



DON BOSCO COLLEGE, TURA

INTERNAL GREEN AUDIT 2020 - 2021

INTRODUCTION

Green Campus is a place where environmentally responsible practice and education go hand in hand. Green Campus serve as a laboratory of self scrutiny, experimentation and application where operational functions, academic programs and people are interlinked providing educational and practical value to the Institution, the region and the world as a whole. Don Bosco College, Tura keeps practicing and promoting a self sustainable green campus with a view to preserve and enhance the Institution in the future to come and always maintains beautiful seasonal flowers, shade trees, fruit trees and medicinal plants as well as endangered plants all throughout the year. The Institution adopted simple cost effective steps to reduce energy and water use and minimize the campus waste and established low cost environmentally friendly alternatives available. The College campus itself can be described as a self sustainable one in terms of environmental, ecological and economic point of view.



Photo1: Don Bosco College Building with lush green trees and seasonal flowers

The positive impact of having a green campus is its easy access to green outdoor environment. The Institution comprises of one single composite building in the shape of the letter ‘E’ in tune with the college motto “Pursuit of Excellence”. Administrative building, Central facility like library, Arts, Science and Commerce Departments are allotted in the same building and designated as Block A, B, C and D.

Serial No.	Name of the Building	Area in square feet
1	Administrative Building	2,950 square feet
2	Central Facilities (Library)	4550 square feet
3	Arts Building	6380 square feet
4	Science Building	17000 square feet
5	Commerce Building	4570 square feet

OBJECTIVES OF A GREEN CAMPUS

The main objective of maintaining a green campus in the college is because of the following reasons:-

- Create a more sustainable campus environment for staff, faculty as well as students.
- Improve environmental health within the college as well as on the student community.
- Result in improve air quality, cool local air temperature, filter and retain storm water and contribute to more healthier and more beautiful campus.
- Set a model example for the student community, faculty and the staff members as well as for the visitors to be environmentally responsible citizen.
- Provide essential habitat and food source for wildlife in a landscape increasingly fragmented by urban development.
- Help sweep away wasteful inefficiencies and ushering in positive changes which could address the daily practical aspects of campus life.
- Offers the Institution the opportunity to take the lead in re-thinking its environmental culture and developing new paradigms for solving problems that are local, national and global.

GREEN AUDIT

WATER AUDIT

Don Bosco College, Tura being a self sustainable and strategically planned campus has its own water resource which is supplied to the entire establishment. Groundwater is the primary water source of the Institution so the well and pump which are the main equipments used were maintained periodically. The Institution has proper water storage facility and never experiences any water scarcity problem even during the dry periods. Maximum water is utilised in departmental laboratories, washrooms, toilets, gardens and canteen. Minimum water wastage can be observed in the campus as even in the gardens proper timings are maintained for watering the plants. Leakage of water pipes is of rare occurrence in the campus. The management always takes proper steps to maintain the water pipelines. There is always clean water available in the college for drinking purposes both for the staff as well as for the student community. Proper utilization of water is prevalent in the campus as most of the staff as well as student community always carry a water bottle specially for drinking purposes. The college has planned to set up a simple cost effective and traditional water harvesting facility in the campus especially to manage the excessive storm water during rainy seasons.

WASTE DISPOSAL AUDIT

The Institution maintains proper rules and regulations for proper waste disposal in the campus. Each classroom has one dustbin for solid waste disposal to encourage proper disposal of any waste materials like paper. Throwing of waste indiscriminately in the campus is highly discouraged by the management and a reminder is given to the student community in the form of an announcement regularly during the assembly sessions. All the solid waste is collected in one place and is transferred by the local Municipal Department for recycling. The liquid waste is collected in one septic tank constructed by the Institution especially for this purpose. The college does not possess any recycling facility in the campus but excess paper waste is sold off in bulk to the local recycling centre. All the e-waste generated in the college is disposed off in a proper manner as the Institution has given the responsibility to Mr. Manjoor Alam, a scrap dealer based in Pan Bazaar, Gawahati, Assam who collect all the e-waste from the campus.

