



MAULANA MAZHARUL HAQUE TEACHERS' TRAINING COLLEGE

Recognized by ERC, NCTE Bhubaneswar

*Affiliated to L.N. Mithila University, Darbhanga & B.S.E.B., Patna
(NAAC Accredited with '**B+**' Grade)*

Green Audit Report 2022-2023



Prepared by
CONSULTIA INTERNATIONAL



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GREEN AUDIT REPORT

(2022-23)

MATHURAPUR, SAMASTIPUR (BIHAR), PIN-848101



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Disclaimer

This report for Maulana Mazharul Haque Teachers' Training College has been prepared by the Consultia International Audit Team using input data that was provided by college representatives and the expert team's best judgment.


Details in this report have been put together in good faith using the information that has been acquired, even though every reasonable precaution has been taken in its compilation.

It is also informed that the conclusions are based on the best estimates available, and that the Audit Team does not make any representations, warranties, or undertakings—express or implied—or take responsibility for any direct or indirect losses resulting from using the data, statements, or forecasts in this report.

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MD
Consultia International


Dr. Adil Sultan



Audit Certificate

This is to certify that the **Green Audit Report** of **Maulana Mazharul Haque Teachers' Training College** is based on the original data collected during the period of study. Further, it is also certified that the baseline data submitted to us, was collected and prepared by the internal audit team of Maulana Mazharul Haque Teachers' Training College. The accuracy and reliability of the base line data has been individually approved by the Green Audit Team. The information used in the study is unique and has never been presented or published before.

Date: 12-06-2023

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Executive Summary

Green auditing is an important step to identify and define whether the institutions practices are sustainable and ecological. Earlier, we were upright and efficient users of natural resources. But over the period of time, excessive usage of resources like water, electricity, petrol, etc. have become usual for everyone especially, in urban and semi-urban areas. It is actually the right time to check if we are using more than required resources? Whether we are using resources rationally? Green audit regulates all such practices and provides an efficient way to use natural resources. In the time of climate change and resource collapse it is necessary to re-check the processes and convert it in to green and sustainable, Green Audit provides a method for increasing the overall awareness among the people working in institution towards the eco-friendly environment. This is the first attempt by the college to conduct green audit of this College campus for fulfilment of NAAC criteria. This audit was mainly to understand the greening indicators like consumption of energy in terms of electricity and fossil fuel, water usage, vegetation, waste management practices and carbon foot print of the campus. A checklist was shared to know about the existing resources of the campus and resource consumption pattern of the students and staffs in the College.



Concept and Background

The green audit, which is sometimes referred to as an environmental audit or a sustainability audit is the systematic evaluation of environmental performance, policies, and practices of any institutions or organizations. According to ICC the green audit defined as “A management tool comprising a systematic, documented, periodic and objective evaluation of how well environmental organization, management and equipment are performing with the aim of safeguarding the environment and natural resources in its operations/projects.” A green audit’s main goals are to evaluate the institution’s environmental effect and pinpoint areas that need to be improved in terms of ecological responsibility and sustainability. It also tries to examine the environmental practices within and outside the College campus, which impact directly or indirectly on the atmosphere. Through this method, the institution may better evaluate their environmental impact and take action to reduce any unfavorable consequences.

Apart from the social responsibility of the institution, the National Assessment and Accreditation Council (NAAC) has also made it mandatory from the academic year 2019–20 onwards that all Higher Educational Institutions should submit an annual Green, Environment and Energy Audit Report. Green Audit is assigned to the Criteria 7 of NAAC, National Assessment and Accreditation Council which is a self-governing organization of India that declares the institutions as Grade A, Grade B or Grade C according to the scores assigned at the time of accreditation. This audit concentrates on the institution's operations related to the Green Campus, Waste Management, Water Management, Air Pollution and Energy Management, among other areas.



Introduction

Educational institutions are becoming more environmentally conscious these days, and as a result, fresh ideas are being presented to make them eco-friendly and sustainable. Many educational institutions use a variety of approaches to address environmental issues in order to protect the environment within the campus. These approaches include encouraging energy conservation, recycling garbage, reducing water use, collecting water, and much more. The institution's operations may have a negative influence on the environment. The term "green audit" refers to the methodical identification, measurement, documentation, reporting, and analysis of environmental diversity components. It is an official assessment of the environmental impact of an institution. The purpose of the Green Audit is to assess the real-world situation on the campus of the organization. A college may utilize a green audit to find out where and how they are consuming the most water, energy, or other resources. From there, the institution can decide how to make adjustments and save money. In order to enhance waste reduction plans or for recycling projects, it may also be used to ascertain the kind and volume of garbage. The implementation of mitigation measures and green audits benefits all institutions, students, and the environment. Additionally, it may raise knowledge of health issues and advance environmental awareness as well as values and ideas. It gives employees and students a greater awareness of the institution's green effect. Green auditing maintains cost savings by utilizing less resources. It provides a chance for educators and learners to grow in taking responsibility for their own personal and societal responsibilities. Primary data collection, a site visit with the college team, and an evaluation of the policies, programs, papers, and records are all part of the audit process.



