PowerTech Energy Solutions
Conserve to Consume

Energy & Green Audit Report
of
Shri Gajanan Maharaj Shikshan Prasark Manadal's Sharadchandra Pawar College of Pharmacy, Dumberwadi (Otur) Pune 412409

Prepared By
PowerTech Energy Solutions
(A MEDA Empanelled Class A Category Consultancy Firm)

Submitted By,

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Date of Audit: 22 January 2020
Date of Report Submission: 26 January 2020

Contents

ENERGY & GREEN AUDIT COMPLETION CERTIFICATE

This is to certify that following utility has carried out Energy & Green Audit as per guidelines laid down in The Energy Conservation Act, 2001 in the month of January 2020

Name of College	Sharadchandra Pawar College of Pharmacy, Dumbrewadi, Otur, Dist:- Pune
Details of Facilities Audited	Main college building including laboratories, libraries, etc.
Date of Energy and Green Audit	22 January 2020
Name of Certified Energy Auditor	Mr. Swapnil Gaikwad
Certification Number	EA 20121
Validity of Certificate	21 January 2021

Signature of Auditor

(Swapnil Gaikwad)

Power Tech Energy Solutions Nashik

Acknowledgement

PowerTech Energy Solutions extends gratitude to Shri Gajanan Maharaj Shikshan Prasark Mandal's Sharadchandra Pawar College of Pharmacy for extending us the opportunity to conduct the Energy & Green Audit.

We are thankful to the professors & supporting staff of the college for their transparency & consistent support in sharing relevant information and for providing data about policies and projects along with their other valuable information. This report would have not been possible without their support.

The study team would like to acknowledge the following distinguished personnel's of college

- **Dr. G.Y. Dama** – Principal
- **Dr. Sumit Ashok Joshi** – Associate Professor

About College

Shri gajanan maharaj shikshan prasarak mandal's college of Pharmacy is a dream come true of its founder late Mr. Vilas Tambe an Educationalist and above all a great visionary, who nearly single handedly laid the foundations of this Educational Society. Was started in early 1990 as a small school, blossomed into a set of Educational Institute for quality education, ranging from the pre-primary to Post-Graduate colleges

SPCOP has a target to promote innovation in the profession of Pharmacy & Pharmaceutical Sciences by developing budding Pharmacist through using imagination & creativity with view to secure through innovative techniques having positive impact in community.

The college is housed in a spacious building of about 70,000 sq. feet constructed area amongst the lush green and quiet surrounding.

The college boasts of spacious and modern Laboratories consisting advanced equipment's and instruments costing of about 50 Lakh. These well-equipped laboratories give complete exposure to students that meet the modern industrial requirements. Spacious & calm library with adequate furniture & No. of latest books with e-Journal Facility, well ventilated specious classrooms along with LCD projectors make the environment enjoyable to study.

Mission

"Our ultimate aim is to link education with the entire society so that underprivileged and economically disadvantaged students are benefited and they could become self-reliant, ethically strong and law-abiding citizens."

Vision

To achieve academic excellence, material and spiritual development of the students, to strengthen rational and scientific attitude among them and to make them well competent.

1 Energy Audit

An energy audit is an inspection, survey and analysis of energy flows, for energy conservation in a building, process or system to reduce the amount of energy input into the system without negatively affecting the output(s). In commercial and industrial real estate, an energy audit is the first step in identifying opportunities to reduce energy expense and carbon footprints.

