distt. Hoshiarpur
ਇੱਥੇ ਮੋਟਰ ਗਡੀਆਂ ਦੀ ਇੰਸ਼ੋਰੈਂਸ ਸਰਕਾਰੀ ਰੇਟਾ ਤੇ ਕੀਤੀ ਜਾਂਦੀ ਹੈ।
M: 94630-72400 M: 73800-77700

Pollution Under Control Certificate of one of University Buses

Well Maintained Buses Of SBBS University

11. ANIMAL WELFARE

11.1. QUESTIONNAIRE

1	List the animals (wild and domestic) found on the campus (dogs, cats, squirrels, birds, insects, etc.)	Cats, squirrels, Birds, Insects, Lizards, Snakes, Frogs
2	How many dogs in your area have undergone Animal birth control / Anti rabies vaccination	No dogs under this area
3	Does your institute have a Biodiversity programme?	Yes

The concept of animal welfare includes three elements: the animal's normal biological functioning (which, among other things, means ensuring that the animal is healthy and well-nourished), its emotional state (including the absence of negative emotions, such as pain and chronic fear) Animal welfare **covers the responsibilities that humans have when it comes to the treatment of animals in captivity.** There are many different situations where animals are held in captivity by people. From farms raising animals for food and zoos to laboratories that run animal testing and circuses, the range of different situations where

animals are captive is vast and shocking. Animal welfare refers to the responsibility that humans have when it comes to the treatment of these animals.

At present In the SBBS University campus Jalandhar as surveyed no animal found except variety of birds and squirrels but these are not harmful to humans.

12. ENVIRONMENTAL LEGISLATIVE COMPLIANCE – WASTE MANAGEMENT

12.1. QUESTIONNAIRE

1	Are you aware of any environmental Laws Pertaining to different aspects of environmental management?	Yes
2	Does your institute have any rules to protect the environment	Yes Ban of plastic
3	Is Environmental Ambient Air Quality monitoring conducted by the institute?	No
4	Dose Environmental Water and Wastewater Quality monitoring conducted by the Institute?	No
5	Dose stack monitoring of DG sets conducted by the Institute?	No
6	Is any warning notice, letter issued by state Government bodies?	No
7	Dose any Hazardous waste generated by the Institute? If yes explain its category and disposal method	No
8	Is any Bio medical waste generated by the Institute? If yes explain its category and disposal method	Yes! Bio medical waste of category 3 & 4 are generated. Biomedical waste is collected, treated and disposed by Meridian Milieu Cate Pvt Ltd. Jalandhar

Principles of Environmental Enforcement (Implementation and Enforcement of Environmental Law (IMPEL), 1992) have defined legal compliance as: "Full implementation of applicable environmental legislation. Compliance occurs when requirements are met and desired changes are achieved."

To help build a culture of improved voluntary compliance within industry and improve compliance practices the department and has published guidance material and supporting information to help industry understand how to meet its environmental obligations and achieve good environmental practices.

- Environmental policy. Environmental Policy should reflect the commitment of top management to comply with applicable legal requirements and other requirements, supported by adequate resources.
- Legal and other requirements (4.3.2) Clause 4.3.2 of ISO 14001 states that the organization should know applicable legal requirements related to their activities and services.
- The objectives and targets (4.3.3) ISO 14001, in its clause 4.3.3, states that when an organization establishes environmental objectives it should take into account its legal and other requirements.
- Evaluation of **compliance** (4.5.2) Periodic evaluation of **compliance** is important, because even if your organization is in **compliance** today you cannot be sure that it will be in **compliance** in six months or a year.

13. GENERAL

13.1. QUESTIONNAIRE

1	Are you aware of any environmental Laws pertaining to different aspects of environmental management?	YES
2	Does your institute have any rules to protect the environment? List possible rules you could include.	YES
3	Does housekeeping schedule in your campus?	YES
4	Are students and faculties aware of environmental cleanliness ways? If Yes Explain	
5	Dose Important Days Like World Environment Day, Earth Day, and Ozone Day etc. eminent in Campus?	YES
6	Dose Institute participated in National and local Environmental Protection Movement?	YES
7	Dose Institute has any Recognition /certification for environment friendliness?	NO
8	Dose Institute using renewable energy?	YES
9	Dose Institution conducts a green /environmental audit of its campus?	YES
10	Has the institution been audited / accredited by any other agency such as NABL, NABET, TQPM, NAAC etc.?	YES

14. RECOMMENDATIONS

- Environmental Monitoring i.e. (Ambient Air Quality monitoring) & Stack Monitoring of DG sets need to be conducted regularly by Punjab State Pollution Control Board, approved laboratory with frequency of six month.
- SBBS University Jalandhar campus is extracting ground water for using for drinking and other purposes. It is highly recommended that they install a metering system/permission from CGWA for regulating and monitoring the same as it is a precious resource and accountability is must for regulating consumption of same.
- Regular maintenance of Solar Panels is suggested to be done strictly to get the best of natural resources.