Overview of college

Maulana Mazharul Haque Teachers' Training College is a co-educational college located in Samastipur, Bihar, India. It was founded in 2010 by Maulana Mazharul Haque Welfare Society. The College is affiliated with Lalit Narayan Mithila University, Darbhanga, and is recognized by NCTE, Bhubaneswar. The College has made significant contributions in the field of higher education by providing quality education and research output. The College with all its glorious academic achievement and ceaseless scholastic pursuits had already created a distinct position for itself in India and beyond to develop a socially competent, culturally accepted, nationally recognized, and educationally fitted with demands of global trends in the field of Teachers' Education. To foster total development of personality of the student's college provides integrated courses in teacher education, marked and defined by value-education, global outlook and interdisciplinary approach.

It is one of the premier College in Bihar that offers B.Ed. and D.El.Ed. and having clean and green campus with imposing building. Surrounded by natural greenery, the 4058 sq meter campus offers an intellectually stimulating atmosphere with two large blocks having well-ventilated three storey building. The college has three well-maintained garden area in the campus.





Vision

The Institution becomes a knowledge hub where the next generation teachers would be equipped with a multidisciplinary perspective of knowledge; grounded with values rooted in Indian culture and history; empowered with twenty-first-century skills; and committed to professional excellence to produce manpower for the country as well as for the global world.

- To Provide experience-based learning for multifaceted development
- To contribute to National development through teacher education
- To integrate pedagogy and technology for learning
- To promote self-learning and group learning
- To develop global competencies and life skills among students
- To acquire multilingual skills and demonstrate effective communication
- To relate knowledge with day-to-day experience
- To adopt technology to address the explosion of knowledge
- To imbibe constitutional and human values based on Indian culture
- To follow inclusive practices in all activities organized by the institution
- To identify the uniqueness of every learner and nurture him/her

Mission

Geo Location

Geo Coordinates from Google Map
25.867994913449984, 85.78825458285841



Overview of the college

S. No.	Particulars	Fact
1	Name of the College And code given by the NCTE	Maulana Mazharul Haque Teachers' Training College ERCAPP470
2	College Address	Mathurapur, Samastipur (Bihar), Pin- 848101
3	Whether the College is accredited by the NAAC	Yes If Yes, Grade- B+
4	Year of establishment	2010
5	Current programs offered by the institution	B.Ed.
6	Whether there are other Courses offered in the same building	Yes, D.El.Ed.

General Facilities of the college

S. No.	Particular	Total	S. No.	Particular	Total
i	Class Room	11	ii	Multi-purpose Hall	01
iii	Library cum Reading Area	01	iv	ICT Room	01
v	Teaching Learning Resource Centre for Arts & Work Experience	01	vi	Health & Physical Education Resource Centre	01
vii	Principal Office	01	viii	Administrative Office	01
ix	Girls Common Room	01	x	Boys Common Room	01
xi	Conference Room	01	xii	Canteen	01
xiii	Toilet (Male)	16	xiv	Toilet (Female)	06
xv	Urinal (Male)	03	xvi	Urinal (Female)	02
xvii	Pantry	01	xviii	HoD Room	01
xix	Psychology Lab	01	xx	No. of Lab	04
xxi	Store Room	02	xxii	Examination Cell	01

Objectives

The main objectives of this audit are as follows:

- To evaluate the environmental viability of the college.
- To impart the sustainable practices in the college.
- To encourage the judicious use of natural resources in the college.
- To develop accountability for the environmental safety among the students in the college campus and outside.
- To inculcate environmental ethic and value systems in young minds.



Green Audit Analysis

Questionnaire Based Answers

Particular 1: General Information

1.1: Was any Green Audit conducted earlier?

Yes, the study of the environmental aspect of the college was conducted in 2020-21.