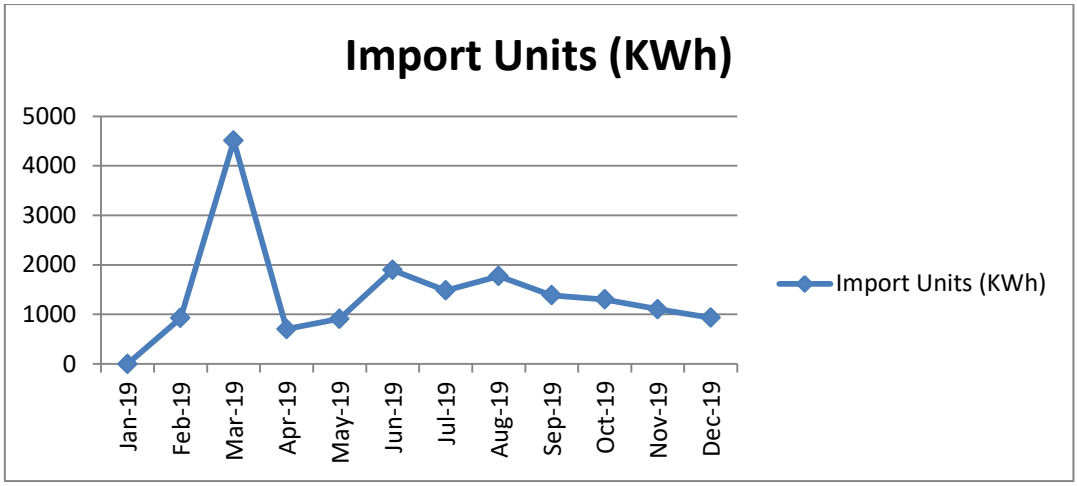
1.1 Electricity Bill Analysis

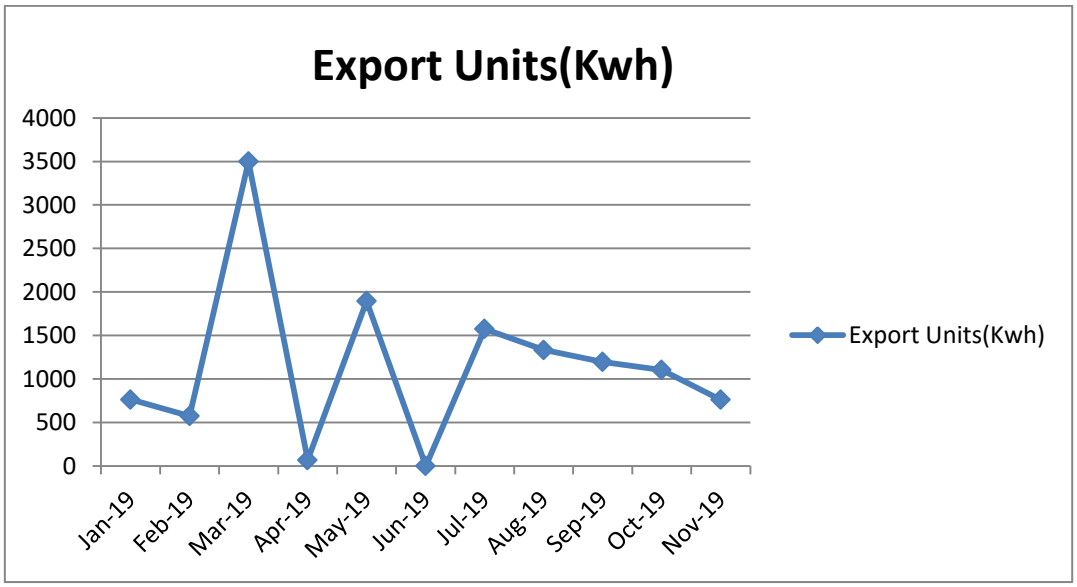
At present, one electricity meter is there for all campus

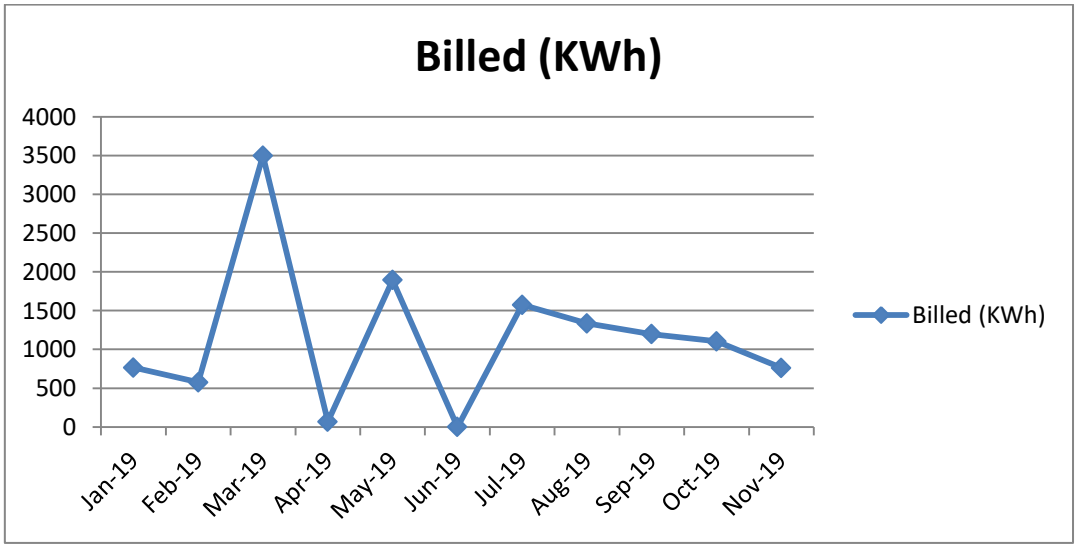
Bill analysis for consumer number 174462986503 shown below

Consumer : Mr Gajanan Maharaj Shikshan Prasark					
Consumer No. : 174462986503					
Utility : MSEDCL					
Tariff : 073/ LT-X B I 0-20 KW Pub Ser Oth					
Contract Demand (KW) : 10 KW					
50% Of Contract Demand (KW) : 5 KW					
Month	**Import (KWh)**	**Export (KWh)**	**Billed KWh**	**Bill (Rs)**	**Rate (Rs./kWh)**
Jan 19	0	0	765	6447.78	8.41
Feb 19	925	350	575	4483.35	7.79
Mar 19	4507	1008	3499	31243.46	8.92
Apr 19	702	634	68	767.69	11.28
May 19	909	617	292	2441.55	8.36
Jun 19	1895	0	1895	17226.088	9.09
Jul 19	1484	1683	0	720	720
Aug 19	1774	0	1575	13319.91	8.45
Sep 19	1384	50	1334	12077.95	9.05
Oct 19	1301	105	1196	11088.31	9.26
Nov 19	1104	0	1104	10491.02	9.50
Dec 19	932	170	762	6878.21	9.02
Average	**1537**	**419**	**1088**	**9765**	**9.01**

Below graph shows the monthly import, export, billed unit consumption


Import Units (KWh)
5000
4000
3000
2000
1000
0
Jan-19
Feb-19
Mar-19
Apr-19
May-19
Jun-19
Jul-19
Aug-19
Sep-19
Oct-19
Nov-19
Dec-19
Import Units (KWh)


Export Units(Kwh)
4000
3500
3000
2500
2000
1500
1000
500
0
Jan-19
Feb-19
Mar-19
Apr-19
May-19
Jun-19
Jul-19
Aug-19
Sep-19
Oct-19
Nov-19
Export Units(Kwh)


Billed (KWh)
4000
3500
3000
2500
2000
1500
1000
500
0
Jan-19
Feb-19
Mar-19
Apr-19
May-19
Jun-19
Jul-19
Aug-19
Sep-19
Oct-19
Nov-19
Billed (KWh)

1.2 Observations

- Monthly average improt energy consumption is 1537.90 units
- Monthly average export energy consumption is 419.72 units
- Monthly average billed energy consumption is 1088.75 units
- Monthly average electricity bill is 9765.44Rs
- Avg. unit rate is 9.01 Rs./kWh

1.3 Connected Load List – Lighting

Below are the some actual site photographs of LED light installation.

