



Energy Audit Report (2021-2022)

for

MVP'S

ARTS, COMMERCE AND SCIENCE COLLEGE NANDGAON,
NASHIK (M.S.)



Prepared by

**Department of Physics, Arts, Commerce and
Science College Nandgaon**

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Preface

Data collection for energy audit of the **MVP'S Arts, Commerce & Science College, Nandgaon, Nashik** was conceded by team for the period of Jan 2022 to February 2022. This audit was over sighted to inquire about convenience to progress the energy competence of the campus. Energy audit survey was completed by Department of Physics

All data collected from each classroom, laboratory, Principal office, Main Office, Staff room, wash room, & Porch. The work is completed by considering how many tubes, fan, A.Cs, electronic instruments, etc in each room. How much was participation of each component in total electricity consumption.

We really appreciate the effort put by MVP'S management for creating awareness of Energy Audit, Use renewable energy such as solar energy and their significance use for efficient energy saving and our nature among the all of us. We really appreciate Hon. Management of the college for encouraging us by providing this wonderful opportunity to do the energy audit. Through this, we have been cleared the vision of Institution towards the Green campus and save our green nature.

Acknowledgement

We are very much thankful to principal Dr. S.N. Shinde Sir for motivating us and giving this energy audit opportunity .We would like to express our sincere thanks to Dr. S.A. Marathe Sir. I am also thankful to all Science teaching nonteaching Staff of the college for who have taken part in this audit survey for each department, lab, office & class room etc. of MVP'S Arts, Commence and Science College Nandgaon. We tried our best to present this energy report as per requirements of college.

Summary

The objective of the audit was to study the energy consumption pattern of the facility, identify the areas where potential for energy/cost saving exists and prepare proposals for energy/cost saving along with investment and payback periods.

The salient observations and recommendations are given below.

1. MVP'S Arts, Commerce & Science College, Nandgaon, Nashik uses energy in the following forms:

a. From MSEDCL

b. Electricity SOLAR Grid connected solar plant (15.36kW)

c. High Speed Diesel Generator (HSDG)

Electrical energy is used for various applications, like: Computers, Lighting, Air-Conditioning,

Fans Other Laboratory Equipment, Printers, Xerox machines, CCTV, UPS, LCD Projector, Router system, External light, Pumping motor etc.

2. The average cost of energy is around **Rs. 17423.15/Month.**

3. After the measurement and analysis, we propose herewith following Energy Efficiency Improvement measures.

Table: Energy Efficiency Improvement

Sr. No.	Recommendations	Annual Saving Potential (Rs.)	Estimated Investment (Rs.)	Pay Back period (Years)	Remarks (Feasibility)
1	Replacing Normal Tube(FTL) with energy saving LED tube	59616	115*180=20700	0.34	Mid/Short Term
2	Providing Energy Saver Circuit to the Air Conditioners	9333*2=18666	Total Cost=4500*2=9000	0.48	Mid/Short Term
3	Use of motion sensor in corridors, passage and toilets	6000	8000	1.33	Mid Term
	Total Amount	84282/-	37700/-	0.71 years	

- Note:- Total savings during the energy audit is estimated at **Rs. 84282/-**
- The total energy cost with an overall payback period of **0.71 Years** for technical and economic feasibility.

Abbreviations

MAHADISCO	Maharashtra State Electricity Distribution Company
UOM	Unit of Measurement
SEC	Specific Energy Consumption
PF	Power Factor
DG	Diesel Generator
DC	Direct current
AC	Alternating Current
GCV	Gross Calorific Value

Chapter: 1

Introduction to Energy Audit

General:

The MVP'S Arts, Commerce & Science College, Nandgaon, Nashik entrusted the work of conducting a detailed Energy Audit of campus with the main objectives are as bellows:

- To study the present pattern of energy consumption.
- To identify potential areas for energy optimization.
- To recommend energy conservation proposals with cost benefit analysis.

Scope of Work, Methodology and Approach:

Scope of work and methodology were as per the proposal .While undertaking data collection, field trials and their analysis, due care was always taken to avoid abnormal situations so as to generate normal/representative pattern of energy consumption at the facility.