15. ENVIRONMENT CONSCIOUSNESS PROGRAMS

Various Programs Like Earth Day, Van Mahotsav Etc Are Celebrated in SBBS University Campus for Awareness Of All Concerned

Plantation Drive by students and faculty of UIET at Village Daroli Kalan, Jalandhar, Punjab

Awareness Of Healthy Environment being conducted in Campus

Honorable guests planting trees on the SBBS University campus

Webinars are conducted by staff for students for Environment awareness in SBBS University Campus

16: CONCLUSION

Considering the diversity of Sant Baba Bhag Singh University, Jalandhar, there is significant environmental research both by faculty and students. The environmental awareness initiatives are substantial. The installation of solar power plant and solar water heater system are noteworthy. Besides, environmental awareness program initiated by the administration shows how the campus is going green. Few recommendations are added to curb the menace of strategic management using eco-friendly and scientific techniques. This may lead to the prosperous future in context of Green Campus & thus sustainable environment and community development

For R.K. Electricals & Energy Audit Services

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

17. Credentials in r/o "R.K. Electricals and Energy Audit Services"

a) Certificate ISO 50001:2018(Energy Management Services)

ICL Integral Certification Ltd.

Certificate OF REGISTRATION

This is to Certify that the Management System of

R.K. ELECTRICALS & ENERGY AUDIT SERVICES

PROGRESSIVE SOCIETY, 1131, SECTOR 50B, CHANDIGARH - 160047, INDIA.

has been found to conform to the Energy Management System standard:

ISO 50001:2018

This certificate is valid for the following scope of operations:

DEALS IN PRODUCTS / SERVICE PROVIDER, ENERGY AUDIT, ENERGY MANAGEMENT, ENVIRONMENT AUDIT GREEN AUDIT, ELECTRICAL SAFETY AUDIT OF BUILDINGS, COLLEGE UNIVERSITY, HOSPITALS, INDUSTRIES, SOLAR PLANTS, THERMOGRAPHY OF ELECTRICAL AND MECHANICAL EQUIPMENT OF INDUSTRIES AND SOLAR PANELS AND ELECTRICAL INSTALLATIONS.

Certificate No.: 09112620G

Date of initial registration	Date of this Certificate	Surv. audit on or before/ Certificate expiry	Recertification Due
01 October 2024	01 October 2024	30 September 2025	30 September 2027

This Certificate remains valid subject to satisfactory surveillance audits.

Accreditation

EGAC Accredited MSCB CAB # 011201

IAF

ICL/PM-001/REV07

Director

For verification and updated information concerning the present certificate visit to www.iclcert.com

This certificate is property of Integral Certification Ltd. and shall be returned immediately when demanded.

Integral Certification Ltd.
International Office : 45, Middle Hillgate, Stockport, Greater Manchester SK1 3DG
Contact No. : +44 7404 823687
(Company Number 15218428 Registered in England and Wales)
Integral Certification Pvt. Ltd.
Corporate Office : 301, U-60 (3rd Floor), Laxmi Nagar, Delhi-110092, India.
Contact No. : +91 9319332223
E-mail: info@iclcert.com Website : www.iclcert.com

b) Certificate ISO 9001:2015(Quality Management System

MANAGEMENT SYSTEM
CERTIFICATE

ROYAL ASSESSMENTS PVT. LTD.

VERIFIED
www.royalapl.com

This is to certify that

R.K. ELECTRICALS & ENERGY AUDIT SERVICES

PROGRESSIVE SOCIETY, 1131, SECTOR 50B, CHANDIGARH - 160047, INDIA.

has been assessed by RAPL and found to comply with the requirements of

ISO 9001 : 2015
Quality Management Systems

For the following activities:

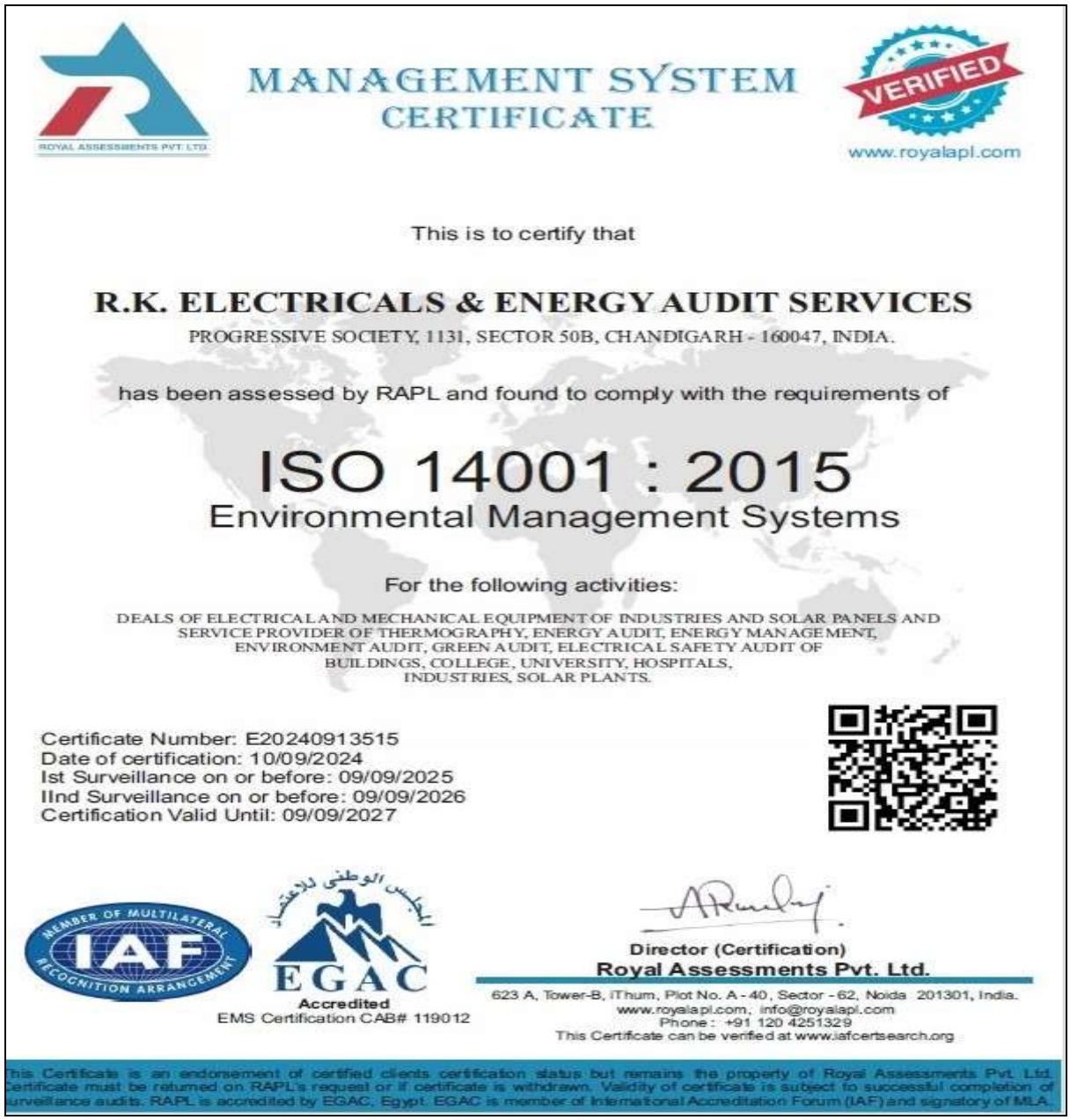
DEALS IN PRODUCTS / SERVICE PROVIDER, ENERGY AUDIT, ENERGY MANAGEMENT, ENVIRONMENT AUDIT GREEN AUDIT, ELECTRICAL SAFETY AUDIT OF BUILDINGS, COLLEGE UNIVERSITY, HOSPITALS, INDUSTRIES, SOLAR PLANTS, THERMOGRAPHY OF ELECTRICAL AND MECHANICAL EQUIPMENT OF INDUSTRIES AND SOLAR PANELS AND ELECTRICAL INSTALLATIONS.

