

# Energy Audit of RBVRR WOMEN'S COLLEGE OF PHARMACY

3-4-343, Barkathpura, Hyderabad - 500027

2022-2023



Prepared by



**M/s KIWIS ECO LABORATORIES PVT LTD.,**  
(Recognized by MoEF, GOI, New Delhi)  
Certified by ISO 9001:2015, ISO 14001:2015 & OHSAS 45001:2018)  
Plot No. 19, ALEAP Industrial Estate, Sy.No.342  
Near Pragathi Nagar, Quthbullapur Mandal  
Rangareddy Dist, Hyderabad, Telangana - 500090  
Tel: +91- 9966661485

## ACKNOWLEDGEMENT

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RBVRR Women's College Of Pharmacy has been working at the forefront since its inception to bring about social change for national and international development by conducting workshops and other extension activities. RBVRR Women's College Of Pharmacy is aware of the needs of the green audit for the maintenance and future development of the campus. In its pursuit of excellence, RBVRR Women's College Of Pharmacy has recognized itself to improve the environmental quality and maintain its unique pristine ecosystem for the future generation of students and all the inhabitants of the campus. Although we have been taking a number of steps to conserve and protect our environment. This report of 2022-23 is the first formal effort to document the results of our investigation and interpret the information of all the required parameters of the Energy audit process. RBVRR Women's College Of Pharmacy aims to take up the policy and efforts at every level to avert ecological catastrophe on a global scale by supporting the climate neutrality goals committed by the Government of India. As a part of this, efforts will take to continuously monitor the sustainability of the academic process by constituting the Energy Audit Committee consisting of faculty members working in this arena to collect basic data of the environmental parameters within the campus so that the environmental issues are resolved within the campus. The Green Audit Committee has tried to identify the current / emerging environmental issues so as to monitor the environmental management practices adopted in the college along with subsequent impact of these on the campus environment.

The Green audit conducted is an external audit that aims towards creating awareness healthy and sustainable environment. Though nascent, the initiative will taken up to foster the concept of environmental sustainability. Hopefully, all stakeholders will pay attention to this report, allowing us to develop a bottom-up approach to addressing future challenges.

*Y.S. Khatu*  
Principal



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This is to certify that the first Energy Audit Report 2022-23 of **RBVRR Women's College Of Pharmacy, Bharkatpura** is an original External audit work conducted by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi)** dated **24-02-2023** on behalf of the terms of agreement with the College. The Green Audit Committee to monitor the environmental management practices adopted in the **RBVRR Women's College Of Pharmacy**, which is in line with the terms of the International Standards of External Auditing.

After going through the report, it is obvious that adequate and appropriate audit procedures were followed for Environmental Quality Audit, Water Audit, Waste Management Audit, and Energy Audit and Carbon Footprint. The gathered evidences support the conclusions reached and contained in this report.

The suggestions and recommendations prescribed and the conclusions derived are quite genuine within the achievable limits, and I understand that RBVRR Women's College Of Pharmacy is competent to fulfil those to meet the Sustainable Development Goals.

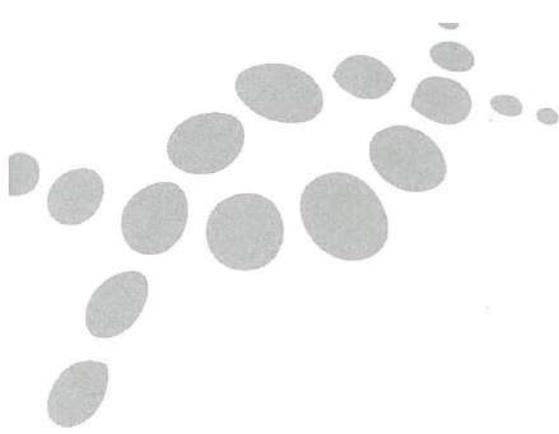
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Principal

