



7.1.3 Quality audits on environment and energy regularly undertaken by the Institution and any awards received for such green campus initiatives:

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

**PRINCIPAL**  
**VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES**  
Rayanigudem(V),-508 376, Suryapet (Mdl),  
Suryapet Dist, Telangana.



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## GREEN AUDIT

The main objective of this green audit is to assess the environmental quality and the management strategies being implemented in vikas college of Pharmaceutical sciences.

The following members were deputed by the Head of the Institute for the committee for energy audit. This committee is responsible for the implementation, coordination and monitoring of all the activities under conservation of energy.

### Committee members:

S.No	Position	Name of the staff
1	Coordinator	Dr.M.kishore
2	Coordinator	Dr.P.Naresh
3	Coordinator	Dr.G.Neelamma
4	Member	Dr.B.Bhadru
5	Member	G.Natesh
6	Member	D.vinay kumar
7	Member	N.shanthi

- The deputed committee is responsible for the strict implementation and monitoring of the energy conservation and maintenance of green energy in the campus.
- The committee should conduct regular meetings and circulate the same among the faculty members, non-teaching staff and the students and also responsible to solve any doubts that arise during the implementation.

### Objectives:

- To assess the quality of the water and soil in VCPS
- To monitor the energy consumption pattern of the college.
- To calculate the amount of liquid and solid waste produced in the campus and to implement waste management strategies.
- To assess the carbon foot print of the college.
- To identify gaps And make proposals to enhance College's green Campus status.

**PRINCIPAL**

VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem(V),-508 376, Suryapet (Mdl)  
Suryapet Dist, Telangana.



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## GREEN AUDITING TARGETS:

The idea of an eco-campus is primarily concerned with the sustainable usage of energy and water, as well as the reduction of waste generation, and also economic efficiency. All of these metrics are evaluated as part of the "Green Auditing" process. Eco-campus focuses on reducing the institute's electricity and water use, reducing waste to landfill, and integrating the environmental considerations into all contracts and facilities that are thought to have major environmental impacts.

### Water Auditing:

Now a day's groundwater depletion and water contamination are occurring at an unprecedented rate. Hence it is important to assess the quality and usage of water in the campus. Water auditing is performed to assess raw water intake facilities and to determine the facilities for water treatment and reuse. The concerned auditor examines the relevant approach that can be followed and applied to balance the demand and availability of water.

**Energy Auditing:** Energy management is a significant element of sustainable development of the campus and is also related to the campus's carbon footprint. Energy auditing is concerned with recycling and approaches to minimize demand that is related to environmental deterioration. The concerned auditor investigates the appropriate solution that can be taken and implemented to balance the energy supply.

### Green Campus Auditing Management:

Trees play a significant ecological role in the urban ecosystem, and also contribute to better public health and provide aesthetic benefits to communities. A single mature tree can consume upto 48 pounds of CO<sub>2</sub> from the atmosphere and release it as oxygen in a single year. The amount of oxygen produced by the trees of the campus is beneficial to the campus's residents.

### Carbon Footprint Auditing:

The combustion of fuels has a larger effect on the atmosphere due to the release of greenhouse gases such as carbon dioxide, nitrogen, nitrous oxide, and ozone. Carbon dioxide is the most abundant of these gases, accounting for 402 ppm of the earth's atmosphere. The primary source of carbon emissions on campus is vehicular emission. So to assess this, method of transportation that is practiced in campus is important.

**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem (V), -508 376, Suryapet (Mdl),  
Suryapet Dist, Telangana



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## METHODOLOGY ADOPTED:

**Energy, waste management and Carbon foot print analysis Survey:** The audit team assessed the college's energy consumption pattern as well as waste generation, disposal and treatment facilities with the assistance of teachers and students. The monitoring was carried out using a detailed questionnaire survey process. The team monitored various college services, categorized different types of appliances and utilities (lights, taps, toilets, fridges, etc.), as well as measured usage per item (Watts indicated on the appliance or measuring water from a tap), and identified specific *consumption* patterns (including how frequently an appliance is used) and their impacts. Staff and students were interviewed to collect information about the use, frequency, and general characteristics of various appliances. Data was gathered in sectors such as energy, waste, green, carbon footprint, and water use.

## GREEN AUDIT REPORT

### Water quality report:

Parameters	Bore well water	Tap water-1	Tap water-2	Standard value (BIS)
Acidity (mg/l)	52	16	18	200
Alkalinity (mg/l)	18	14	12	200
Dissolved Oxygen (mg/l)	6.2	7.6	7.8	6-8
Hardness (Total)	Nil	Nil	Nil	200
Conductivity ( $\mu$ s)	136.5	157.4	162.9	200
Chloride (mg/l)	32.6	26.8	24.3	250
pH	5.8	6.9	6.4	6.5-8.5
Salinity (ppt)	0.076	0.085	0.064	<0.5 ppt
Total coliform	Nil	Nil	Nil	Nil

  
**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem (V), -508 376, Suryapet (Mdl),  
Suryapet Dist, Telangana.



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE


Email : vikassuryapet@gmail.com

## Water management:

Parameters	response
Source of water	Bore well
No of motors	2
Horse power- motor	7HP-1, 3HP-1
No of water tanks	4
No of taps	120
Capacity of tanks	10000 L
Quantity of water pumped everyday	15000 L
Water usage for gardening	2000 L
Availability of rain water harvest	yes
Any water management plan implemented	Water managemnt audit conducted

## Soil Quality assessment:

Parameter	Location ( ground)
pH	7.3
Total kjeldhal Nitrogen(mg/kg)	2.8
Total organic carbon(%)	1.6
Phosphate (mg/kg )	0.3

  
PRINCIPAL  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem(V),-508 376, Suryapet (Mdl).  
Suryapet Dist, Telangana.