Approach to Energy Audit:

We focused our attention on energy management and optimization of energy efficiency of the systems, sub systems and equipment. The key to such performance evaluation lies in the sound knowledge of performance of equipment's and system as a whole.

Energy Audit:

The objective of Energy Audit is to balance the total energy inputs with its use and to identify the energy conservation opportunities in the stream. Energy Audit also gives focused attention to energy cost and cost involved in achieving higher performance with technical and financial analysis. The best alternative is selected on financial analysis basis.

Energy Audit Methodology: Energy Audit Study is divided into following steps

1. Historical Data Analysis:

The historical data analysis involves establishment of energy consumption pattern to the established base line data on energy consumption and its variation with change in production volumes.

2. Actual measurement and data analysis:

This step involves actual site measurement and field trials using various portable measurement instruments. It also involves input to output analysis to establish actual operating equipment efficiency and finding out losses in the system.

3. Identification and evaluation of Energy Conservation Opportunities:

This step involves evaluation of energy conservation opportunities identified during the energy audit. It gives potential of energy saving and investment required to implement the proposed modifications with payback period.

Chapter: 2

General Details

Sr. No.	Particulars	Details
1	Name of the Institute	MVP'S Arts, Commerce and Science College Nandgaon
	Address	MVP'S Arts, Commerce and Science College Nandgaon, Malegaon Road, Tal Nandgaon, District Nashik-423106
2	Year of Establishment	
3	Courses offered	XIth and XIIth Arts , Commerce & Science B. A./B.Com./B.Sc. M.A. (Marathi) (Political Science) M.Com. (Master in Commerce) C.C. Community College
4	Affiliation	Savitribai Phule Pune University,Pune-07

Energy Consumption Profile

Source of Energy:

MVP'S Arts, Commerce & Science College, Nandgaon, Nashik, uses

Energy in following forms:

a. Electricity from MSEDCL : MVP'S Arts, Commerce & Science College, Nandgaon, receives Electricity from Nandgaon Circle.

b. High Speed Diesel Generator (HSDG) :

HSD is used as a fuel for **Diesel** Generator which is run whenever power supply from MSEDCL. It is used when electric power is not available.

Chapter: 3 Historical Data Analysis



Photo 1 Solar Panels

**Maratha Vidya Prasarak Samaj's
Arts, Commerce and Science College - Nandgaon, Nashik**

15.36 Kw Roof Top Solar Power Plant

Name of Component with Specification	Make	Qty
Solar Panels (320W)	Waree	48 Nos.
Inverter - 15 Kw	Delta	1 Nos.
AC Cables	Polycab	

Capacity of Generation	60 Units/ Day
Name of the contractor	Seven Greens Solar Systems Pvt. Ltd. 33-34/1, Shree Ram CHS, Ram Mandir Road, Kher nagar Bandra (east), Mumbai - 400051.
Funded by	Savitribai Phule Pune University, Pune
Funded Amount	Rs. 5,00,000/-
Sanction Year	2017 - 18

1 Solar array converts energy from sunlight into electricity.

2 The energy is used in your homes, school or business.

3 The bidirectional meter indicates energy usage and excess energy produced.

4 Excess energy not used by your home that goes back to the electrical grid.

5 The inverter converts the electricity produced by the solar array from direct current (DC) to alternating current (AC) for use in your home, school or business and measures the energy produced by the solar array.