Certificate Number: E20241014012
Date of certification: 07/10/2024
Ist Surveillance on or before: 06/10/2025
IInd Surveillance on or before: 06/10/2026
Certification Valid Until: 06/10/2027

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT
IAF
EGAC
Accredited
QMS Certification CAB# 119012

Director (Certification)
Royal Assessments Pvt. Ltd.
623 A, Tower-B, iThum, Plot No. A - 40, Sector - 62, Noida 201301, India.
www.royalapl.com, info@royalapl.com
Phone : +91 120 4251329
This Certificate can be verified at www.iafcertsearch.org

c) Certificate ISO 14001:2015 Environment Management System



MANAGEMENT SYSTEM CERTIFICATE

ROYAL ASSESSMENTS PVT. LTD.

VERIFIED

www.royalapl.com

This is to certify that

R.K. ELECTRICALS & ENERGY AUDIT SERVICES

PROGRESSIVE SOCIETY, 1131, SECTOR 50B, CHANDIGARH - 160047, INDIA.

has been assessed by RAPL and found to comply with the requirements of

ISO 14001 : 2015

Environmental Management Systems

For the following activities:

DEALS OF ELECTRICAL AND MECHANICAL EQUIPMENT OF INDUSTRIES AND SOLAR PANELS AND SERVICE PROVIDER OF THERMOGRAPHY, ENERGY AUDIT, ENERGY MANAGEMENT, ENVIRONMENT AUDIT, GREEN AUDIT, ELECTRICAL SAFETY AUDIT OF BUILDINGS, COLLEGE, UNIVERSITY, HOSPITALS, INDUSTRIES, SOLAR PLANTS.

Certificate Number: E20240913515
Date of certification: 10/09/2024
Ist Surveillance on or before: 09/09/2025
IInd Surveillance on or before: 09/09/2026
Certification Valid Until: 09/09/2027

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

EGAC

Accredited
EMS Certification CAB# 119012

Director (Certification)
Royal Assessments Pvt. Ltd.

623 A, Tower-B, iThum, Plot No. A - 40, Sector - 62, Noida 201301, India.
www.royalapl.com, info@royalapl.com
Phone : +91 120 4251329
This Certificate can be verified at www.iafcertsearch.org

This Certificate is an endorsement of certified clients certification status but remains the property of Royal Assessments Pvt. Ltd. Certificate must be returned on RAPL's request or if certificate is withdrawn. Validity of certificate is subject to successful completion of surveillance audits. RAPL is accredited by EGAC, Egypt. EGAC is member of International Accreditation Forum (IAF) and signatory of MLA.

d) Certificate ISO 45001:2018 (Occupational Health and Safety Management System

MANAGEMENT SYSTEM CERTIFICATE

VERIFIED
www.royalapl.com

This is to certify that

R.K. ELECTRICALS & ENERGY AUDIT SERVICES

PROGRESSIVE SOCIETY, 1131, SECTOR 50B, CHANDIGARH - 160047, INDIA.

has been assessed by RAPL and found to comply with the requirements of

ISO 45001 : 2018

Occupational Health and Safety Management Systems

For the following activities:

DEALS IN PRODUCTS / SERVICE PROVIDER, ENERGY AUDIT, ENERGY MANAGEMENT, ENVIRONMENT AUDIT GREEN AUDIT, ELECTRICAL SAFETY AUDIT OF BUILDINGS, COLLEGE, UNIVERSITY, HOSPITALS, INDUSTRIES, SOLAR PLANTS, THERMOGRAPHY OF ELECTRICAL AND MECHANICAL EQUIPMENT OF INDUSTRIES AND SOLAR PANELS AND ELECTRICAL INSTALLATIONS.