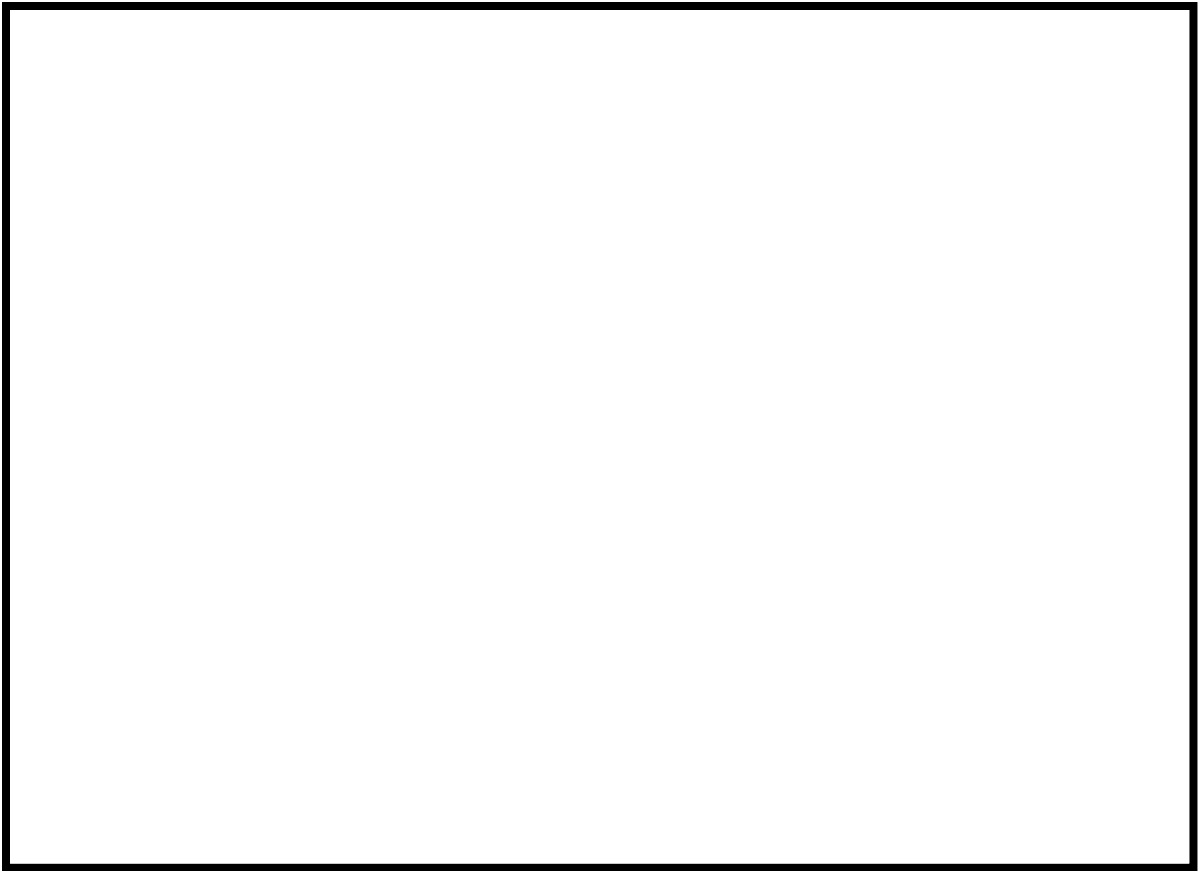


Photo 2: Some of the e-waste collected from Don Bosco College , Tura.

ENVIRONMENTAL AUDIT

To make the college more eco-friendly and to sensitise the students about environmental issues and its conservation the Institution organises World Environment Day and World Earth Day programmes to make the students aware of global issues like climate change. Proper signboards giving awareness about plastic free and clean and green campus are put up in the college campus to instil a sense of responsibility and environmental consciousness among the student community, faculty and all the staff members of the Institution. Eco-friendly and indigenous materials like bamboo are used as a dustbin in the outdoor campus area to encourage community based sustainable campus. The college campus always remains lush green at any given point of time. The Institution tries its best to curb any noise pollution and take proper measures to make the campus as serene as possible and till date the Institution have never received any complaint from the immediate neighbourhood about noise pollution.



Photo 3: Endemic and endangered Citrus indica garden provides an overall greenery cover

HEALTH AUDIT

The Institution possesses a separate common room and toilets for Boys and Girls student in the building which the students can access at any point of time during the college timing. Adequate restrooms are also made available for the faculty and one common room which the visitors to college can also use whenever the situation arises. Proper signboard for awareness of wearing masks in the college campus is put up in every corner of the building by the management. Some departments keep a First Aid Box to deal with small accidents. Proper instruction is given to the students before the practical classes related to handling of chemicals as well as glass apparatus. There is also a washbasin in each practical room for the students as well as for the staff to use when in need. Fire safety equipments are installed in the building as a preventive measure for safety of the staff and the student community. A gymnasium was also set up in the college premises for those who are health conscious. One of the main objectives of setting up a gymnasium

in college building itself is to empower the students to improve their physical and mental well being.



Photo 4: Fr. Anthony Buccieri Memorial Gymnasium in the college building.

ENERGY AUDIT

The Institution adopts proper measures to save energy. The Institution ensure that all the electronic gadgets and electrical equipments such as computers and laboratory apparatus that consume energy are always switched off when they are not in use. Proper monitoring of the students and staff on importance of saving energy are regularly done as everyone including the staff is instructed to switch off the lights and fans whenever it is not used. Energy conserving lights are used in the classrooms and departments. Most of the classrooms, staffrooms and laboratories have quite a number of windows to let the cool breeze in so usage of fans is kept to a minimum saving a lot of energy consumption. The Institution has a strategically planned college building and the classrooms have enough natural light during the daytime reducing the use of electricity.