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## Energy Audit Report:

Electrical appliances/instruments	Number	Power (W/Units)	Total power	kW	Operation /day	kW/hr	No of days in months	Total Consumption/month
LED Tube lights	83	18	1494	1.494	4	5.976	25	149.4
Projector	5	280	2800	2.800	1	2.800	20	28.0
Fan	50	60	5240	5.240	4	36.96	20	52.40
computers	60	250	15000	15.000	4	78.00	20	150.0
Printers	10	50	500	0.5	1	0.500	25	5.0
UPS	5	1000	5000	5.00	5	25.00	25	50.0
A/C	5	3000	25000	25.0	1	31.50	20	25.0
Refrigerator	5	100	1000	1.0	24	28.80	30	10.0
Oven	5	1500	7500	7.500	2	15.00	10	15.0
Exhaust fan	19	32	608	0.609	4	2.432	25	60.8
Centrifuge	5	850	4250	4.250	1	4.250	8	34
Autoclave	2	1700	3400	3.400	1	3.400	8	27.2
Hplc	2	260	520	0.520	1	0.520	20	10.4
Uv	3	220	660	0.660	2	1.320	10	13.2
Dissolution apparatus	3	220	660	0.660	2	1.320	10	13.2
Incubator	1	220	220	0.220	1	0.220	10	2.2
Tablet compressor	2	480	960	0.960	1	0.960	5	4.8
Ball mill	1	380	380	0.380	1	0.380	5	1.9
Pan coating	1	220	220	0.220	1	0.220	5	1.1
Tablet punching machine	1	220	220	0.220	1	0.220	5	1.1
Homogeniser	1	220	220	0.220	1	0.220	5	1.1

**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Rayanigudem (V), 508 376, Suryapet, Dist. Nalgonda, T.S.



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES


Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## List of plants in campus:

s.no	Common name	Scientific name
1	Annona	Annona reticulate
2	Banana	Muca paradisica
3	Pomegranate	Pinika granatum
4	Aloe	Aloe barbadensis miller
5	Thanikkaya	Terminaliya bellirika
6	Hibiscus	Hibiscus rosasinensis
7	Gaja nimma	Cotrus penivesiculata
8	Phyllanthus	Phyllanthus neruri
9	Rakta chandanam	Pterocorpus santaninus
10	Mango	Mangifera indica
11	Shankapushpi	Convolvulus phericalis
12	Shatavari	Asparagus racemosus
13	Onion	Allium cepa
14	Vasaka	Justicia adhatoda
15	Saraswati leaf	Centella asiatica
16	Kharjura	Phoenix dactilifera
17	Bamboo	Bambusa vulgaris
18	Nandivardhanam	Tabernaemontana divaricata
19	Rauwolfia	Rauwolfia serpentina
20	Drum stick	Moringa oleifera
21	Cinnamon	Cinnamonam verum
22	Clove	Syzygium aromaticum
23	Lemon grass	Cymbopogon citratus
24	Turmeric	Curcuma longa
25	Neem	Azadiracta indica

  
**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem (V), -508 376, Suryapet (Mdl.)  
Suryapet Dist, Telangana



# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

## Carbon foot print analysis:

1. Total no of vehicles used by the stakeholders of the college- 4
2. No of two wheelers used - 4  
Avg distance travelle - 20km  
Avg quantity of fuel used -1L
3. No of cars used – 4  
Avg distance travelle - 20km  
Avg quantity of fuel used -1.5L
4. No of persons using public transportation- 600
5. Amount of fuel used – 60 L
6. No of lpg syinders used -10

## Suggestions and recommendations :

- Overall report remains satisfactory
- Provide separate register for room wise indent.

**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem(V),-508 376, Suryapet (Mdl),  
Suryapet Dist, Telangana.



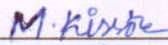

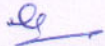

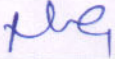
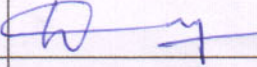
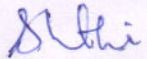
# VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES

Affiliated to Jawaharlal Nehru Technological University Hyderabad  
Permitted by Govt. of A.P. & Approved by AICTE & P.C.I.

RAYANIGUDEM (V) - 508 376, SURYAPET (Mdl.&Dist.), TELANGANA STATE

Email : vikassuryapet@gmail.com

Report generated by:

S.No	Position	Name of the staff	SIGNATURE
1	Coordinator	Dr.M.kishore	
2	Coordinator	Dr.P.Naresh	
3	Coordinator	Dr.G.Neelamma	
4	Member	Dr.B.Bhadru	
5	Member	G.Natesh	
6	Member	D.vinay kumar	
7	Member	N.shanthi	



**PRINCIPAL**  
VIKAS COLLEGE OF PHARMACEUTICAL SCIENCES  
Rayanigudem (V), -508 376, Suryapet (Mdl),  
Suryapet Dist, Telangana.