1.2: What is total strength of the college

Population	Male	Female	Total
Students	153	247	400
Teaching Staff	14	12	26
Non-teaching Staff	15	02	17
Total	182	261	443

1.3: What is total number of working days of your college in a year?

There are two hundred (200) working days in the college.

1.4: Where is the college located?

The campus is located at Mathurapur, Samastipur Bihar – 848102

1.5: Which of the following area available in your college?

• Garden area	✓ YES
• Play ground	✓ YES
• Kitchen	✓ YES
• Toilets	✓ YES
• Garbage or Waste Store Yard	✓ YES
• Laboratory	✓ YES
• Canteen	✓ YES



Particular 2: Waste Management

2.1: Does your college generate any waste? If so, what are they?

Yes, Solid Waste: Paper, Waste from canteen, E-Waste etc.

2.2: Approximate amount of waste generated.

1. Solid Waste	20 Kg/day
2. Biodegradable Waste	12 Kg/day
3. Non-biodegradable waste	05 Kg/day
4. E-Waste	0.3 Kg/day

2.3: How much solid waste recycled every day?

05 Kg

2.4: How much solid waste disposed off every day?

15 Kg

2.5: How is the waste managed in the campus?

- Paper waste management is done by Vermi compost and later used for gardening purpose.
- The biodegradable waste generation from tree and plants as well as food are also used for making manure through Vermi composting.
- Non-biodegradable waste is mainly collected by the municipal corporation of Samastipur.
- E-waste mainly collected and got recycled through authorized vendor.

2.6: How is the waste paper used in your college?

- Paper waste management is done by Vermi compost and later used for gardening purpose.

2.7: How is the waste managed in the campus?

- Paper waste management is done by Vermi compost and later used for gardening purpose.

2.8: Method adopted for spread of “No Plastic use” message in the campus.

- “No to Plastic” in board in campus.
- Seminars and lectures.

Particular 3: Green Campus

3.1 Total green cover area in the campus

83835.78 sq. ft

3.2: Is there a garden in your institute?

Yes, North Garden and Litchi Plants Garden.

3.3: Do students spend time in the garden?

Yes

3.4: Total number of Trees, Plants and Shrubs in Campus?

932

3.5: Is the College campus having any Horticulture Department?

Yes

3.6: How many Tree Plantation Drives organized by campus per annum?

Yes, 2 times

3.7: Is there any Plant Distribution Program for Students and Community?

Yes, Trees distributed to nearby schools

3.8: Is there any Plantation drive?

Yes



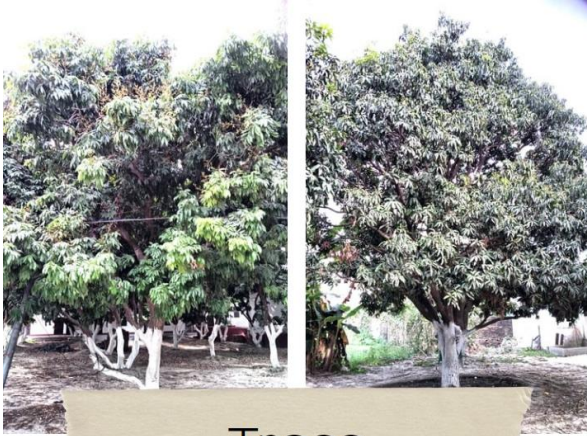


MMHTTC Campus: List of Trees			
S. No.	Common Name	Scientific Name	QTY
1	Mango Tree	Mangifera indica	10
2	Lichi	Litchi chinensis	24
3	Amra	Hog plum	01
4	Banana Tree	Musa Acuminata	20
5	Akhroat	Walnut	01
6	Lemon Tree	Citrus limon	02
7	Shatalu	Peach	03
8	Papaya Tree	Carica papaya	02
9	Guava Tree	Psidium guajava	03
10	Bael Tree	Aegle marmelos	02
11	Neem Tree	Azadirachta indica	04
12	Shariffa	Custard Apple	03
13	Rose Plant	Rosa	50
14	Marigold	Tagetes	100
15	Kanel	Narium oleander	01
16	Palm	Aethiopum	10
17	Bhang	Hemp	20
18	Udhul Tree	Hibiscus rosa-sinensis L	01
19	Maize	Zea mays	50
20	Estar	Aster	20
21	Christmas Tree	Araucaria columnaris	15
22	Vinka	Vinca	20
23	Palmyra Palm	Borassus aethiopum	9
24	Khajoor Palm	Phoenix dactylifera	12
25	Entihorium	Antihorium	20
26	Mayur Tree	Platycladus orientalis	15
27	Kanershan	Denthus	20
28	Daliya	Daaliya	20