**(Dr.-M. Sumakanth)**

RBVRR Women's College Of Pharmacy

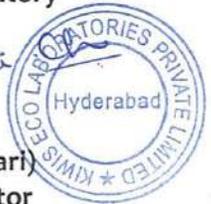




## DECLARATION

Energy Audit Report for **M/s. RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** during **06<sup>th</sup> and 08<sup>th</sup> February 2023** and following Observations were presented below. The Management is proactive towards Green Initiative by Harvesting Solar Energy, Planting Trees, Better water conservation, Waste Management, Carbon Footprint, A continual improvement in Green Initiative is appreciated. We appreciate the efforts of the **M/s. RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** in this regard. This Energy Audit Report has been prepared by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi, ISO 9001:2015,14001:2015)** dated **23-02-2023** is for the use of the Customer with due consideration and skill as per our general terms and conditions of business and the terms of agreement with the customer.

Authorized Signatory

(Ch. Rajani Kumari)  
Managing Director

**KIWIS ECO LABORATORIES PRIVATE LIMITED**

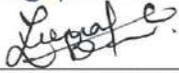
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Plot No. 19, ALEAP Industrial Estate, SY. No's 342, Gajularamaram Village, Quthbullpur Mandal and Municipality, Hyderabad, Ranga Reddy Dist 500 090. Email: [kiwislabhyd@gmail.com](mailto:kiwislabhyd@gmail.com) | Website: [www.ssmntgroup.com/kiwis-eco-labs](http://www.ssmntgroup.com/kiwis-eco-labs). ☎ 040 - 23816333.

CIN NO : U85110TG2013PTC087604

## GREEN AUDIT ASSESSMENT TEAM

## INTERNAL: RBVRR Women's College Of Pharmacy,

Dr. M. Sumakanth, Principal	Chairman	
Dr. A. Krishna Sailaja. IQAC	Member	
Ms. Zeenath Banu	Member	
Dr. Sudha Parimala	Member	
Dr. G. Uma Rani	Member	
Dr. J. Archana	Member	

## EXTERNAL: KIWIS ECO LABORATORIES PRIVATE LIMITED

Dr. Ch. Rajani Kumari Managing Director,	Team Member	
Dr. D. Sivaramakrishna HOD-LAB	Team Member	
Dr. D. Sreekanth Quality Manager	Team Member	
Dr. Nalini Vijayalaxmi Manager-Laboratory	Team Member	
Dr. S. U. B Ramakrishna Sr Chemist	Team Member	

### Energy Audit scope of work

The Energy Audit is carried out in view of assessing all necessary environmental components and their impact on the campus physically by visiting the premises with reference to following.

- ❖ Harvest the Solar Power in the campus, Encourage Renewable Energy usage to reduce the fossil fuel dependency,.

### About the College

RBVRR Women's College of Pharmacy was established in the year 2006 under "Hyderabad Mahila Vidya Sangham" to provide education to women students. The college was self-financed, approved by **PCI, AICTE** and is affiliated to **Osmania University**, accredited by **NBA** for B.Pharmacy Course with an objective to nurture the pharmacy education and to support the healthcare system through skilled Women Pharmacy graduates.

RBVRR Women's College of Pharmacy Institute is one of the leading institutions which have taken a leap forward in the quality professional education. This institution has emerged as a unique centre of academic excellence of higher learning in the field of pharmacy. All the efforts are focused to provide a congenial environment to educate and train girl students into competent professionals and mould them into confident women to succeed in their lives both personally and professionally which helps in fulfillment of vision of the college. The college is footing with achievements like "**Recognition as Research Centre**" by Osmania University, has Certified "**Institute Innovation Council**" jointly by **AICTE** and **MHRD**.

From the past 14 years of standing period, the institute has created its own identity by adopting innovative practices. The phenomenal academic achievements of our students have always added glory to the college.