6 Energy used by your home from the electrical grid.

Utility pole/distribution line

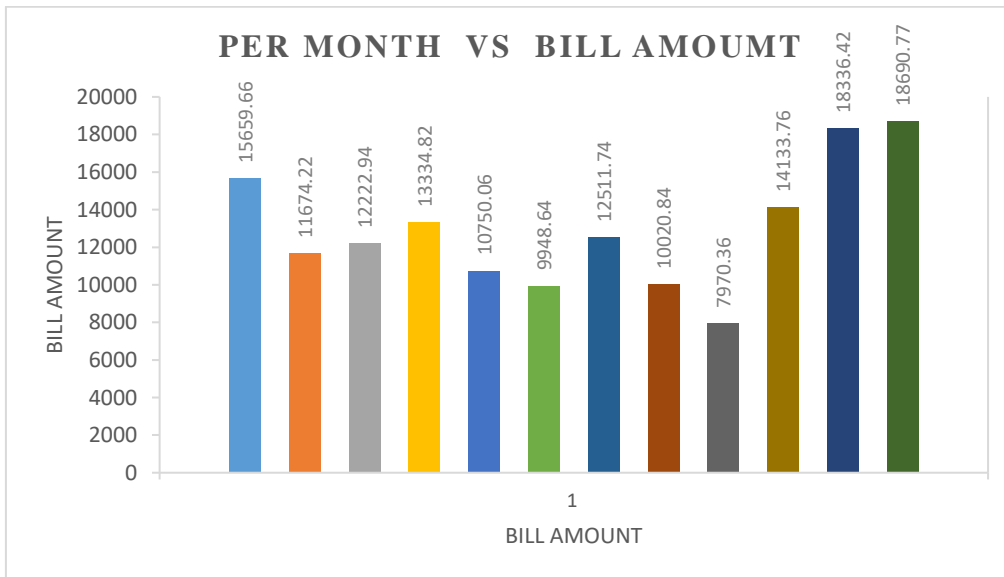
SINGLE LINE DIAGRAM

MATERIAL LIST	
WIRE	1000 FT
CONDUIT	100 FT
TERMINALS	100
INVERTER	1
METER	1
SOLAR PANELS	48
CABLES	1000 FT
SINGLE LINE DIAGRAM	
TECHNICAL DRAWING BY T. SINGH	

Photo 2 Solar panels Chart

4.1 Study of Month wise Electricity Bill Variation: Table No 4.1 Variation in Electricity Bill

Sr. No.	Month	No. Units kWh	Electricity Bill Amount (Rs.)
1	Jun 2021	2109	15659.66
2	July 2021	1557	11674.22
3	Aug 2021	1633	12222.94
4	Sep 2021	1787	13334.82
5	Oct 2021	1429	10750.06
6	Nov 2021	1318	9948.64
7	Dec 2021	1673	12511.74
8	Jan 2022	1328	10020.84
9	Feb 2022	1044	7970.36
10	March 2022	1853	14133.76
11	April 2022	2474	18336.42
12	May 2022	2523	18690.77
			Average=12937.85



Conclusion: Monthly Electricity Bill Variation has been identified.

Roof Top PV Solar System (15.36KW) installed on terrace of Main Building

- **Before Installation Average Monthly Bill = Rs. 25090/-**
- **After Installation Average Monthly Bill = Rs. 12937.85 /-**
- **Savings in Bill due to Installation (per month) = Rs. 12152.15 /-**
- **Annual Savings in Bill (One Year) = Rs. 145825.8 /-**

Chapter: 4

Actual Measurements and its Analysis

College Campus:

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (Watt)	Usage per Day Hr.	Power Consumption/day (Watt)
A	B	C	D	$E = C \times D$	F	$G = E \times F$
1	LED tube	20	122	2440	3	7320
2	Normal Tube(FTL)	40	141	5640	3	16920
3	FAN	80	152	1216	6	7296
4	Exhaust fan	60	4	240	6	1440
5	PC	60	68	4080	6	24480
6	AC	3500	2	7000	3	21000
7	Printer	300	23	6900	1	6900
8	LCD Projector	280	5	1400	2	2800
9	TV	80	1	80	5	400
10	CFL	25	3	75	6	450
11	Xerox machine	650	5	3250	1	3250
12	Water Cooler	250	3	750	6	4500
13	Refrigerator	2000	3	6000	6	36000
14	Flood light	400	14	5600	10	56000
15	Electric bell	5	2	10	1	10
16	Incubator	1500	1	1500	1	1500
17	Internet Box with wifi router W/Hr	5	6	30	8	240
18	Vacuum Cleaner	1400	1	1400	0.5	700
19	CCTV	10	33	330	24	7920
20	Water filter	4	6	24	2	48
21	Hot air oven	1400	1	1400	1	1400
22	Lab Equip. for Practical	250	15	3750	1	3750
23	Furnace	600	2	1200	0.5	600
24	DG Gen set	15KVA	as per use			
25	Pumping motor	746	3	2238	1	2238
26	UPS	2-5KVA, 36 batteries of 80 Amp-hr	3	8653	5	43265