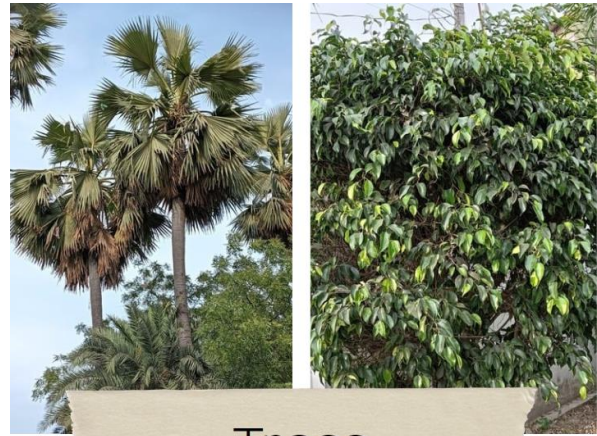


MMHTTC Campus: List of Plants & Shrubs

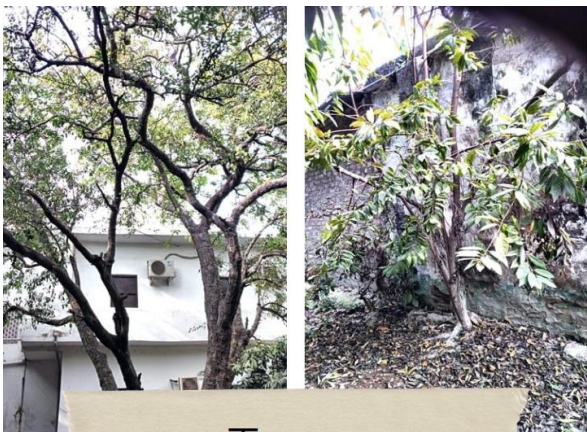
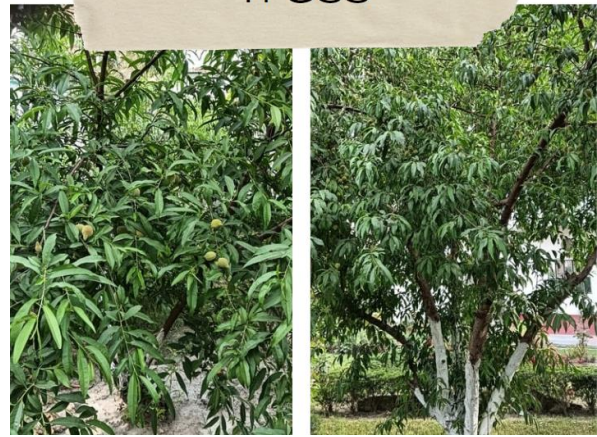
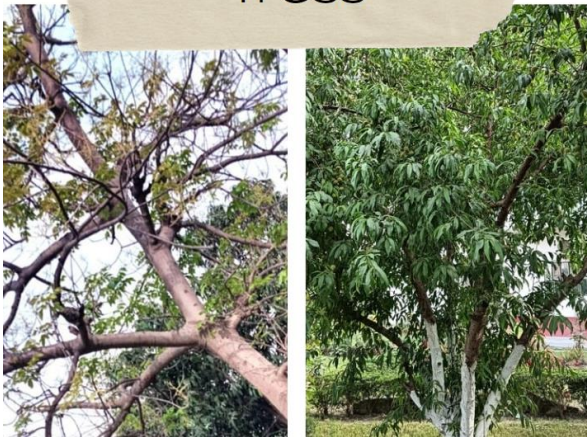
S. No.	Common Name	Scientific Name	QTY
29	Neela ful	Pitoniya	20
30	Bela	Bela	20
31	Rose Plant	Rosa	50
32	Raat Rani	Cestrum nocturnum	5
33	Pam Pam daliya	Pam pam daliya	20
34	Gajeniya	Gajeniya	15
35	Salvia	Salvia	15
36	Aloe Vera	Aloe barbadensis miller	20
37	Antiharam	Antiharam	15
38	Klandula	Calandula	20
39	Farn	Farn	15
40	Kaari patta	Curry leaves	20
41	Croton Plant	Codiaeum variegatum	20
42	Arica	Arica	15
43	Son of india	Son of india	15
44	Money plant	Money Plant	20
45	Rubber Plant	Rubber Plant	15
46	Bottle Palm	Hyophorbe lagenicaulis	19
47	Foxtel Palm	Wodyetia bifurcata	10
48	Anglonima	Anglonima	15
49	China palm	China plam	10
50	Asthal kamal	Land lotus	15
51	Jinia	Jinia	10
52	Kuchia	Cuchia	15
53	Kosmos	Cosmos	15
54	Gladia	Gladia	15
55.	Gum Farnia	Gum Farnia	15
56.	Spider Plant	Spider Plant	15