The college has a tradition of excelling in Sports and extracurricular activities, in which our students continue to bring us laurels. The success in all spheres is the combined product of all our little efforts- the contribution of highly qualified, dynamic and multi-talented faculty, non-teaching staff and our students. Our teachers aim at providing high quality educational experience to the students in the form of debates, group discussions, workshops, symposia, seminars, Environmental activities, social activities (NSS) and cultural competitions. Eminent personalities are invited from all walks of life to address our students and expose them to new ideas and thoughts for our better society.

**RBVRR Women's College of Pharmacy** is centrally located in the city at Plot No 3-4-343, Barkatpura, Hyderabad District, Hyderabad -50002, and Telangana State. The site is located at the intersection of 17°23'36.64" (N) latitude and 78°29'40.92" (E) longitude. The site location of the buildings and facilities in RBVRR and some photographs given in (Fig 1). The total area of the Institute is 0.8 acres in which 0.2 acres of area is covered with green belt and 0.56 acres is covered with buildings and roads and the layout of the same is presented as above.



Figure.1 Site Location of the College

# **ENERGY AND RENEWABLE ENERGY AUDIT**

## Energy and Renewable Energy :

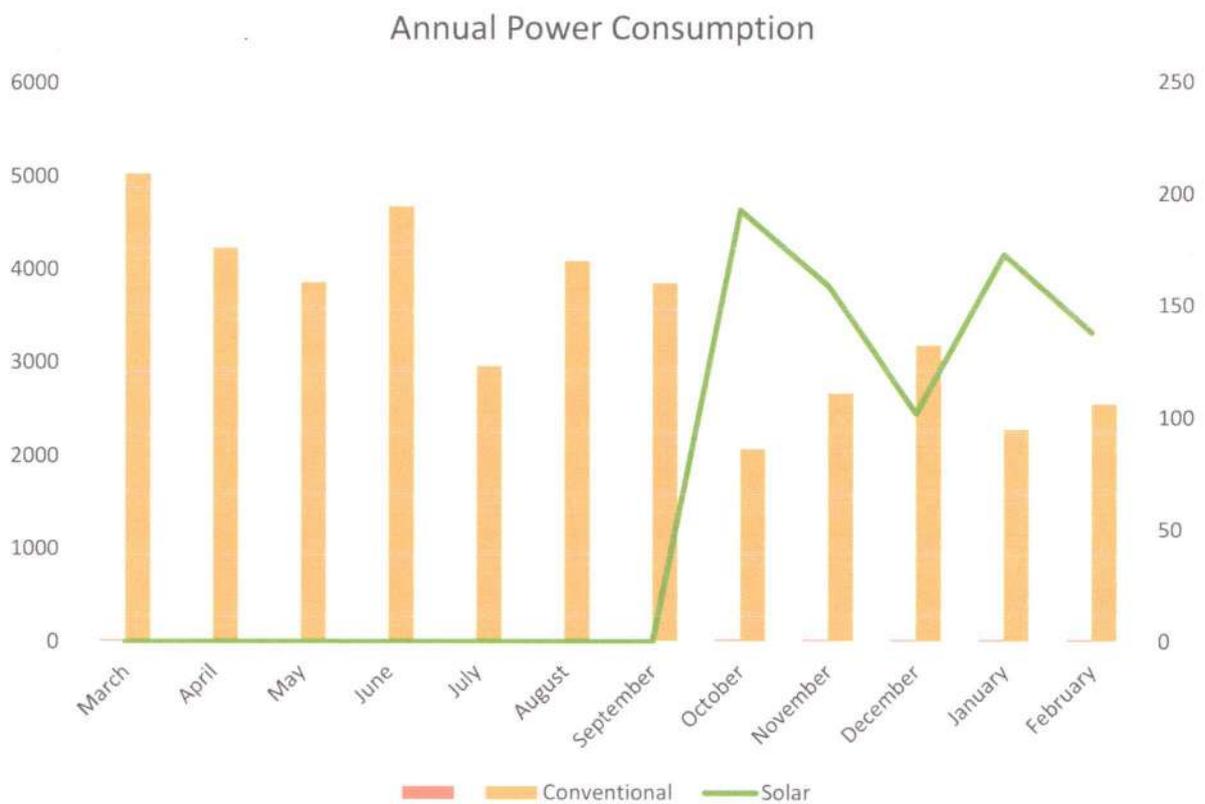
India is on a path to rapid energy transition, started at a normal pace in 2008 as part of the then announced Climate Change Action Plan for India, with a target of installing 20,000 MW of renewable energy generation facilities including Solar and Wind electricity by 2022. Prime Minister Shri. Narendra Modi, after taking over reviewed this target and called upon the people of India to target 175,000 MW of renewable by 2022 – composed of 100,000 MW of Solar PV; 60,000 MW of Wind Power; 10,000 MW of Biomass based power and 5,000 MW of Small Hydro Power and all other renewable energy routes. At the historic 21<sup>st</sup> UNFCCC (UN Framework Convention on Climate Change) held in Paris in December 2015, India declared its INDC (Intended Nationally Determined Contribution) in which these targets are also explicitly stated. Therefore, it is only natural that through a Green Audit, any Higher Education Institution should identify opportunities for developing Renewable Energy (RE) Sources within its own premises.