Certificate Number: E20240913825
Date of certification: 26/09/2024
Ist Surveillance on or before: 25/09/2025
IInd Surveillance on or before: 25/09/2026
Certification Valid Until: 25/09/2027

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF
EGAC
Accredited
OHSMS Certification CAB# 119012

Director (Certification)
Royal Assessments Pvt. Ltd.
623 A, Tower-B, iThum, Plot No. A - 40, Sector - 62, Noida 201301, India.
www.royalapl.com, info@royalapl.com
Phone : +91 120 4251329
This Certificate can be verified at www.iafcertsearch.org

This Certificate is an endorsement of certified clients certification status but remains the property of Royal Ass... Pvt. Ltd. Certificate must be returned on RAPL's request or if certificate is withdrawn. Validity of certificate is subject to su... tion of

e) Certificate of Energy Auditor MoP GoI

Regn. No. EA-10080 Certificate No. 5591

National Productivity Council

(National Certifying Agency)

PROVISIONAL CERTIFICATE

This is to certify that Mr. / Ms. Rakesh Kumar Sharma

son / daughter of Mr. Krishan Datt

has passed the National Certification Examination for Energy Auditors held in July - 2010, 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 : 7th October, 2010

Controller of Examination

f) Certificate of Energy Auditor MoP GoI

Regn. No. EA-19322 Certificate No. 7889

National Productivity council

National Productivity Council

(National Certifying Agency)

PROVISIONAL CERTIFICATE

This is to certify that Mr. / Mrs./ Ms. Paramjeet Singh

son / daughter of Mr. Barkha Ram

has passed the National Certification Examination for Energy Auditors held in August - 2013, 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 : 6th January, 2014

Controller of Examination

g) Certificate of IGBC Accredited Professional (IGBC India)

IGBC

CII
Confederation of Indian Industry

The Indian Green Building Council

hereby certifies that

Rakesh Kumar Sharma

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

Gurmit Singh Arora
Chairman
Indian Green Building Council

B Thiagarajan
Vice-Chairman
Indian Green Building Council

h) Certificate of Electrical Engg.

Regn. cum Roll No. L-40405009

ਪੰਜਾਬ ਟੈਕਨੀਕਲ ਯੂਨੀਵਰਸਿਟੀ

Punjab Technical University

Jalandhar

BACHELOR OF TECHNOLOGY

Mr./Ms. Varun Sharma son/daughter of Sh. Rakesh Sharma

student of Chandigarh Engineering College, Landran, having completed the course of studies approved by the University and having passed the prescribed examination held in Dec.-2007, has been conferred the degree of Bachelor of Technology of this University in the discipline of Electrical Engineering in First Division.