Tress



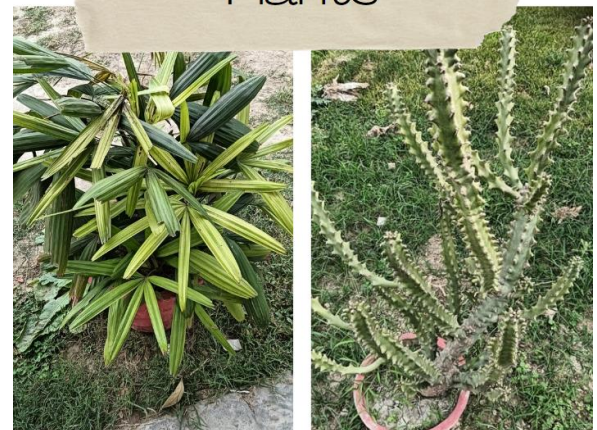
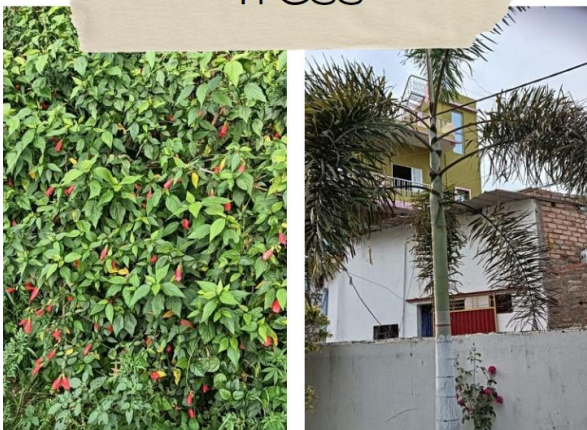
Tress



Tress



Plants





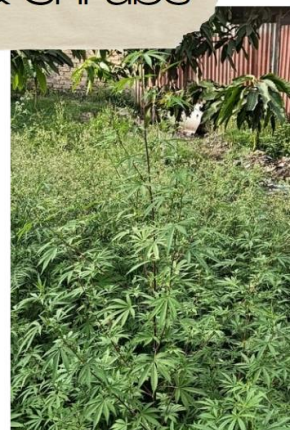
Plants

Plants



Plants

Plants & Shrubs



Particular 4: Water and Waste Water management

4.1: Total water storage capacity in the campus

10000 liters

4.2: Do the campus have water harvesting facility?

Yes

4.3: Water usage in the campus per day.

<input type="checkbox"/> Drinking	800 liters
<input type="checkbox"/> Gardening	3500 liters
<input type="checkbox"/> Toilet and other	600 liters

4.4: How does the college store water?

Overhead Tanks

4.5: How the college manage water resource? (water saving technique)

- ✓ Avoid overflow of water from water tank.
- ✓ Close the taps after usage.
- ✓ Water conservation awareness to the students through various means: seminars, lectures, poster-making etc.
- ✓ The college RO water purifier for drinking purposes, the waste water from RO is use for gardening purposes.
- ✓ Ensures regular maintenance of water tanks and water tanks and water coolers are checked every 3 months, and RO systems are regularly changed.

4.6: Is the campus have rain water harvesting facility?

Yes



Particular 5: Carbon Footprint –Emission & Absorption

5.1: Total emission of CO₂ from electricity

Input value (in KWh/Year) X 0.85 (Emission Factor) = Output value in (Kg of CO₂)