The Institute has **20 KW** Solar PV Grid Connected in an area of **200 sft** and there is available area of **350 sft** for further addition of Solar PV plant.

The solar system has generated energy, the energy bills will drop. How much we save on bill will be dependent on the size of the solar system and electricity usage. Moreover, not only will you be saving on the electricity bill, there is also a possibility to receive payments for the surplus energy that you export back to the grid. If you generate more electricity than you use (considering that your solar panel system is connected to the grid). The annual energy consumption of the institute represented as **Table.1, 2 and Figure.3 &4**

**Table:1 Total Electrical Energy Consumption as per Utility Bills**

TOD -> 2022-23	From Conventional	Solar	Total Amount Paid Rs.
March	5030	0	49710
April	4235	0	47715
May	3859	0	45523
June	4676	0	54557
July	2959	0	35663
August	4087	0	48156
September	3847	0	45309
October	2074	193	23829
November	2670	159	30602
December	3181	102	37052
January	2280	173	26211
February	2553	138	29578
<b>Year Total</b>	<b>41451</b>	<b>765</b>	<b>473905</b>
<b>Minimum</b>	<b>2074 October 2022</b>	<b>0 Mar-Sep 2022</b>	<b>23829 October 2022</b>
<b>Maximum</b>	<b>4676 June 2022</b>	<b>193 October 2022</b>	<b>54557 June 2022</b>



*Figure. 2: Share of Solar PV in RBVRR Campus [With 20 kW SPV]*

Table 2: Annual Utilization of Electricity

Academic Year	Annual Utilization			
	Conventional Electricity	Solar Electricity Export to the Grid	Total Consumption	%Solar
2018-19	30300	7710	22590	25.4
2019-20	38914	6956	31958	21
2020-21	3136	4341	3136	138
2021-22	22249	5022	17227	22.5
2022-23	41451	765	40686	0.1
<b>Average</b>				<b>52.8%</b>

For the consumption as in Table 1, the monthly charges are paid. The charge payable for peak time is Rs. 10.70 and the Normal time will be Rs8.90. Along with this 0.06% electricity duty is added up with the unit cost. Total for the year: Rs.473905. The 0.1% solar energy is supplied to against the to the grid and remaining is utilized as from conventional Energy for day to day activities.

Among all the benefits of solar energy the most important thing is that solar energy is a truly renewable energy source. It can be harnessed in all areas of the world and is available every day . We can not run out of solar energy as energy source.