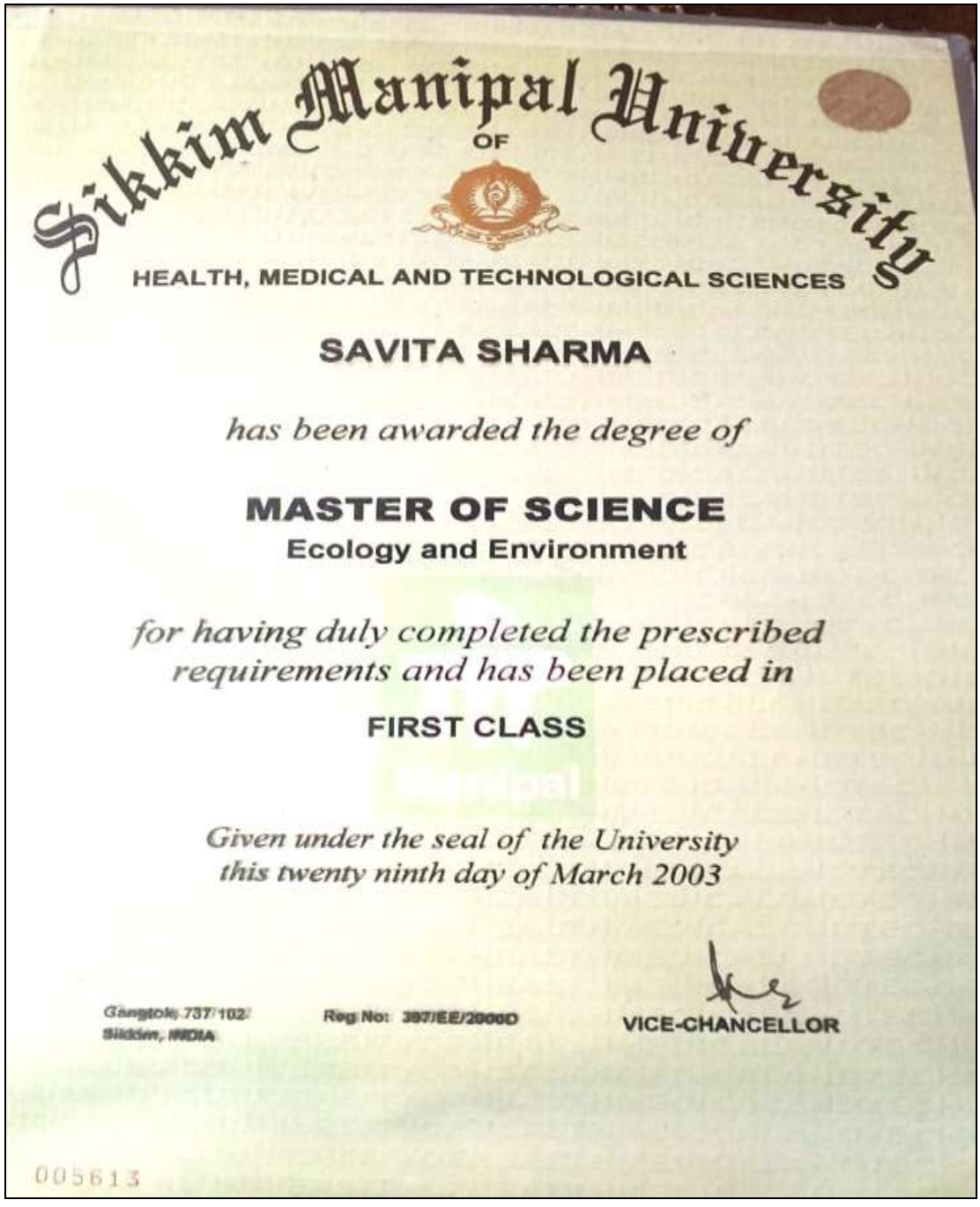
Given under the seal of the University

ਰਜਿਸਟਰਾਰ
Registrar
Jalandhar, 25/10/10

ਵਾਈਸ-ਚਾਂਸਲਰ
Vice-Chancellor

ਚਾਂਸਲਰ
Chancellor

i) Certificate of Ecology Environment



Sikkim Manipal University
OF
HEALTH, MEDICAL AND TECHNOLOGICAL SCIENCES

SAVITA SHARMA

has been awarded the degree of

MASTER OF SCIENCE
Ecology and Environment

for having duly completed the prescribed requirements and has been placed in

FIRST CLASS

Given under the seal of the University this twenty ninth day of March 2003

Gangtok 737 102
Sikkim, INDIA

Reg No: 397/EE/2000D

VICE-CHANCELLOR

005613

g) Award certificate

Government of Punjab
Department of New & Renewable Energy Sources

Award for Outstanding Contribution

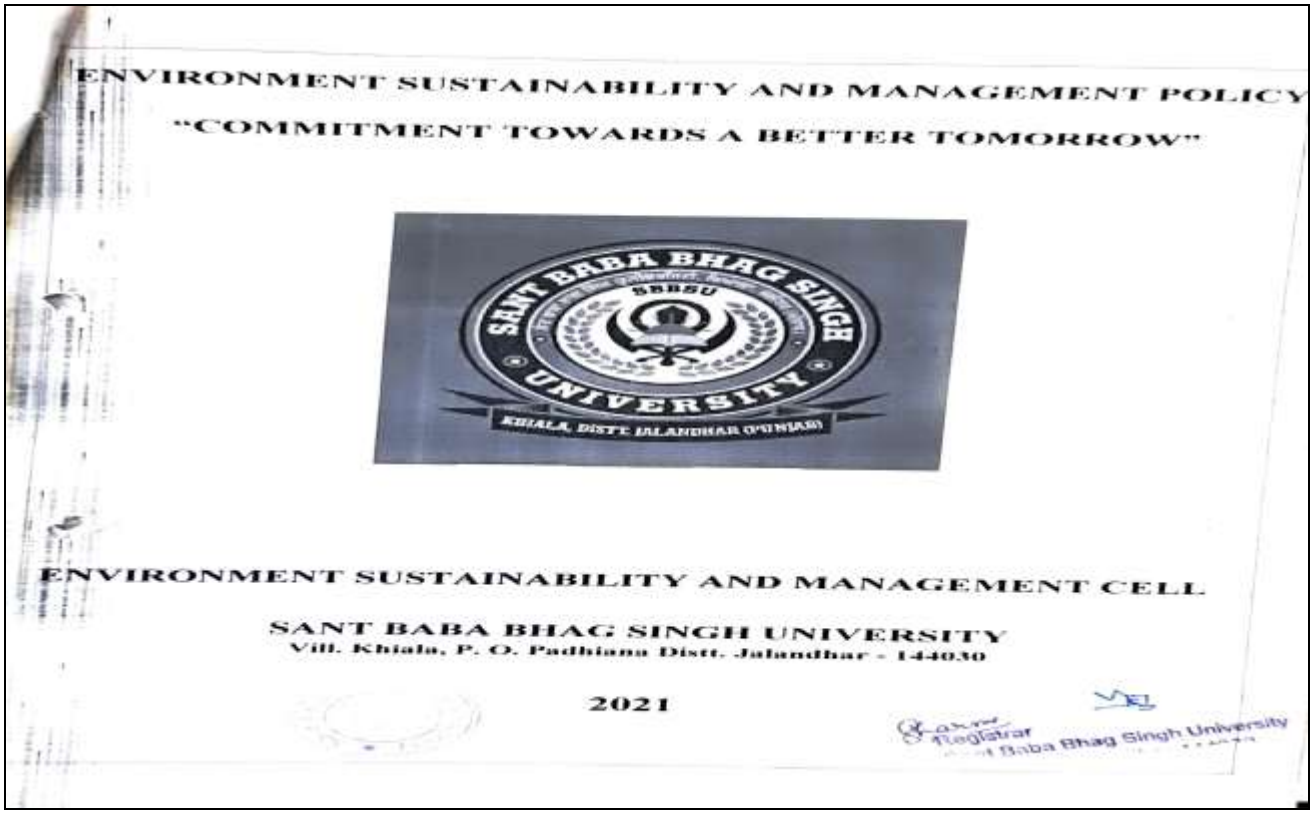
Presented to

M/s. R.K Electricals & Energy Audit Services, Chandigarh
(Sector: Energy Auditing Agencies)
participated in the State Level Energy Conservation Award Competition
organized by Punjab Energy Development Agency, Chandigarh
(State Designated Agency-Punjab) and secured the
Second Position
under the category of
BEE Certified Energy Auditors & Energy Auditing Agencies
for their efforts made in the field of
Energy Conservation during the last two years 2021-22 & 2022-23.