27	On Grid connected solar Planet	15.36KW	1	15.36	12	184.32
It is expected to generate 60 units/day, 1800 units per month. In our case In June only 216 units are generated through solar. Other months also get affected for optimum power generation.						

*** This is total load consumption considered approximately. Actual load consumption might be different according to actual use of power for particular time period.**

Department wise load consumption:

A) Main Building:

(Principal, Vice Principal, Staff room, YCMO, Examination department, Computer lab, 12 class Rooms, Store, Geography Department and Passage)

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (watt)	Usage Per Hr.	Power consumption /day (Watt)
A	B	C	D	E = C X D	F	G = E X F
1	LED tube	20	55	1100	3	3300
2	Normal Tube(FTL)	40	23	920	3	2760
3	FAN	80	68	5440	6	32640
4	Exhust fan	60	5	300	6	1800
5	PC	60	37	2220	6	13320
6	AC	3500	2	7000	3	21000
7	Printer	300	17	5100	1	5100
8	LCD Projector	280	1	280	2	560
9	TV	80	1	80	5	400
10	CFL	25	16	400	6	2400
11	Xerox machine	650	3	1950	1	1950
12	Water Cooler	250	1	250	6	1500
13	Refrigerator	2000	1	2000	6	12000
14	Flood light	400	7	2800	10	28000
15	Electric bell	5	2	10	1	10
16	Internet Box with wifi router W/Hr	5	6	30	7	210
17	Vacuum Cleaner	1400	1	1400	0.5	700
18	CCTV	10	12	120	24	2880

19	Water filter	4	1	4		0
20	Pumping motor	746	1	746	1	746
21	UPS	2-5KVA, 36 batteries of 80 Amp-hr	1	8653	5	43265
22	On Grid connected solar Planet	15.36KW	1	15.36	12	184.32

B) Gymkhana 1 & 2:

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (watt)	Usage Per Hr.	Power consumption/day (Watt)
A	B	C	D	E = C X D	F	G = E X F
1	LED tube	20	3	60	2	120
1	Tube (FTL)	40	1	40	2	80
2	FAN	80	2	160	6	960
3	PC	60	1	60	6	360
4	Printer	300	1	300	1	300

C) Science lab (Chemistry/Physics/Botany/ Zoology/ Mathematics):

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (watt)	Usage Per Hr.	Power consumption/day (Watt)
A	B	C	D	E = C X D	F	G = E X F
1	Normal Tube(FTL)	40	27	1080	2	2160
2	LED tube	20	40	800	2	1600
3	FAN	80	42	3360	3	10080
4	Exhaust fan	60	4	240	6	1440
5	PC (CPU/MONITOR)	95/45	10/22	950/990	3	5820
6	Printer	300	4	600	1	600
7	LCD Projector	280	3	840	1	840

8	CFL	25	3	75	6	450
9	Water Cooler	250	1	250	6	1500
10	Refrigerator	2000	2	4000	6	24000
11	Flood light	400	4	1600	10	16000
12	Incubator	1500	1	1500	1	1500
13	Internet Box with wifi router W/Hr	5	1	5	6	30
14	CCTV	10	10	100	24	2400
15	Water filter	4	2	8	3	24
16	Hot air oven	1400	1	1400	1	1400
17	Lab Equip. for Practical	250	15	3750	1	3750
18	Furnace	600	2	1200	0.5	600
19	UPS	2-5KVA, 36 batteries of 80 Amp-hr	1	2884.56	5	14422.8

D) Library Building (Seminar hall, Marathi, English, Hindi, Commence, Economics, Reading Room, Ladies Room wash room & Porch):