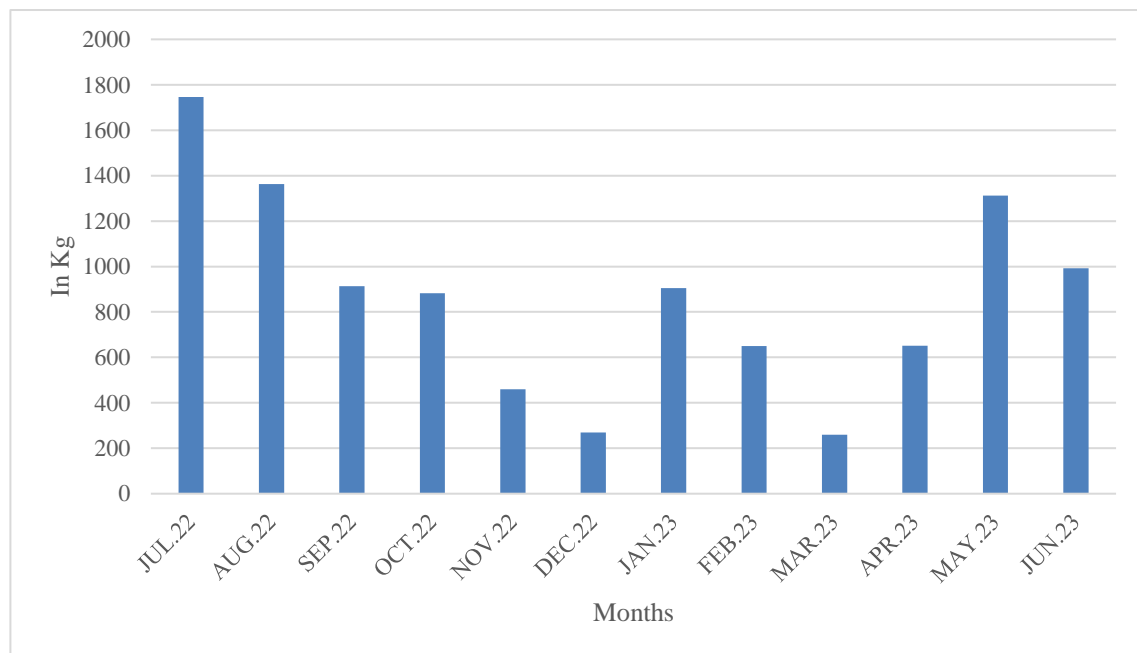
12242 KWh X 0.85 = 10405.7 Kg

10.4 tons

Monthly CO₂ Emission from Electricity

Months	CO ₂ Emission
July 2022	1746.75
August 2022	1362.55
September 2022	912.9
October 2022	882.3
November 2022	459.85
December 2022	269.45
January 2023	905.25
February 2023	650.25
March 2023	260.1
April 2023	651.95
May 2023	1311.55
June 2023	992.8

Monthly CO₂ Emission from Electricity



5.2: Total emission of CO₂ from petrol

Input Value (In Litres/Year) X 2.296 (Emission Factor) = Output value in (Kg of CO₂)

$$2267.8 \times 2.296 = 5206.87 \text{ Kg}$$

5.2 tons

5.3: Total emission of CO₂ from diesel

Input Value (In Litres/Year) X 2.653 (Emission Factor) = Output value in (Kg of CO₂)

$$532.3 \times 2.653 = 1412.2 \text{ Kg}$$

1.41 tons

5.4: Total emission of CO₂ from LPG

N.A.

5.5: Total Carbon (CO₂) emission in the campus

Add emission from electricity + petrol + diesel + LPG = Output value in (tons of CO₂)

$$10.4 + 5.2 + 1.41 + 0 = \mathbf{17.01 \text{ tons}}$$

5.6: Does the college have solar panel installed?

No, college doesn't have solar panel installed but the college has applied for the approval of solar panel



Energy Use and Conservation:

Energy source utilized by the campus is electricity only. Total energy consumption is determined as 12242 KWH/year. The entire campus including common facility centers are equipped with LED lamps and LED tube lights, except at few locations. Computers are set to automatic power saving mode when not in use. Solar water heaters are installed in hostel buildings as to promote renewable energy. Also, campus administration runs switch-off drill on regular basis

List of AC with Location and Approximately Working Hour

S. No.	Location of AC	Number of AC	Working Hours
1.	Principal's Office	01	9:00 am to 4:30 pm
2.	HoD Office	01	9:00 am to 4:30 pm
3.	IQAC Office	01	9:00 am to 4:30 pm
4.	Faculty Chamber	01	9:00 am to 4:30 pm
5.	Meeting Hall	02	9:00 am to 4:30 pm
6.	Seminar Hall	02	9:00 am to 4:30 pm
7.	Medical Room	02	As per use



Inspection of JEE, NBPDC, Samastipur

Green Initiatives

❖ **Solar Energy Installation**

Maulana Mazharul Haque Teachers' Training College has demonstrated a forward-thinking approach by installing solar panels across its campus. This sustainable energy source not only reduces the institution's carbon footprint but also serves as a model for renewable energy adoption in educational settings. The institution has granted permission of Solar Energy with 2200 KVA Rooftop Solar PV System as an alternate source of energy in college.

