#### Shetkari Shikshan Sanstha's



# ARTS, COMMERCE & SCIENCE COLLEGE, MAREGAON (ROAD)

Dist. Yavatmal- 445 303 (M.S.) India

(Affiliated to Sant Gadge Baba Amravati University, Amravati) NAAC Accredited at 'B+' grade with CGPA 2.51 (Cycle-I)

# 7.1.3 Quality audits on environment and energy regularly undertaken by the Institution. The institutional environment and energy initiatives are confirmed through the following

- 1. Green audit / Environment audit
- 2. Energy audit
- 3. Clean and green campus initiatives
- 4. Beyond the campus environmental promotion activities

#### 1.Green audit / Environment audit:

Green Mentor Organization satisfied with the available adequate infrastructure, green and ecofriendly campus and all available facilities in the college. On the basis of these and proper documentation GREEN MENTOR provides Green College (Green Audit), Environment Audit and Energy Audit Certificates to our college.

#### **GREEN COLLEGE (Green Audit) Certificate:**



#### **ENVIRONMENT AUDIT Certificate:**



#### **EFFECTIVE PARAMETERS FOR GREEN COLLEGE:**

# **Waste Segregation:**

Waste Segregation Mechanism is well placed at the College campus. Waste generated through various sources and practices are being segregated in the safe manner & sent to recycling & composting sites or authorized recyclers in the safe manner, that prevent the waste being sent to the landfills.

# **Solid waste management:**

Blue and Green covered dustbins are placed in the premises. Waste bins are provided on each floor, in staff rooms, classrooms, laboratories, washrooms, and canteen as well as in campus areas. Daily around 10-15 kg organic/biodegradable waste is generated in the campus which includes horticultural waste. Quantity of horticulture waste varies significantly due to seasonal variation, e.g. around 50-70 kg of horticulture waste is generated daily in February- March due to leaf fall. College had a vermicomposting unit for the treatment of horticulture waste generated in the campus. The unit will be operational in 2-3 months. Being a college with non- residential facilities, the quantity of wet (food/organic) waste generated in the premises is minimal.

Biodegradable wet waste is mostly generated from the canteen. College has initiated the process of installing a composting unit of 15-20 kg/ day capacity for the treatment of canteen waste and some horticulture waste. Composting unit will be operational once the College starts working. In other areas like classrooms, mostly paper waste and plastic wrappers are generated. Segregation of wet and dry waste is practiced within the campus. However, there is no signage for promoting segregation of wet and dry waste.



**Dustbins** 

- A) Paper Waste Management being an academic institution, waste paper is one of the main solid wastes generated in the premises. College has taken steps to minimize and avoid paper usage. Prints and photocopies are taken on both sides of the paper to avoid excess paper usage.
- B) Plastic Waste: College strictly follows the guidelines regarding plastic usage and has prohibited the use of single use plastic e.g. carry-bags, glasses, spoons etc., in the campus. As per the College guidelines, Canteen Contractor is prohibited to use plastic cutlery, instead paper plates and wooden spoons are used.

## C) E-waste management:

Computers, laptops, printers etc. are sold as scrap or exchange options are used.

## **Organic Waste Management:**

Since College has adopted the philosophy of "reduce - reuse - recycle", therefore all organic waste sent to Vermicomposting Facilities makes waste into resources and prevents the waste being sent to the landfills.



Vermicompost Pit

# **Green Policy:**

College framed a broader Green Policy that inspires its teaching learning community to take responsibility for the future through their behavior with nature and natural resources.

# Conserve Energy

- Well-ventilated Classrooms, Faculty / Staff Cabins with natural light.
- Usage of LED Lamps.
- Monitoring block wise power consumption daily.

#### Minimize Waste Generation

- Banned all disposable food packing in campus.
- Waste segregation at source for proper disposal.

#### Other Initiatives

Print on both sides of paper

- Plant trees
- Using recycled stationery

Well Ventilated Laboratories and Classrooms













Well Ventilated Principal & Staff cabin























# **Salvaged Materials:**

College uses old roof galvanized tin sheets and iron angle bars for the construction of the roof of the new cycle stand. Old wood material is used to make the wooden sticks square for the door. It helps to minimize the use of new material as well as to save money.



Cycle Stand

Wooden sticks square

# **Eco-friendly Wood Based Materials:**

Our college encourages using Certified Composite Wood to encourage use of Ecofriendly Wood based Materials towards conserving Forest Resources and reducing the dependence on virgin materials.



Certified Table and Benches

# **Materials with Recycled Content:**

College uses materials in its new construction sites and repairing spaces, which have recycled content like Concrete, Bricks, and Fly ash Bricks to reduce environmental impacts associated with the use of virgin materials. All the old building material like concert and bricks are used to give the strength for the ground flower base of the new building as well as the cycle stand.

Our college comes in eco-friendly zone. Majority of our college premises is surrounded by large trees having botanical garden on one side and playground on the other side There is plenty of air and environment of college is pleasant. Also, regular cleaning practice is also implemented from time to time to keep environment neat and Clean.