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (watt)	Usage Per Hr.	Power consumption/day (Watt)
A	B	C	D	E = C X D	F	G = E X F
1	Normal Tube(FTL)	40	50	2000	6	12000
2	LED tube	20	5	100	6	600
3	FAN	80	26	2080	3	6240
5	PC	60	31	1860	3	5580
6	Printer	300	4	1200	1	1200
7	LCD Projector	280	1	280	1	280
8	Water Cooler	250	1	250	6	1500
9	Flood light	400	2	800	10	8000
10	CCTV	10	10	100	24	2400
11	Water filter	4	1	4	3	12
12	UPS	2-5KVA, 36 batteries of 80 Amp-hr	1	2884.56	5	14422.8

E) Ladies hostel:

Sr. No.	Name of Appliance	Power Rating (Watt)	Quantity	Power Consumption (watt)	Usage Per Hr.	Power consumption/day (Watt)
A	B	C	D	$E = C \times D$	F	$G = E \times F$
1	Normal Tube (FTL)	40	42	1680	6	10080
2	LED tube	20	22	440	6	2640
3	FAN	80	16	1280	9	11520
4	Water Cooler	250	1	250	6	1500
5	Flood light	400	1	400	10	4000
7	Water filter	4	1	4	3	12
8	water pump	746	1	746	2	1492

Remarks:

- It has been observed that in old and new building majority of electrical power consumption is through light load such as fan, FTL and power load such as refrigerator, ups, etc. unnecessary use of electrical equipment must be avoided.
- As per individual dept. level load consumption, we understand the scope for improvement of energy saving. Hence our electricity bill will be reduced by proper load management techniques along with optimum utilization of resources.



Photo 3 Solar meter

Chapter: 5 Light Intensity Analysis

Sr. No.	Department\class room	Luxmeter readings (Lux)
1	Principal office	500
2	Staff room	400
3	Vice principle office	28
4	Political science & SYBSc classroom	190
5	Exam Dept.	300
6	IT Dept.	100
7	Administration office N7	114
8	N1,N2,N3,N4,N5, N6 classroom	250
9	N8,N9,N10,N11,N13,N14	225
10	N12	50
11	Chemistry	103.50
12	Physics	300
13	Botany	310
14	Library	24
15	Reading room	200
16	Marathi	276
17	English	190
18	Commerce	150
19	Geography	100
20	Gymkhana	250

Observation:

Most of the departments having good exposure of sunlight. So, it reduces the light consumption of institute.

Chapter: 6 Study of Electrical Systems

6.1: Electrical Supply Details:

The electrical supply to MVP'S Arts Commerce and Science College, Nandgaon comes from MSEDCL supply at 11 kV, which is stepped down to 415 V by a transformer.

6.1.2 Study of Electrical Demand:

There is a single meters installed in the premises. The details of meters are as under

Table No 6.1: Meter Details:

Consumer No: 077621025557 & Meter No: 077621025557			
Sr. No.	Details of Electricity Demand	Tariff	LT-X B II (88)
1	Sanctioned Demand	20	kVA
2	Contract Demand	20	kVA
3	Recorded Maximum Demand	11	kVA

Thus we observe that:

Total Sanctioned Demand is **20 kVA** while the recorded Maximum Demand is **10 kVA**.

Electrical Energy Cost Analysis

The electrical bills from MSEDCL for 12 months from January 2020 to December 2020 have been studied.

Lighting System

Observations and suggestions:

- It is found that FTL, Bulbs, CFLs is installed in the facility.
- It is recommended that some tube lights in this area be switched off when sufficient daylight is available.
- Presently there are no reflectors installed for tube lights.
- Every light or electric gadget left on when not needed is wasting energy and money and is causing pollution that is totally unnecessary.