Area		Type of Light (LED/	% Use of LED Lights	Total Qty.	Total Wattage	Daily Running Hrs.	Monthly Working Days	Monthly kWh
Administrative office	G-1							
a) Board room	G-1	LED	20	8	160	4	24	15.36
b) Reception Desk with waiting room	G-1	LED	20	2	40	6	24	5.76
c) Principal Cabin	G-1	LED	20	8	160	6	24	23.04
d) Account section	G-1	LED	20	3	60	6	24	8.64
e) pantry	G-1	LED	20	2	40	6	24	5.76
Pharmaceutical chemistry Lab-	G-2	FTL	40	5	200	8	24	38.4
Organic Chemistry Lab	G-3	FTL	40	5	200	8	24	38.4
Pharmaceutical Analysis	G-4	FTL	40	5	200	8	24	38.4
Machine Room	G-5	FTL	40	4	160	8	24	30.72
PG Research lab	G-6	FTL	40	6	240	8	24	46.08
Boy's common room with attached toilet	G-7	FTL	40	2	80	6	24	11.52
P.G Pharmaceutics lab	G-8	FTL	40	6	240	8	24	46.08
P.G Quality assurance technique lab	G-9	FTL	40	6	240	8	24	46.08
Staff room		FTL	40	5	200	8	24	38.4
a) Chemistry Lab	G-10	FTL	40	4	160	8	24	30.72
b) P,Cology Lab	G-11	FTL	40	4	160	8	24	30.72

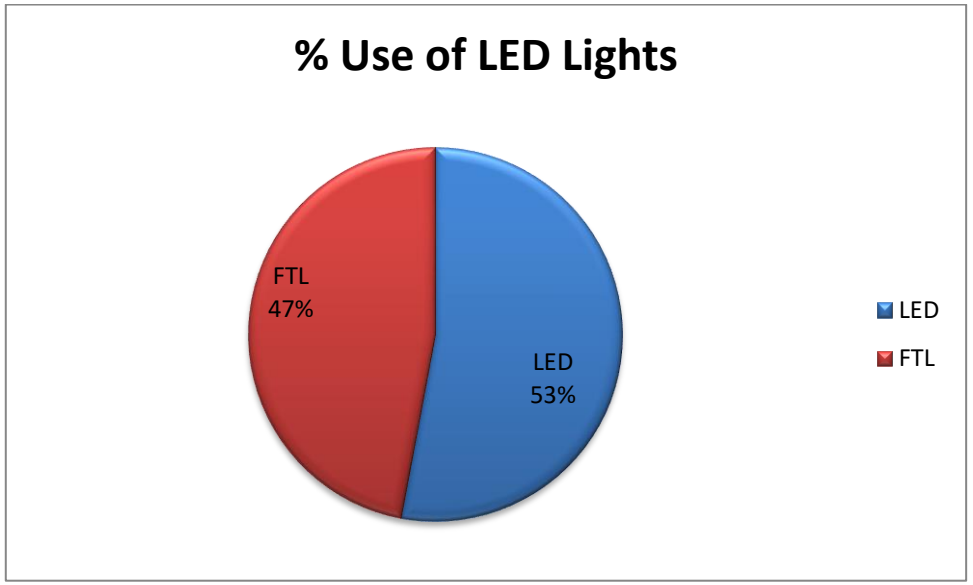
Area		Type of Light (LED/	% Use of LED Lights	Total Qty.	Total Wattage	Daily Running Hrs.	Monthly Working Days	Monthly kWh
Animal House	F-12	FTL	40	6	240	8	24	46.08
Store Department For chemical	F-13	FTL	40	6	240	8	24	46.08
IQAC Cell	F-14	FTL	40	4	160	8	24	30.72
Stationary room	F-15	FTL	40	4	160	8	24	30.72
Staff room Pharmaceutics-I	F-16	FTL	40	4	160	8	24	30.72
P.G Tutorial Room-I	F-17	FTL	40	4	160	8	24	30.72
P.G Tutorial Room-II	F-18	FTL	40	4	160	8	24	30.72
Sick Room-I	F-19	FTL	40	4	160	8	24	30.72
Girls common room with attached toilet Block	F-20	FTL	40	4	160	8	24	30.72
Computer Lab	F-21	FTL	40	4	160	8	24	30.72
U.G Instrument Lab(Analytical)	F-22	FTL	40	4	160	8	24	30.72
Pharmaceutics Staff room	F-23	FTL	40	2	80	8	24	15.36
Pharmaceutics HOD cabin	F-24	FTL	40	2	80	8	24	15.36
Pharmaceutics Lab-I	F-25	FTL	40	4	160	8	24	30.72
Pharmaceutics Lab-II (Microbiology) with Aseptic Cabin	F-26	FTL	40	4	160	8	24	30.72
UG Class room-I	S-27	LED	20	6	120	8	24	23.04
UG Class room-II	S-28	LED	20	6	120	8	24	23.04