❖ **Tree Plantation Drive**

Emphasizing the importance of green cover, the college has initiated tree plantation drives, adding to the campus's biodiversity. These efforts not only enhance the aesthetic appeal but also contribute to environmental conservation and promote a healthier ecosystem.

❖ **Waste Management and Recycling Programs**

With a commitment to responsible waste management, the college has established comprehensive recycling programs. By promoting waste segregation and recycling initiatives, MMHTTC ensures minimal environmental impact while fostering a culture of sustainability among students and staff.

❖ **Water Conservation Measures**

Recognizing the value of water conservation, the college has implemented various measures such as rainwater harvesting systems, water-saving fixtures, and awareness campaigns. These initiatives aim to optimize water usage, reduce wastage, and promote responsible water stewardship within the campus community.

❖ **Green Building Practices:**

MMHTTC prioritizes sustainable infrastructure development through green building practices. By incorporating energy-efficient designs, sustainable construction materials, and eco-friendly landscaping, the college strives to minimize its environmental footprint while creating conducive learning environments.

❖ **Sustainable Transportation:**

Encouraging eco-friendly commuting options, the college promotes sustainable transportation initiatives. With dedicated bike lanes, carpooling incentives, and



public transportation partnerships, MMHTTC fosters a culture of responsible commuting among students, faculty, and staff.

❖ **Environmental Education and Awareness Programs:**

To instill environmental consciousness, the college integrates environmental education and awareness programs into its curriculum. Through workshops, seminars, and awareness campaigns, MMHTTC educates the campus community about sustainability, climate change, and ecological conservation.

❖ **Biodiversity and Green Spaces:**

Emphasizing biodiversity conservation, the college focuses on developing green spaces and preserving native flora and fauna. By maintaining gardens, planting native trees, and enhancing green areas, MMHTTC creates a harmonious environment that supports biodiversity and ecological balance.

❖ **Green Campus Development:**

MMHTTC envisions a sustainable future with its comprehensive green campus development initiatives. By integrating various sustainability measures, the college aims to transform its campus into a model of environmental stewardship and innovation.

❖ **Energy Efficiency Upgrades:**

Committed to energy efficiency, the college undertakes regular upgrades and maintenance of its infrastructure. By adopting energy-efficient technologies and practices, MMHTTC reduces energy consumption, lowers operating costs, and minimizes its carbon footprint.

❖ **Green Audit and Reporting:**

In alignment with its commitment to transparency and accountability, the college conducts regular green audits. These audits assess the institution's environmental performance, identify areas for improvement, and guide future sustainability initiatives. By publishing comprehensive green audit reports, MMHTTC reaffirms its dedication to environmental responsibility and continuous improvement.

By implementing these green initiatives, Maulana Mazharul Haque Teachers' Training College can strengthen its commitment to environmental sustainability, foster a culture of eco-consciousness among its stakeholders, and contribute to a greener and more sustainable future for all.



Recommendations

Based on the information provided in the Green Audit Report for Maulana Mazharul Haque Teachers' Training College, here are some recommendations to further enhance its environmental sustainability efforts:

- 1. Expand Renewable Energy Usage:** Consider investing in renewable energy sources like solar panels or wind turbines to further reduce the college's carbon footprint from electricity consumption.
- 2. Enhance Waste Management:**
 - Implement a comprehensive recycling program for plastics, metals, and other recyclable materials.
 - Explore partnerships with local organizations for efficient e-waste management and recycling.
- 3. Water Conservation Initiatives:**
 - Install water-saving fixtures and technologies across the campus.
 - Introduce awareness campaigns to educate students and staff about responsible water usage.
 - Consider expanding rainwater harvesting systems to capture and utilize more rainwater.
- 4. Carbon Offset Programs:** Develop initiatives to offset the remaining carbon emissions, such as tree plantation drives, which can help absorb CO₂ and contribute to campus aesthetics.
- 5. Sustainable Transportation:** Encourage the use of sustainable transportation methods among students and staff, such as promoting carpooling, cycling, or using electric vehicles within the campus.
- 6. Green Infrastructure Development:**
 - Continue to maintain and expand green spaces on campus, enhancing biodiversity and providing natural habitats.
 - Introduce more native plants that require less water and maintenance.
- 7. Environmental Education and Training:**
 - Incorporate sustainability and environmental awareness modules into the curriculum.