Chapter: 7 Carbon Di-Oxide Emission

In this Chapter we compute the CO₂ emissions. For consumption of 1 Unit (1 kWh) of Electricity, the CO₂ emitted is 0.8 Kg. OR the Emission is 0.8 Kg/kWh. In the following Table we present the total units consumed and CO₂ emitted as under:

Sr. No.	Month	kWh	Bill amount	CO ₂ Emission in Tons
1	Jun 2021	2109	15659.66	1.687
2	July 2021	1557	11674.22	1.245
3	Aug 2021	1633	12222.94	1.306
4	Sep 2021	1787	13334.82	1.429
5	Oct 2021	1429	10750.06	1.143
6	Nov 2021	1318	9948.64	1.054
7	Dec 2021	1673	12511.74	1.338
8	Jan 2022	1328	10020.84	1.062
9	Feb 2022	1044	7970.36	8.35
10	March 2022	1853	14133.76	1.482
11	April 2022	2474	18336.42	1.979
12	May 2022	2523	18690.77	2.018
			Mean Bill=12937.85	Mean=1.381.

Merits/Existing Features for Energy Savings.

1. Staff awareness.
2. Computers are connected in LAN.
3. Printers are shared in LAN.
4. Screen savers facility implemented for every computer.
5. AC's used are of three STARS.
6. Refrigerators are of three STARS.
7. Incandescent Bulbs are now here used.
8. They are replaced by CFL tubes.
9. Maximum use of natural light.
10. Cross Ventilation is provided in laboratory & class rooms, which reduced number of fans.
11. Most of the practical's are scheduled in noon time where Billing Rate in normal.
12. Walls are painted with off white Colour to have sufficient brightness.
13. Solar powered street lamp is used.
14. LED flash light is used in Seminar hall.
15. PV solar system (15.36KW) is installed which is expected to generate 60 Unit/day. (60*365=21900 units/year) This saves Rs. 131400/Year. (21900*6 per unit bill=Rs.131400per year)

Chapter: 8

Energy Conservation Proposals

8.1 Providing Energy Saver Circuit to the Air Conditioners:

The **energy saver circuits for the air conditioners, intelligently reduces the operating hours** of the compressors either by timing or temperature difference logic without affecting the human comfort. This can save around 15% to 30% of the electricity depending on the weather conditions and temperature settings.

There are total 2 split type air conditioners. It is Recommended that the old air conditioners are being replaced with new energy efficient BEE STAR labeled (3 Star and above) air conditioners in a phased manner.

- Considering the average compressor ON Time = 5 h/day
- Power consumption by 2 TR compressor = 6.1 kW
- Average daily consumption = $6.1 \times 5 = 30.5$
- KWh/day/ air conditioner Yearly operating days = 300 days/year/ air conditioner.
- Yearly electricity consumption = 9150 kWh/year/ air conditioner
- Considering a saving of 15%, total annual savings = $15\% \times 9150 = 1372.5$ kWh/year/ air conditioner.
- Cost of electricity = Rs. 6.80 / kWh
- Yearly savings = $6.80 \times 1372.5 = \text{Rs. } 9333/\text{year}/$ air conditioner
- Total number of Air Conditioners = 2

Summary:

- **Total yearly Saving = $2 \times 9333/\text{year} = \text{Rs. } 18666/\text{year}$**
- **Total Cost of each energy saver circuit = $\text{Rs. } 4500 \times 2 = \text{Rs. } 9000/-$**

8.2 Replacing Fluorescent Tube Lights (FTL) with LED Tube Lights

The **115 W** FTLs can be replaced with the LED tube lights **16 W**. These changes can be made at the places where the life is higher. Usually minimum of 3 years warranty is given and approximate burning hours is 40 000. (15 years considering 8 hours per day running)

Following calculations are done for 8 hours working:

- Power consumption by 36 W FTL with conventional choke = 40 W/ Tube Light
- Equivalent LED tube light = 20 W/ Tube Light
- Savings in power = 20 W/ Tube Light
- Operating hours = 8 h/day x 300 = 2400 h/year
- Tube Light Yearly savings = 2400 x 20 W = 48.0 kWh/year/Tube Light
- Average Cost of electricity = Rs.6.80/ kWh
- Saving = 48.0 kWh x 6.80 = Rs.326 / year/ Tube light
- Approximate investment on single LED Tube lights = Rs. 180
- Number of Tube Lights to be replaced = 122