Area		Type of Light (LED/	% Use of LED Lights	Total Qty.	Total Wattage	Daily Running Hrs.	Monthly Working Days	Monthly kWh
Exam Department	S-29	LED	20	5	100	8	24	19.2
Academic Department	S-30	LED	20	4	80	8	24	15.36
UG Class room-III	S-31	LED	20	6	120	8	24	23.04
UG Class room-IV	S-32	LED	20	6	120	8	24	23.04
NSS Department	S-33	LED	20	2	40	8	24	7.68
Library	S-34	LED	20	8	160	8	24	30.72
Lunch room (Boys lunch Box)	S-35	LED	20	6	120	8	24	23.04
Housekeeping room	S-36	LED	20	6	120	8	24	23.04
Lunch room (Girls lunch Box)	S-37	LED	20	6	120	8	24	23.04
Seminar Hall	T-38	LED	20	12	240	8	24	46.08
Indoor –Sport room	T-39	LED	20	6	120	8	24	23.04
Pharmacognasy Lab-I	T-40	LED	20	6	120	8	24	23.04
Pharmacognasy Lab-II	T-41	LED	20	6	120	8	24	23.04
Pharmacology Lab	T-42	LED	20	6	120	8	24	23.04
H.A.P Lab	T-43	LED	20	6	120	8	24	23.04
Total				**238**	**7000**			**1310**

Percentage Wise Distribution of Lighting

Out of 238 tube lights, 112 nos. lights are of FTL lights and 126 are LED lights, below table and pie chart shows the % contribution of LED lights in total requirement

Type of Light	Total Nos.	% Use
LED	126	53%
FTL	112	47%
Total	238	



1.4 Connected Load List –Ceiling Fan

Area		Watt	Total Qty.	Daily Running Hrs.	Monthly Working Days	Monthly kWh
Administrative office	G-1					
a) Board room		75	2	4	24	14.4
c) Reception Desk with waiting room		75	2	6	24	21.6
d) Principal Cabin		75	2	6	24	21.6
e) Account section		75	2	6	24	21.6
e) pantry		75	1	6	24	10.8
Pharmaceutical chemistry Lab-	G-2	75	3	4	24	21.6
Organic Chemistry Lab	G-3	75	3	8	24	43.2
Pharmaceutical Analysis	G-4	75	3	8	24	43.2
Machine Room	G-5	75	2	8	24	28.8
PG Research lab	G-6	75	2	8	24	28.8
Boy's common room with attached toilet	G-7	75				0
P.G Pharmaceutics lab	G-8	75	2	8	24	28.8
P.G Quality assurance technique lab	G-9	75	2	8	24	28.8
		75				0
Staff room		75				0
a) Chemistry Lab	G-10	75	3	8	24	43.2
b) P,Cology Lab	G-11	75	2	8	24	28.8
Animal House	F-12	75	1	8	24	14.4
Store Department For chemical	F-13	75	2	8	24	28.8
IQAC Cell	F-14	75	1	8	24	14.4
Stationary room	F-15	75	1	8	24	14.4
Staff room Pharmaceutics-I	F-16	75	1	8	24	14.4

Area		Watt	Total Qty.	Daily Running Hrs.	Monthly Working Days	Monthly kWh
P.G Tutorial Room-I	F-17	75	1	8	24	14.4
P.G Tutorial Room-II	F-18	75	1	8	24	14.4
Sick Room-I	F-19	75	1	8	24	14.4
Girls common room with attached toilet Block	F-20	75				0
Computer Lab	F-21	75	3	8	24	43.2
U.G Instrument Lab(Analytical)	F-22	75	1	8	24	14.4
Pharmaceutics Staff room	F-23	75	1	8	24	14.4
Pharmaceutics HOD cabin	F-24	75	1	8	24	14.4
Pharmaceutics Lab-I	F-25	75	3	8	24	43.2
Pharmaceutics Lab-II (Microbiology) with Aseptic Cabin	F-26	75	3	8	24	43.2
	F-26	75				0
UG Class room-I	S-27	75	5	8	24	72
UG Class room-II	S-28	75	5	8	24	72
Exam Department	S-29	75	2	8	24	28.8
Academic Department	S-30	75	1	8	24	14.4
UG Class room-III	S-31	75	5	8	24	72
UG Class room-IV	S-32	75	5	8	24	72
NSS Department	S-33	75	1	8	24	14.4
Library	S-34	75	3	8	24	43.2
Lunch room (Boys lunch Box)	S-35	75	1	8	24	14.4
Housekeeping room	S-36	75	1	8	24	14.4
Lunch room (Girls lunch Box)	S-37	75	1	8	24	14.4
Seminar Hall	T-38	75	10	8	24	144
Indoor –Sport room	T-39					0
Pharmacognasy Lab-I	T-40					0

Area		Watt	Total Qty.	Daily Running Hrs.	Monthly Working Days	Monthly kWh
Pharmacognasy Lab-II	T-41					0
Pharmacology Lab	T-42					0
H.A.P Lab	T-43					0
Total			**92**			**1263**

2 Energy Saving Measures

Replacement of conventional ceiling fans with energy efficient ceiling fans

Recommendation 1- Replace existing FTL (Fluorescent Tube lights) 40 W tube lights with 20W energy efficient LED lights