Some of the key benefits of solar energy on the environment include:

- Using less water-Water is one of our most precious natural resources,
- Reducing air pollution-Help to slow climate change,
- Reducing your household's carbon footprint
- Reducing our dependence on fossil fuels.

The following housekeeping measures in Energy saving required for achieving the cited gains were introduced during year:

- Displayed stickers to switch off equipment - like Computers, Printers, Photocopiers, etc. when not required also to isolate them from power supply, whenever possible.
- Maintenance schedules for switchboards and distribution boards prepared and followed.
- Log Books for recording energy consumption, extent of power failures and running of standby generators were introduced.

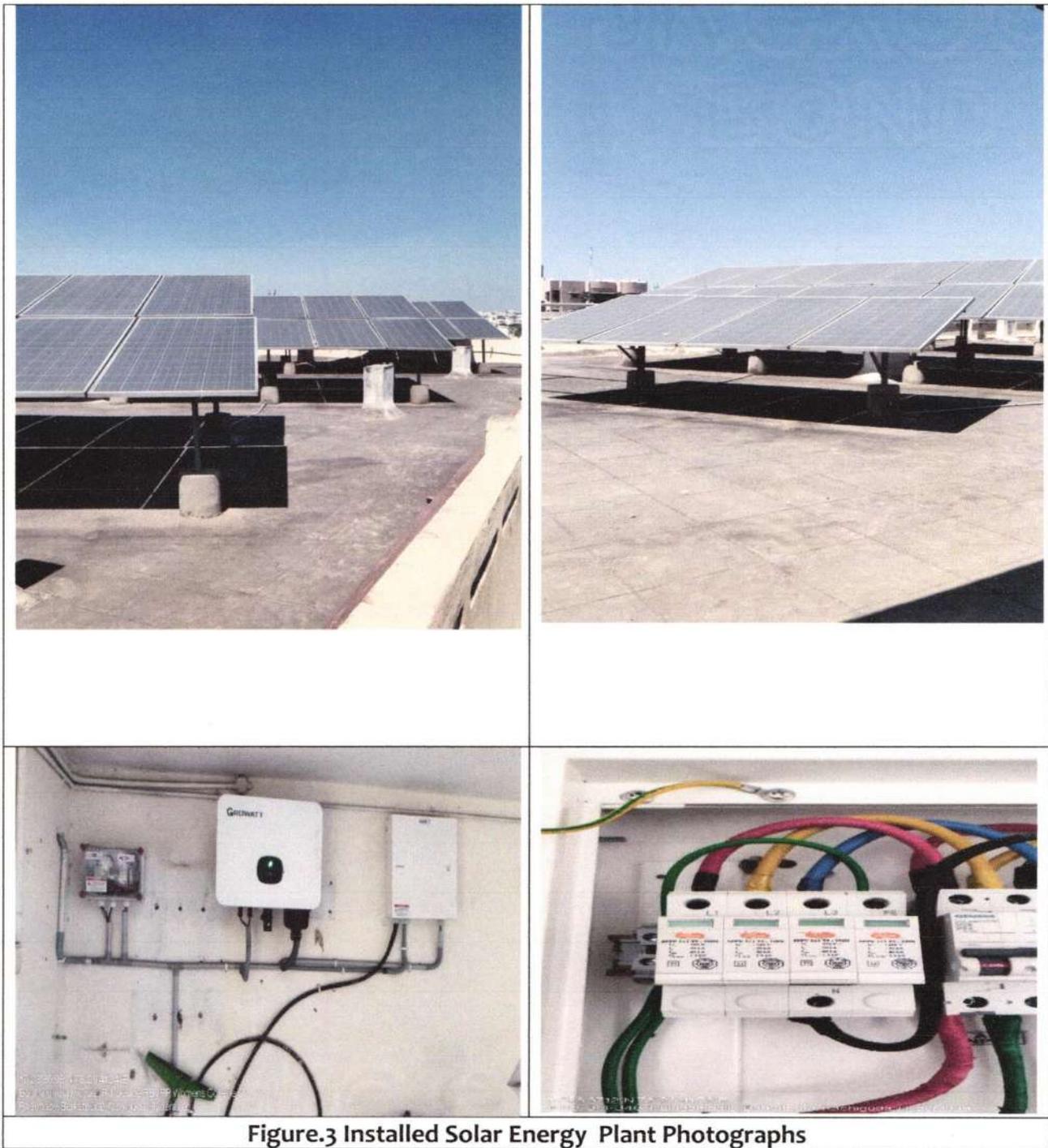


Figure.3 Installed Solar Energy Plant Photographs

**Present Status:** Presently installed 20 KW Grid Connected Solar PV to Harness the Solar Power and further enhancement of solar PV is in the pipe line.

## Summary

### **Goals of the College**

In the effort to Enhancing an environmentally literate campus where students can learn the idea of protection of environment and stay healthy. The college Management is proactively working on the several facets of “Green Campus” including. Effective utilization of Renewable Energy to mitigate the fossil fuels, etc .

### **STATEMENT OF ASSURANCE**

The Green Audit conducted for the **February 2023** in the college. The Management had taken initiative to carryout the part of Green Audit externally. As mentioned above it is in the process of improving the awareness towards the renewable energy and sustainable development .The conclusions are based on a comparison of the situations as they existed at the time of the audit. The evidences presented are in support of the conclusions.

**Audit Framework and detailed findings of the Audit**

<b>Objective</b>	<b>Observation/ Present status</b>	<b>Remarks / Recommendation</b>
Renewable Energy – Harness Solar Power , Wind Power etc	A Grid Connected Solar plant is installed with capacity of 20 KW	The Solar PV plant is functional and exporting clean energy to the grid. It is recommended to explore the vacant areas to increase the solar roof top plants to harness more solar energy