December 2023
Chandigarh

Dr. Amarpal Singh, IAS
Chief Executive Officer
Punjab Energy Development Agency

Annexure A: Environment Sustainability and Management Policy of SBBS University:



ENVIRONMENT SUSTAINABILITY AND MANAGEMENT POLICY

"COMMITMENT TOWARDS A BETTER TOMORROW"

SANT BABA BHAG SINGH UNIVERSITY

ENVIRONMENT SUSTAINABILITY AND MANAGEMENT CELL

SANT BABA BHAG SINGH UNIVERSITY
Vill. Khiala, P. O. Padhiana Distt. Jalandhar - 144030

2021

Registrar
Sant Baba Bhag Singh University

INDEX

Registrar
Sant Baba Bhag Singh University
Khiala, Jalandhar-144030

Sant Baba Bhag Singh UNIVERSITY

1. VISION: The ESM cell envisions to embed an outstanding environmental sustainability performance and serve as a voice and vehicle for improvement along with the enhancement of the environment.

2. MISSION:

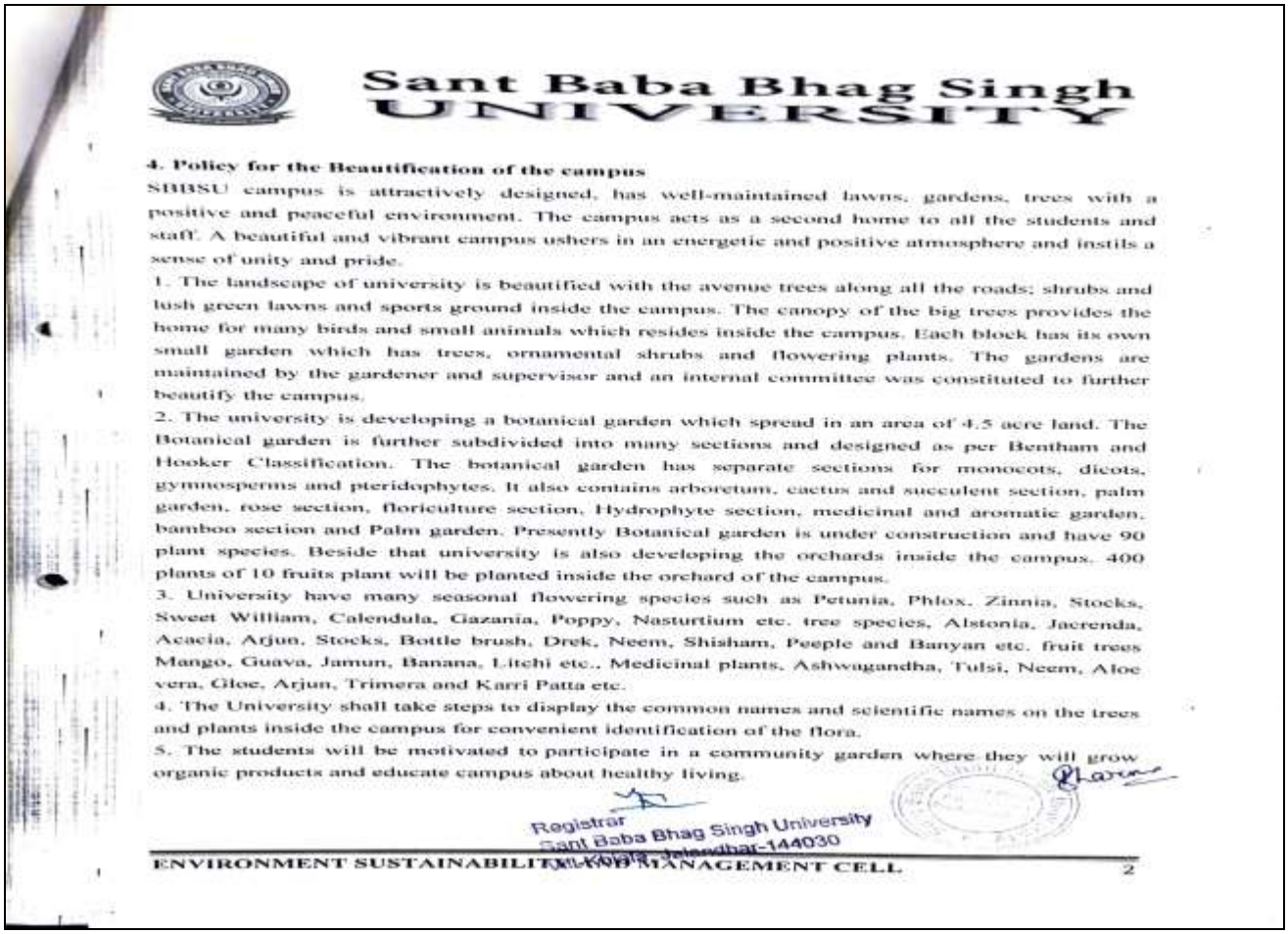
- The ESM cell is committed to addressing environmental issues in cost- effective manner while following a disciplined approach to achieve sustainability.
- It aims at educating the staff and students to contribute effectively towards the welfare of the environment.