- Total No. of FTL present = 112 Nos.
- Total No. of FTL to be replaced= 112 Nos.
- Present Energy Consumption = 856 kWh
- Expected Energy Consumption = 428 kWh
- Total Energy Saved per Month = 856-428= 428 kWh
- Total Saving = 428kWh
- Monetary Savings = Rs.3895
- Expected Investment = Rs.33,,600
- Simple Payback Period = 8.6 Months

Recommendation 2 - Replace existing 75 watt conventional ceiling fans with 40 watt energy efficient fans

- Total No. of Ceiling fans present = 112 Nos.
- Total No. of Ceiling fans to be replaced= 112 Nos.
- Present Energy Consumption = 1263 kWh
- Expected Energy Consumption = 674 kWh
- Total Energy Saved per Month = 1263-674= 589 kWh
- Total Saving = 589 kWh
- Monetary Savings = Rs.5349
- Expected Investment = Rs.201600
- Simple Payback Period = 38 Months

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3 Requirements of NAAC

3.1 Alternative Energy Initiative

Percentage of power requirement met by renewable energy sources

= (Power requirement met by renewable energy sources / Total power requirement) X 100

= (4617/16917) X 100

= 27.29%

3.2 Percentage of lighting power requirement met through LED bulbs

= (Lighting power requirement met through LED bulbs / Total lighting power requirement) X 100

= (126/238) X 100

= 52.9 %

4 Green Audit

Green audit was initiated with the beginning of 1970s with the motive of inspecting the work conducted within the organizations whose exercises can cause risk to the health of inhabitants and the environment. It exposes the authenticity of the proclamations made by multinational companies, armies and national governments with the concern of health issues as the consequences of environmental pollution. It is the duty of organizations to carry out the Green Audits of their ongoing processes for various reasons such as; to make sure whether they are performing in accordance with relevant rules and regulations, to improve the procedures and ability of materials, to analyze the potential duties and to determine a way which can lower the cost and add to the revenue. Through Green Audit, one gets a direction as how to improve the condition of environment and there are various factors that have determined the growth of carrying out Green Audit. Some of the incidents like Bhopal Gas Tragedy (Bhopal; 1984), Chernobyl Catastrophe (Ukraine; 1986) and Exxon-Valdez Oil Spill (Alaska; 1989) have cautioned the industries that setting corporate strategies for environmental security elements have no meaning until they are implemented.

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.

The intention of organizing Green Audit is to upgrade the environment condition in and around the institutes, colleges, companies and other organizations. It is carried out with the aid of performing tasks like waste management, energy saving and others to turn into a better environmental friendly institute.

4.1 Goals of Green Audit

- The objective of carrying out Green Audit is securing the environment and cut down the threats posed to human health.
- To make sure that rules and regulations are taken care of
- To avoid the interruptions in environment that are more difficult to handle and their correction requires high cost.
- To suggest the best protocols for adding to sustainable development

4.2 Benefits of Green Audit

- It would help to shield the environment
- Recognize the cost saving methods through waste minimizing and managing
- Point out the prevailing and forthcoming complications
- Authenticate conformity with the implemented laws
- Empower the organizations to frame a better environmental performance
- It portrays a good image of a company which helps building better relationships with the group of stakeholders
- Enhance the alertness for environmental guidelines and duties

5 Initiatives by College

5.1 Tree Plantation

Tree-planting is the process of transplanting tree seedlings, generally for forestry, land reclamation, or landscaping purpose. It differs from the transplantation of larger trees in arboriculture, and from the lower cost but slower and less reliable distribution of tree seeds.

In silviculture the activity is known as reforestation, or afforestation, depending on whether the area being planted has or has not recently been forested. It involves planting seedlings over an area of land where the forest has been harvested or damaged by fire, disease or human activity. Tree planting is carried out in many different parts of the world, and strategies may differ widely across nations and regions and among individual reforestation companies. Tree planting is grounded in forest science, and if performed properly can result in the successful regeneration of a deforested area. Reforestation is the commercial logging industry's answer to the large-scale destruction of old growth forests, but a planted forest rarely replicates the biodiversity and complexity of a natural forest.

Because trees remove carbon dioxide from the air as they grow, tree planting can be used as agro engineering technique to remove $CO_2$from the atmosphere. Desert greening projects are also motivated by improved biodiversity and reclamation of natural water systems, but also improved economy and social welfare due to increased number of jobs in farming and forestry.

College has planted the trees campus area to make it more environments friendly. Below are the some records, photos which shows the

Below are the details of tree plantation

Name of tree	Quantity
Coconut	6
Alstoni (Saptparni)	1
Delonixregia (Gulmohor red)	1
Azaddirachtaindica (Neem)	1
Bottle Brush	1
Bottle palm	55
Ficusreligiosa	2
Date palm	2
Jackfruit	4
Delonixregia (Gulmohor yellow)	1
Samaneasaman (rain tree)	2
Kadamba	2
Bauhinda (kanchan)	3
Plumeria (chafa)	4
Betel nut tree (supari)	5
Ficusrelingixo (pipal)	1
Mangiferaindica (mango)	2
Fishtail palm	24
Sankrantvel	1
Mosa palm	3
Zandu palm	4
Banyan tree (vad)	2
Basil	1
SaracaAsoca	40
Almond	12
Sagwan	2
Hibiscus	7
JusticiaAdhatoda (Adulsa)	2
Tamarind (Chinch)	2
Bael (Bel)	1
AnnonaReticulata (Ramphal)	1
Ravenalamadagascariensis (Fanas)	1
Curry Tree (Kadipatta)	10
Phyllanthusemblica (Awala)	1
Blue Mountain (Nilgiri)	1