Photo 5: Signboard to maintain social distance and wearing of face mask in the campus

CARBON ACCOUNTING AUDIT

The Institution has a landscape of surplus greenery and trees in the campus which play an important role in the cycle of carbon in the campus through storing carbon, sequestering carbon and reducing the building carbon emission. Having maximum number of trees in the campus has also resulted in the negligible use of air conditioners in the college even during the hot summer months. The students are encouraged to plant trees in the campus whenever such an occasion arises so that the greenery in the college campus always remains stable. Even the management takes the initiative to take care of the gardens by supplying enough water for the plants at regular intervals. The trees are given proper care as regular pruning is done which keeps the plants healthy and disease free in the campus. Strategic planting of trees in front of the college building helps in reducing the building carbon emission making the concrete building as eco-friendly at some level.



Photo 6: Strategic planting of trees in front of college building reduce building carbon emission

RECOMMENDATIONS

- The Institution can take the initiative to start vermicompost in the campus to convert the organic waste to nutrient rich organic manure which can be used for flower beds prevalent across the campus and will make the college self sustainable and generate a substantial income in the near future.
- The Institution should make a basic strategic planning in maintaining a Green Campus and involve the student community in developing campus wide marketing strategies to promote Green campus initiatives and encourage them to join in recycling projects.
- The Institution can encourage the students to team up with faculty and experienced personnel from Government agencies and Private industry to conduct environmental evaluation of the campus as well as other important environmental sites of the local region as to help them develop basic skills in environmental research and make them environmentally responsible citizens.



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ENVIRONMENTAL PRACTICES OF DON BOSCO COLLEGE

I) WATER MANAGEMENT

Name of the Practice	Botany	Zoology	Chemistry	Physics	Geography	Biotech Hub	Arts	Commerce	Toilet	Canteen
Wise use of water	√	√	√	√	√	√	√	√	√	√
Water leakage repair	√	√	√	√	√	√	√	√	√	√
Use of water purification	√	√	x	x	x	√	√	√	x	√
Water Pollution incidence	x	x	x	x	x	x	x	x	x	x
Water storage	√	√	√	√	√	√	√	√	√	√
Water use per day in litres	x	x	x	x	x	x	x	x	x	x
Water tank	√	√	√	√	√	√	√	√	√	√
Rain water harvest	x	x	x	x	x	x	x	x	x	x
Water management practices	√	√	√	√	√	√	√	√	√	√

II) WASTE MANAGEMENT

Name of the Practice	Arts Department	Science Department	Computer Science	Biotech Hub	Office	Library	Canteen
Food/ organic waste per day	Low	Low	x	Low	Low	Low	High
Paper waste per day	Low	Low	Low	Low	High	Low	Low
Plastic/thermocool waste per day	Low	Low	High	Low	Low	Low	High
Other (e-waste)	Low	Low	High	Low	Low	Low	x

Management of organic waste	x	x	x	x	x	x	x
Management of other waste	x	x	x	x	x	x	x
Waste dumping pit	√	√	√	√	√	√	√
Waste management practices	√	√	√	√	√	√	√

III) ENERGY MANAGEMENT

Name of the Practice	Classroom	Office	Computer labs	Library	Staff room	Laboratory	Biotech Hub	Principal/Vice Principal's office
No. of tubes and bulbs	72	19	11	20	22	33	3	7
No. of A/C	x	x	2	x	x	x	1	2
No. of LCD projector	10	x	x	x	x	x	1	x
No. of photocopier	x	4	x	1	x	x	x	1
Computers and Printers	x	12	55	12	15	x	2	2
LEDs	x	x	x	x	x	x	x	x
Non conventional energy (solar/wind)	x	x	x	x	x	x	x	x
Energy management practices	√	√	√	√	√	√	√	√

IV) LANDSCAPE/ENVIRONMENT MANAGEMENT

Name of the Practice	Outdoor	Remarks
Overall green cover	70%	
Garden	√	
Indigenous trees/plants	√	
Exotic plants	√	
Overall biodiversity	√	
Landscape management plan	√	
Natural water bodies	x	

V) BUILDING ENVIRONMENT

Name of the Practice	Whole Building	Remarks
Building type	RCC type	
Area in square feet	35,450	
Eco-friendliness	Yes	
Aesthetic appeal	Yes	
Fire prevention provisions	Yes	
Serenity of classrooms	Yes	
Ladies restroom	Yes	
Recreation room	No	
Separate toilets for men/women	Yes	
Provisions for differently abled	Yes	
Gymnasium	Yes	