- Organize workshops, seminars, and guest lectures focusing on green practices, climate change, and ecological conservation.
- 8. Regular Monitoring and Reporting:** Establish a dedicated team or committee responsible for regularly monitoring the college's environmental performance, setting measurable targets, and reporting progress.
 - 9. Engage Stakeholders:** Foster collaboration with alumni, local communities, and industry partners to share best practices, resources, and innovative solutions for sustainable development.
 - 10. Continuous Improvement:** Conduct periodic reviews of the Green Audit recommendations, seeking feedback from students, faculty, and staff to identify areas for continuous improvement and innovation.

Implementing these recommendations will not only strengthen Maulana Mazharul Haque Teachers' Training College's commitment to environmental sustainability but also inspire and educate the campus community about the importance of adopting green practices for a sustainable future.



Conclusion

The Green Audit Report provides a comprehensive overview of Maulana Mazharul Haque Teachers' Training College's current environmental practices, policies, and initiatives, highlighting both achievements and areas for improvement.

MMHTTC has demonstrated a commendable commitment to promoting sustainability and environmental responsibility within its campus and broader community. From waste management and water conservation to renewable energy usage and carbon offset initiatives, the college has taken significant steps to reduce its ecological footprint and foster a culture of environmental stewardship among students, faculty, and staff.

However, as with any institution striving for sustainability, there remain areas that warrant further attention and enhancement. Recommendations outlined in the report, ranging from expanding renewable energy usage and enhancing waste management practices to promoting sustainable transportation and fostering environmental education, provide a roadmap for MMHTTC to advance its green initiatives further.

Moving forward, it is crucial for MMHTTC to integrate these recommendations into its strategic planning and operational framework, fostering collaboration, innovation, and continuous improvement across all aspects of environmental sustainability. By doing so, the college not only aligns with national and international standards but also sets a benchmark for educational institutions aspiring to create a more sustainable and resilient future.

In conclusion, the Green Audit Report underscores Maulana Mazharul Haque Teachers' Training College's commitment to environmental sustainability while highlighting opportunities to further enhance its green initiatives. By embracing these recommendations and fostering a culture of sustainability, the college is well-positioned to lead by example, inspiring positive change within its community and beyond, ensuring a brighter and more sustainable future for all.

References

- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006).
- Electrical Act 2003 (Amended 2001) / Rules 1956 (Amended 2006).
- Energy Conservation Act 2010.
- Energy Conservation Act 2010.
- E-waste management rules 2016.
- E-waste management rules 2016.
- EPA:1989 (Amended in 2005).
- The Air (Prevention & Control of Pollution) Rules – 1982.
- The Air [Prevention & Control of Pollution] Act – 1981 (Amended 1987).
- The Air [Prevention & Control of Pollution] Act – 1981 (Amended 1987) The Air (Prevention & Control of Pollution) Rules – 1982.
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle.
- The Central Motor Vehicle Act: 1988 (Amended 2011) and The Central Motor Vehicle.
- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010).
- The Environment [Protection] Act – 1986 (Amended 1991) & Rules-1986 (Amended 2010).
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981).
- The Gas Cylinders Rules – 2016 (Replaces the Gas Cylinder Rules – 1981).
- The Petroleum Act: 1934 – The Petroleum Rules: 2002.
- The Petroleum Act: 1934 – The Petroleum Rules: 2002.
- The Water [Prevention & Control of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975.
- The Water [Prevention & Control of Pollution] Act – 1974 (Amended 1988) & the Water (Prevention & Control of Pollution) Rules – 1975.

Annexure

Photographs of the campus



Well-ventilated building structure



Green Campus



Well, maintained Clean Campus



Lush Green Campus



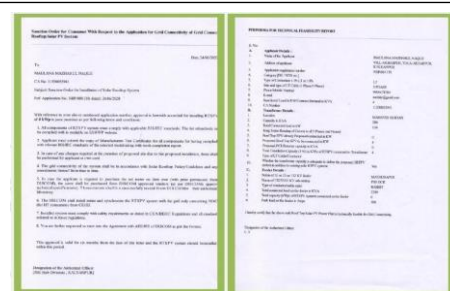
Solid waste management



Waste Collection



E-Waste



Solar Panel Approval Letter



MAULANA MAZHARUL HAQUE TEACHERS' TRAINING COLLEGE

Academic Audit Report- 2022-23



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