5.2 Solar PV System

College has installed 10 kW solar PV plant to generate the electricity through solar energy. Solar power plant is generating almost 4617 units annually which results in reduction of 3.73 Tons of CO_2 emission

Following are the some actual images of installed solar PV plant

5.3 Rain Water Harvesting

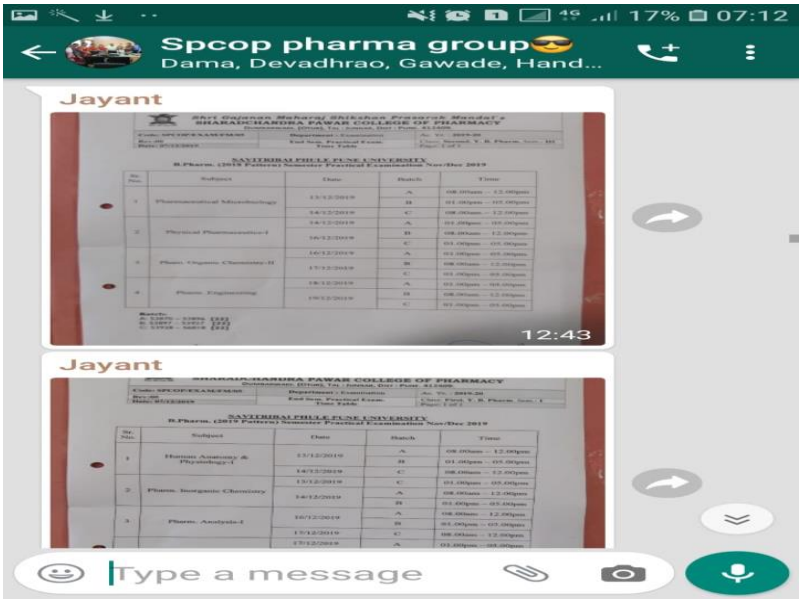
Rain water which is accumulated on terrace of different building is getting utiliesed by means of rain water harvesting system. Water from the various buildings is transferred to the main well and bore to recharge the water level. Following are the same images of actual system

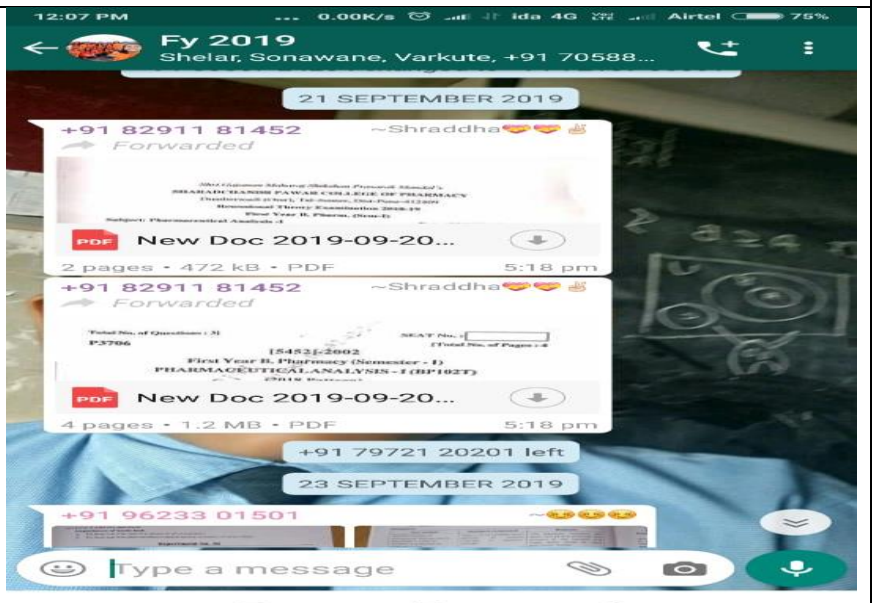
5.4 Paper Free Campus

Concept of plastic free and paper free campus can be successfully implemented in the college. Management need to take initiative to make the policy for same. It will help to do reduce the use of plastic and papers which will be a good contribution towards sustainable environment

Attendance of students is being taken digitally which avoids the use of papers/registers, etc.

Below are the some software snapshots which shows the digital attendance of student





5.5 E Waste Management

Electronic waste or e-waste describes discarded electrical or electronic devices. Used electronics which are destined for reuse, resale, salvage, recycling, or disposal are also considered e-waste. Informal processing of e-waste in developing countries can lead to adverse human health effects and environmental pollution.

Electronic scrap components, such as CPUs, contain potentially harmful components such as lead, cadmium, beryllium, or brominates flame retardants. Recycling and disposal of e-waste may involve significant risk to health of workers and communities in developed countries and great care must be taken to avoid unsafe exposure in recycling operations and leaking of materials such as heavy metals from landfills and incinerator ashes.

College has made the agreement with authorized E waste contractor to collect the all generated E –waste from college campus

Below is the photograph of agreement

सदरचा मुद्रांक लिव्ह ॲण्ड लायसेन्ससाठी नाही.

भारतीय गैर न्यायिक

एक सौ रुपये

Rs. 100

रु. 100

ONE HUNDRED RUPEES

सत्यमेव जयते

भारत INDIA

INDIA NON JUDICIAL

महाराष्ट्र MAHARASHTRA © 2014 © LU 743642

अनुक्रमांक : ५७८ दिनांक : 9/2/2015

रुपये : 100/-

मुद्रांक कोणत्या कारणासाठी वापरावयाचा आहे प्रतिज्ञा पत्र

मुंबई मुद्रांक अधिनियम अनुच्छेद क्र.