# **Dedicated Playground:**

College has provided students' The Facilities of various playground. College has the following dedicated playgrounds.

- Kabaddi Ground 13×10
- Kho-Kho Ground 29×16
- Badminton Ground 44×20
- Badminton Court



Kho-Kho Ground



Kabaddi Ground



Volley ball Ground



**Badminton Court** 

## 2. Energy audit

# **Energy Audit Certificate:**



## **Energy efficient Equipment's:**

We have some old electric equipment which consumes more energy compare to latest equipment's. We are currently using LED to save energy. Our infrastructure up gradation is in process and we are focusing to purchase energy efficient instruments only to avoid extra energy consumption.

**Distributed Power Generation:** Our college has green, ecofriendly campus situated at pollution free environment. The college has well-ventilated classrooms, laboratories faculty and staff Cabins with natural light.

Sr No. (A)	Room No./ Lab Name (B)	Name of Ele Equipment ©	Ele Consumtion (D)	Total Eqp. (E)	Total Watts (F)=(D*E)	Use/ Hours/ Instrument (G)	kWh/ Day/ Instrument (H)= E*G/1000	(kWh/Month) Total Consum. (I)= H*26
1	Botany	Projector	50 Watts	1	50	3	0.15	4 Watts
2	Physics				0		0	0 Watts
					0		0	0 Watts
3	Classroom (7 Rooms)	Fan	55 Watts	14	770	5	3.85	100 Watts
		Tubelight	10 Watts	14	140	5	0.7	18 Watts
		J			0		0	0 Watts
4	Computer Lab	Desktop	100 Watts	10	1000	5	5	130 Watts
		Fan	55 Watts	2	110	5	0.55	14 Watts
		Tubelight	10 Watts	2	20	5	0.1	3 Watts
5	Principal's Cabin	Fan	55 Watts	4	220	5	1.1	29 Watts
		Tubelight	10 Watts	2	20	5	0.1	3 Watts
		Inverter	15 Watts	1	15	24	0.36	9 Watts
6	Non- Teaching Office	Fan	55 Watts	8	440	5	2.2	57 Watts
		Tubelight	10 Watts	6	60	5	0.3	8 Watts
		Cooler	250 Watts	1	250	5	1.25	33 Watts
		Desktop	100 Watts	5	500	4	2	52 Watts
		Printer	50 Watts	4	200	3	0.6	16 Watts
		UPS	10 Watts	2	20	5	0.1	3 Watts
		Internet Modem		1	0		0	0 Watts
		Sanitizer Machine		1	0		0	0 Watts
		Bell		1	0		0	0 Watts
7	Home Economics	Cooler	250 Watts	1	250	5	1.25	33 Watts
		Fan	55 Watts	1	55	5	0.275	7 Watts
		Tubelight	10 Watts	1	10	5	0.05	1 Watts
		Exhaust Fan	35 Watts	1	35	4	0.14	4 Watts
		Fridge- Godrej 165L	150 Watts	1	150	24	3.6	94 Watts
		Microwave LG	800 Watts	1	800	2	1.6	42 Watts
		Mixer	500 Watts	2	1000	1	1	26 Watts
8	Auditorium	Tube light	10 Watts	2	20	5	0.1	3 Watts
		Fan	55 Watts	2	110	5	0.55	14 Watts
		Desktop	100 Watts	1	100	4	0.4	10 Watts
		Printer	50 Watts	1	50	1	0.05	1 Watts
	TOTAL			93	6395	150	27.375	712 Watts

We have 1477 watts of electric consumption for this academic year even though there might be 712 watts of more electric consumption for the next academic year. We have decided to use only energy efficient equipment's for our new building. If we calculate in percentage of consumption, it will definitely save more energy in comparatively previous year energy consumption.

Our college has a diesel generator (DG) of capacity 100 KVA. DG set is used only in case of emergency when there is power cut-off. Power cut off ratio is very less in our area so we use DG very rarely and therefore DG emissions are not monitored. We use inverter battery power backup for computers in case of Power Cut Off to avoid pollution occurred by Diesel Generator.

# 3. Clean and green campus initiatives

College run clean campus and tree plantation programs on the different occasions for clean and green campus.

• The students are participated in Swatch Bharat Abhiyan on the occasion of Mahatma Gandhi Jayanti (02 October, 2019).



• No smoking signage is displayed at the entrance indicating smoking is prohibited within 100 meters from the College campus. In our college premises Signage boards are installed at Common spaces such as Auditorium, parking spaces, outside classrooms and administrative building.







# 4. Beyond the campus environmental promotion activities

The students and faculty members are participated in Tree plantations on 01 July, 2018 at National Highway 930.



The students of our college were participated in Swatch Bharat Abhiyan on 27 January, 2019 at Chinchala village.





The students of our college were participated in Swatch Bharat Abhiyan on 05 January, 2018 at Pisgaon village.





The students of our college were participated in Swatch Bharat Abhiyan on 05 March, 2022 at Takalkheda village.