3. KEY PRIORITY AREAS:

For the assurance of the sustainable environment goal, the key areas of focus shall be:

1. Transforming the campus into ECO-Campus by enhancing the beauty of the university campus.
2. Solid Waste management through compost program.
3. Conservation and Judicial utilization of Energy.
4. Installation of Solar Panels.
5. Rainwater harvesting Projects.
6. Provision of a safe and healthy environment for the staff and students.
7. Organizing awareness campaigns to make the students and staff environment conscious.
8. Sensitizing the communities in the vicinity regarding the adverse effects of their activities on the environment.
9. Integrating sustainable development and environmental management courses in the curriculum of the students.
10. Establishment of multidisciplinary research projects to tackle the environmental issues at local, national and global levels.
11. Incorporation of Green Audit as an indicative tool to measure the implementation of sustainable development of the university.

ENVIRONMENT SUSTAINABILITY AND MANAGEMENT CELL 1



Sant Baba Bhag Singh UNIVERSITY

4. Policy for the Beautification of the campus

SBBSU campus is attractively designed, has well-maintained lawns, gardens, trees with a positive and peaceful environment. The campus acts as a second home to all the students and staff. A beautiful and vibrant campus ushers in an energetic and positive atmosphere and instils a sense of unity and pride.

1. The landscape of university is beautified with the avenue trees along all the roads; shrubs and lush green lawns and sports ground inside the campus. The canopy of the big trees provides the home for many birds and small animals which resides inside the campus. Each block has its own small garden which has trees, ornamental shrubs and flowering plants. The gardens are maintained by the gardener and supervisor and an internal committee was constituted to further beautify the campus.
2. The university is developing a botanical garden which spread in an area of 4.5 acre land. The Botanical garden is further subdivided into many sections and designed as per Bentham and Hooker Classification. The botanical garden has separate sections for monocots, dicots, gymnosperms and pteridophytes. It also contains arboretum, cactus and succulent section, palm garden, rose section, floriculture section, Hydrophyte section, medicinal and aromatic garden, bamboo section and Palm garden. Presently Botanical garden is under construction and have 90 plant species. Beside that university is also developing the orchards inside the campus. 400 plants of 10 fruits plant will be planted inside the orchard of the campus.
3. University have many seasonal flowering species such as Petunia, Phlox, Zinnia, Stocks, Sweet William, Calendula, Gazania, Poppy, Nasturtium etc. tree species, Alstonia, Jacrenda, Acacia, Arjun, Stocks, Bottle brush, Drek, Neem, Shisham, Peeple and Banyan etc. fruit trees Mango, Guava, Jamun, Banana, Litchi etc., Medicinal plants, Ashwagandha, Tulsi, Neem, Aloe vera, Gloe, Arjun, Trimera and Karri Patta etc.
4. The University shall take steps to display the common names and scientific names on the trees and plants inside the campus for convenient identification of the flora.
5. The students will be motivated to participate in a community garden where they will grow organic products and educate campus about healthy living.

Registrar
Sant Baba Bhag Singh University
Khiala, Jalandhar-144030

ENVIRONMENT SUSTAINABILITY AND MANAGEMENT CELL 2

Sant Baba Bhag Singh UNIVERSITY

4. Policy for the Beautification of the campus

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Registrar
Sant Baba Bhag Singh University
Vill. Khiala, Jalandhar-144030

Sant Baba Bhag Singh UNIVERSITY

6. Energy Conservation Policy

To exhibit our commitment towards environmental management and sustainability, certain measures should be implemented for energy conservation on the campus. SBBSU will adopt and practise various strategies aimed at effective and optimum energy utilization whilst curtailing its expenditure.

1. Firstly, operate the electrical appliances only when needed. Switch off when not in use like PCs, fans, bulbs, projectors, printers.
2. In the classrooms and hostel rooms, CFL bulbs have been installed because its durability is more, consumes less energy and saves money. Efforts should be made to maximizing the use of natural light whenever possible.
3. The office equipment purchased for the university should be Energy STAR labelled products. Such rated devices cut down up to 70% of energy costs in comparison to the average electronic equipment.
4. Reduction in the number of office equipment and encouraging the use of facilities such as printers, computers at the central faculty labs. All equipment should be turned off at the end of working hours.
5. The use of air conditioners should be minimized.
6. The university already provides E-rickshaw services to get around the campus which is more energy-efficient than the conventional autorickshaws.
7. Energy-efficiency initiative has been taken by SBBSU by shifting to a renewable energy source via the installation of solar panels. Solar energy not only limits expenses but also reduces carbon emissions, thus providing a clean and reliable energy source. The university currently runs 100 kW of solar panels and should be upgraded in the future.
8. Water management is another factor that is responsible for effective energy management and conservation. The following steps should be considered to save water:

a. Avoiding unnecessary wastage of water.

b. Checking for any leaks or water dripping points and immediate reporting of the same to the concerned authority.