मुद्रांक घेणाऱ्याचे संपूर्ण नाव शरदचंद्र पवार इन्स्टिट्यूट

संपुर्ण पत्ता ऑफ फार्मसी ओतूर

हस्ते व्यक्तीचे संपूर्ण नांव प्रमोद कृ. शिंदे

पत्ता

Shinde

पत्रांक धारकाची/हस्ते व्यक्तीची सही

05 FEB 2015

उपकोषागार अधिकारी, जुन्नर

सौ. स्वाती राजेंद्र पन्हाळे

सौ. स्वाती राजेंद्र पन्हाळे

परवानाधारक मुद्रांक विक्रेता, ओतूर

ला. नं. २२००७००८ वदाक शिक्षा परवाना

दि. ३१/०३/२०१५ पर्यंत नुतनीकृत

AGREEMENT FOR E-WASTE DISPOSALS

The Agreement executed at Pune on this 15th Day of Feb. 2015by between

Sharadchandra Pawar College of Pharamacy. and having its registered address, At – Dumbarwadi, Tal – Junnar, Dist- Pune, Pincode – 410504. at (which expression shall mean and include its successors and assigns) of the first part

And

KULDEEP E-WASTE DISPOSALS PUNE

M/s. Kuldeep E-Waste Disposals ,having business address at Sr.no.66/18/4, Near Ayappa Swami Temple Santosh Nagar, Katraj,Pune-411046 (hereinafter referred to as " Service Provider" which expression shall mean and include its partners, successor's and assigns) of the other party.

WHEREAS Sharadchandra Pawar College of Pharamacy. and having its registered address, At – Dumbarwadi, Tal – Junnar, Dist- Pune, Pincode – 410504. and it desires to engage M/s Kuldeep E-Waste Disposals to provide e-waste collection,carriage and disposal services to Sharadchandra Pawar College of Pharamacy and

WHEREAS the "Service Provider "has expressed its capability and willingness to offer the above said services to Sharadchandra Pawar College of Pharamacy.

Therefore, the parties do hereby agree and enter into this agreement on the following terms and conditions:

1. The Service Provider hereby agrees to provide services to Sharadchandra Pawar College of Pharamacy. of efficient collection and carriageof e-waste.
2. The Service Provider shall visit Sharadchandra Pawar College of Pharamacy.on mutually agreed time interval, if required by Sharadchandra Pawar College of Pharamacy, and provide services of e-waste disposal as per government norms or local laws.
3. The Service Provider shall make an entry in Sharadchandra Pawar College of Pharamacy Log book for its visits, whichshall be required to be countersigned by an authorized officer Sharadchandra Pawar College of Pharamacy.
4. The Service Provider will pay to Sharadchandra Pawar College of Pharamacy. as per mutually agreed price including all applicable taxes of e-waste. Immediate payment shall be Sharadchandra Pawar College of Pharamacy. on collection of E waste as per agreed rate. Any increase in rate shall be communicatedin writing.
5. It shall be the responsibility of the Service Provider to bring in with him the equipment's, instruments, tools, staff and required hardware to be used by him in fulfilling his duties under this agreement and shall, in no manner, be responsible for the cost, maintenance or reimbursement to the Service Provider for those equipment's etc.
6. The service provider shall perform degaussing of magnetic medial (Hard disk drive), physical destruction of solid-state media in presence of IT representative of Sharadchandra Pawar College of Pharamacy at service providers premises.
7. The service provider will provide storage/HDD data Destruction certificate to the Sharadchandra Pawar College of Pharamacy.

8. The Service Provider shall take all statutory and regulatory approvals required under various labor, environmental or local laws applicable for providing the services under this agreement and Sharadchandra Pawar College of Pharamacy. shall not be, in any manner, responsible for any non-compliance on the part of the Service Provider.

9. The Service Provider shall at all time work diligently and efficiently and make endeavours to perform its duties in an environment-friendly manner and dispose off the e-waste as per the guidelines issued by MPCB and ensure the safety and health of the people/ environment/ surrounding of the area where it would be carrying on its work under this agreement.

10. The Service Provider shall provide competent personnel/staff having good skill, experience and expertise in e-waste collection, carriage and disposal services. The Service Provider shall be liable to the Sharadchandra Pawar College of Pharamacy . for the conduct and behaviour of the personal/ staff provided by it.

11. The Service Provider shall bring its own vehicle; use all the safety equipments/ safety measures required for providing its services under this agreement and Sharadchandra Pawar College of Pharamacy. shall be in no manner responsible for any untoward incident happening due to failure because of Service Provider to follow Safety measures.

12. Sharadchandra Pawar College of Pharamacy . shall be in no manner responsible for any situation arisingdue to failure in taking precautions/ safety measures; using safety equipment's or for the happening of any untoward incident or any other physical or health related harm done to the personnel or property of Sharadchandra Pawar College of Pharamacy. or the Service Provider.

13. Service provider should be paid charges as per there provided quotation against E-waste material.

14. This contract shall be valid for one yearand shall be liable to be terminated by either party with a notice of one month or may be extended by the mutual agreement of the parties in writing.

15. The Service Provider shall not transfer or assign this Agreement or any right or obligation under it, by operation of law or otherwise, to any other entity without Sharadchandra Pawar College of Pharamacy's written permission and any such attempted assignment will be void abinitio.

16. In the event of any dispute or difference arising out of this Agreement between the parties hereto, the same be referred to an Arbitrator. The parties do hereby agree that the Partner of Kuldeep E-waste Disposals shall be the Arbitrator. The venue of the Arbitration shall be in Pune.