Summary:

- **Total Yearly Saving = 122 x 326 = Rs. 39772 /year**
- **Total Investment = 122 x Rs. 180 = Rs. 21960 /-**

8.3 General Recommendations

- All Class Rooms and labs to have **Display Messages** regarding optimum use of electrical appliances in the room like, lights, fans, computers and projectors. Save electricity. **Display the stickers of save electricity**, save nature everywhere in the campus. So that all stakeholders encouraged to save the electricity.
- Most of the time, all the tube lights in a class room are kept ON, even though, there is sufficient light level near the window opening. In such cases, the light row near the window may be kept OFF.
- Trying to get the benefit of -01.50 rate in addition to actual rate for per unit consumption of **electric motor pumping during 2200 – 0600 Hrs.**
- All projectors to be kept OFF or in idle mode if there will be no presentation slides.
- All computers to have power saving settings to turn off monitors and hard discs, say after 10 minutes/30 minutes.
- The comfort/Default air conditioning temperature to be set between 24°C to 26°C.
- Lights in toilet area may be kept OFF during daytime

- Use A UTOMATIC POWER FACTOR CORRECTION (APFC) Panel FOR P F improvement.
- Need to focus on existing solar plant which is generating power below the rated power.
- Need to use power saver circuits for AC.
- Need to replace FTL by smart LED Tube
- Need to replace ordinary bulb by LED bulb.
- Need to replace ordinary CRT monitor by LED.
- Need to replace ordinary refrigerator by BEE power saver refrigerator if possible.
- Recently govt. has declared the exemption on electricity duty charges for school and colleges trying to get the benefit of the same as soon as possible.

8.4. Executive Recommendations:

1. There has to be Institute level student community that keeps track of the energy consumption Parameters of the various departments, class rooms, halls, areas, meters, etc
2. Energy auditing inside the campus has to be done on a regular basis and report should be made public to generate awareness.
3. Need to Create energy efficiency/ renewable energy awareness among the college campus i.e. solar, wind, Biogas energy. College should take initiative to arrange seminars, lectures, paper presentation competition among students and staff for general awareness.



8.5. SWOT Analysis:

8.5.1. Strengths:-

- a) PV solar system (15.36KW) is installed which is expected to generate 60 Unit/day. ($60 \times 365 = 21900$ units/year) This saves
- b) We have replaced old tubes (40W) into energy saving LED Tube (20W).

c) Advantages of college is that lots of sun light comes into room, lecture halls and Practical labs.

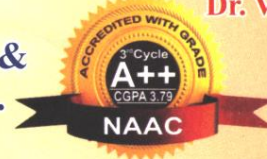
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Maratha Vidya Prasarak Samaj's
**K.R.T. Arts, B.H. Commerce &
A.M. Science College, Nashik.**
(KTHM College)



Dr. V. B. Gaikwad
M.Sc., M.Phil, Ph.D
Principal

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- College with Potential for Excellence Status by UGC, New Delhi.
- Best College Award of Savitribai Phule Pune University.
- DBT Star College.
- UGC Sponsored B.Voc. Programme & Community College.
- Affiliated to SPP University [ID No. PU/NS//ASC/012(1969)]
- Junior College Index No. J-13.17.001
- DST-FIST Sponsored.

Ref.No. : 2021-2022


Date : 11-10-2022

Whom It May Concern

This is to certify that Maratha Vidya Prasarak Samaj's Arts, Commerce and Science College, Nandgaon, Tal: Nandgaon, Dist: Nashik – 423106 has successfully undergone Energy Audit on assessment of green initiative, planning and implementation of the college campus as per the guidelines laid down by the Energy Conservation Act 2001. We appreciate the efforts of the college and issue the certificate of Energy Audit.

Date: 11-10-2022

Place: Nashik


Dr. V.B Gaikwad
Principal

E-mail : dr.gaikwadvb@rediffmail.com / contact@kthmcollege.com / website : www.kthmcollege.ac.in