Registrar
Sant Baba Bhag Singh University
Vill. Khiala, Jalandhar-144030

Sant Baba Bhag Singh UNIVERSITY

c. The rainwater harvesting initiative will be taken by university by capturing the rainwater. The rainwater can be collected on the rooftop of all its buildings and discharge into storage tanks for using it in the watering of the gardens and lawns.
d. Start the water awareness campaign under the title "SAVE WATER, SAVE LIFE" to educate and sensitize everyone towards saving water.
9. Any suggestions or recommendations regarding the energy conservation by faculty, staff, and student should be addressed to the ESM cell, SBBSU.
10. Inclusion of energy conservation agenda in the student orientation programs.

7. Green Campus Initiative Policy

7.1 Policy for restriction of automobiles in campus

The university is committed to restrict the unnecessary movement of automobiles in the campus so that pedestrian will feel comfort inside the campus. University has developed certain guidelines to restrict the automobiles inside the campus as

1. The parking for two-wheeler and four-wheeler is provided near gate for students and staff separately and all are encouraged to use pedestrian paths inside the campus.
2. A separate parking is provided for block number 7 which is far away from main campus in the university.
3. Barricade and speed breakers were installed to check/limit the speed of vehicle and to stop the unnecessary movement of automobiles inside the campus of the university.
4. University also provides e-rickshaw to the staff and students for visiting the block 7 and agriculture farm which is far away from the main campus.
5. No vehicle will be given entry without the proper driving license and helmet (in case of two-wheeler) and seat belt (in case of four-wheeler) inside the campus.
6. All staffs and students follow the parking rules as per notice in the parking area. A separate parking will be provided for bicycle inside the campus.
7. Visitor vehicles are not permitted inside the campus without gate pass and their parking is provided outside the university gate. Gate pass will be provided to the needful visitor at the university gate.

Registrar Sant Baba Bhag Singh University

ENVIRONMENT SUSTAINABILITY AND MANAGEMENT CELL 5

Sant Baba Bhag Singh UNIVERSITY

8. Vehicles will be provided to disable person or old age visitors from the main gate on request.
9. If students want to use their own vehicle for transportation from home to university they should deposit declaration form duly signed by their parents and obtain the vehicle pass from the transportation officer/ registrar office.
10. Inside the campus the speed of the vehicle is restricted to 30 Km/hr. On violation the speed limit the vehicle will be seized by the transportation office.
11. No students are allowed to go outside the campus during working hours of the university without producing the valid gate pass duly signed by their class incharges, CoD and Deans of the institute.
12. The movement of staff and students are under the surveillance of CC cameras, covering the main gate.
13. A committee is constituted to monitor the guidelines for automobiles inside the campus. Complaints and violation of the above guidelines will be handled by the committee. After the meeting they will decide the serious and disciplinary action to be be taken against the offenders.

7.2 Policy for use of Bicycles/ Battery Power vehicle and pedestrian pathway

The university is committed to reduce the air pollution inside the campus and to fight back the increasing air pollution following initiatives has been taken.

1 Many students and staff living nearby villages prefer to use bicycle as a mode of transport for attending university.
2 University provides the separate parking for bicycle in each block of the university. It will also provide the bicycle to staff and students from main gate on the basis of fare per hour inside the campus for transportation as a green initiative.
3 Use of bicycle is environment friendly and help in the reduction of air pollution and also increases the health benefit.
4 University developed the pathways inside the campus for pedestrians. These pathways serve as a shortcut to different blocks and discourage to use automobiles inside the campus.

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5 All pathways are lined with trees inside the university campus so that the students and staff experience comfort in walking through pedestrian pathways

6 The university provides e-rickshaw to the staff, students and visitors as a shuttle to transport them inside the university blocks

7 The entry of unnecessary vehicle is restricted so that student, staff and visitor can walk with comfort inside the campus.

7.3 Policy to ban the use of plastic

University is committed to ban the single use plastic such as plastic bottles, polythene bags, spoon, and straws. However, university is trying to create awareness among the students, staff and vendors to reduce the plastic waste and completely stop the use of single use plastic. The policy for banning the single use plastic inside the campus as follows

1 A committee is constituted inside the campus to create the awareness among student and staff about the use of plastic.

2 The university is trying to tackle the plastic waste problems with UNEP programme of 3Rs i.e. Reuse, Reduce and Recycle.

3 Two types of bins are kept inside the campus. Green colour bins are kept for organic waste and blue colour bins are kept for single use plastic, wrappers and other plastic waste

4 Organic waste can be converted into compost in vermicomposting unit. While single use plastic waste is collected and sold in the nearby recycle units

5 Student, staff and visitors are encouraged to carry cloth bag instead of polythene and their own bottle for drinking water.

6 Awareness programmes are conducted to create awareness about the harmful impact of plastic and its management through 3Rs i.e., Reuse, Reduce and Recycle.

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8. FUTURE GOALS:

1. Survey of Green Flora Cover in the campus.
2. To identify gaps and suggest recommendations to improve the Green Campus status of the institute.
3. Engagement of local farmers on campus.
4. To execute good, protracted waste management strategies to extenuate gross waste generation and to increase recycling and reuse of waste products.
5. Enhance the alertness for environmental guidelines and duties among students.
6. Making of "Eco club/Nature club" with the group of students for enhancing the scenic beauty of the campus.
7. These clubs shall regularly assess the environmental condition of the campus.
8. Propose a system for converting biodegradable waste especially mess waste into vermicompost/composting which is a useful resource. The vermicompost produced is used in nurseries/gardens and agriculture fields of the University.
9. Investment in shifting towards the renewable energy sources in a systematic and affordable manner.

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