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17. Both parties under this agreement shall maintain all statutory records required under applicable statutes.

18. It will be the sole responsibility of Service Provider to comply with the guidelines issued by MPCB under E-Waste (Management) Rules2016.and conditions mentioned in Letter of Authorization issued to Service Provider by MPCB vide letter bearing authorization number BO/MPCB/RO(HQ)/B-1710000047.

19. This agreement shall be governed by the laws of India. All matters arising out of the agreement shall be subject to the jurisdiction of Courts at Pune, India only.

20. With the signing of this agreement, all prior understandings expressed or implied and agreements verbal or written stands terminated and its effects stand null and void.

21. This agreement will be valid for five years from issued date.

IN WITNESS WHEREOF, the authorized representatives of the parties have hereto set their hands upon the date, month and the year first above written.

For – Sharadchandra Pawar College of Pharamacy. For KULDEEP E-WASTE DISPOSALS

Authorised Signatory

(Designation) (Proprietor)

PRINCIPAL
Sharadchandra Pawar College of Pharmacy
Dumbarwadi (Otur), Tal. Junnar, Dist. Pune

Ashok Bharaskar

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5.5 Environmental Trip

A) Academic year (2019-20)

To undertake the environmental field work which is a part of EVS syllabus a visit organized by college to Maharashtra Shasan Junnar Vanvibhag, Dingore? This is near to Dingore village.

This place is near about twenty five km away from our college. This group consist of first year B. pharm students. After reaching the destination different groups were formed to study the forest ecosystem as well as various animals and bird's habitat.

The forest is divided in three parts such as Charakvan, Nakshatrvan and forest area. It also contains a small Matibandhara and water tanks. The students were enthusiastic about eagerly collecting samples of flora and the fauna from the forest.

Teacher explained about various natural resources available from forest. Forest also contains one small compost manure preparation system which is also helpful information to our students. For each of the new findings students were eagerly taking photographs which would help them in preparing reports.

Environment field trip is a part of curriculum to produce awareness to student about natural resources, energy conservation, pollution, nuclear hazards and disaster management to understand their responsibilities toward the nature. Forest contains various medicinal plants which are we labels with their name and a use, these boards gives various helpful information to our students.

B) Academic year (2018-19)

Sharadchandra Pawar College of pharmacy Otur arranged the environment field trip for First year B. Pharmacy students at Shivneri Fort. College environment club arranged this trip for the purpose of plastic collection and making the fort clean.

It is an environmental field work which is a part of EVS syllabus. On this occasion Principle Sir shared his view on Plastic Waste recycling. He also shared his ideas and techniques for how to reduce the use of plastic and recycle it. Students collected the plastic bottles, plastic bages and other plastic material.

After reaching the destination different groups were formed to collect the plastic bottles and other plastic material. In reality, plastic is not a problem. The problem is irresponsible human behaviour is disposing of plastic. If disposed of sensibly, it can actually do well to the environment. But people or tourist who come to visit fort come and enjoy the place and make it dirty by throwing plastic bottle, plastic wrappers and many more.

So we motivated students to collect plastic from the area and make it plastic free. Our students also worked well and collected all the material and then given for further process

C) Academic year (2017-18) :

To undertake the environmental field work this is a part of EVS syllabus a visit organized by college to Bhimashankar.

Bhimashankar is a prominent pilgrimage centre located in the ghat region of the Sahyadri hills. The densely forested area is spread over an area of 120 sq. km on the Western Ghats. This place is mainly famous for endemic and pandemic animals and bird species including the Indian Giant Squirrel.

This group consist of S.Y. B pharm students. The purpose of the visit was to study the forest ecosystem and study related medicinal plant species.

The students were enthusiastic about forest visit, the area was covered with thick vegetation students were eagerly collecting samples of medicinal plant for Herbarium purpose. The students also documented regarding sources of plastic pollution nearby area.

After field study, food was served to student. Following lunch they enjoyed songs as arrangements for the music was also there.

The event went well and it was great learning experience for the students.

D) Academic year (2016-17):

Sharadchandra Pawar College of pharmacy Otur arranged the environment field trip for second year B. Pharmacy students at Avasari Ghat.

The purpose of the visit was to study the forest ecosystem and study related medicinal plant species.

Environment field trip is a part of curriculum to produce awareness to student about natural resources, energy conservation, pollution, nuclear hazards and disaster management to understand their responsibilities toward the nature.

The students gained a thorough exposure to different ecosystems, plant species, and their uses. Students were explained regarding extinction of leopards in India and also existence of Rehabilitation centre for leopards.

E) Academic year (2015-16)

Sharadchandra Pawar College of pharmacy Otur arranged the environment field trip for Second year B. Pharm students at Shivneri Fort.

A total number of sixty students were taken for the field work.

The purpose of visit was to study the various natural resources available nearby forest and to collect plastic material on Fort

F) Academic year (2014-15):

Sharadchandra Pawar College of pharmacy Otur arranged the environment field trip for Second year B. Pharm students at Maharashtra Shasan Junnar Vanvibhag, Dingore. It is an environmental field work which is a part of EVS syllabus. This forest is located near to Dingore village. Mainly it is divided in three parts such as Charakvan, Nakshatrvan and forest area.

A total number of fifty five students were taken for the field work. The purpose of the visit was to study the forest ecosystem. After reaching the destination different groups were formed. The students were enthusiastic about eagerly collecting samples of various parts of medicinal plants which is helpful information to them