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**KIWIS ECO LABORATORIES PRIVATE LIMITED**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

PLOT NO.19, ALEAP INDUSTRIAL ESTATE, SY NO. 342, GAJULARAMARAM VILLAGE,  
QUTBULLAPURMANDAL & MUNICIPALITY, HYDERABAD, RANGA REDDY, TELANGANA, INDIA

in the field of

**TESTING**

Certificate Number: TC-8699

Issue Date: 15/12/2022

Valid Until:

14/12/2024

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Identity : KIWIS ECO LABORATORIES PRIVATE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



No.Q.15018/27/2013-CPW

Dated: 10 -9-2014

To

M/s Kiwis Eco Laboratories Pvt. Ltd.  
Plot No. 19, Sy. No. 342,  
ALEAP Industrial Estate,  
Gajularamaram Village,  
Quthbullpur,  
Rangareddy District  
Andhra Pradesh

**Sub: Recognition of Environmental Laboratory under the Environment (Protection) Act, 1986 of M/s Kiwis Eco Laboratories Pvt. Ltd., Rangareddy District, Andhra Pradesh.**

Please refer to your application seeking recognition of your environmental laboratory under the Environment (Protection) Act, 1986. As approved by the competent authority, it has been decided to accord recognition to your laboratory under Environment (Protection) Act 1986. The terms & conditions as given in the Annexure – III, IV & V have already been agreed by you.

2. It is desired that the period of recognition of the laboratory under E(P)A 1986, as Gazette notified may also be mentioned wherever "MoEF recognized Lab" is written. A copy of the Gazette notification is enclosed.
3. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) exercise conducted by the Central Pollution Control Board, atleast once a year, to ascertain the capability of the laboratory and analysts from time to time.
4. The laboratory has to submit quarterly reports to the Ministry in the enclosed format regarding its activities and the number of samples analysed during the reporting period.
5. It may also be noted that periodic surveillance of recognized environmental laboratory under the Environment (Protection) Act, 1986 will be undertaken by the Central Govt. to assess its proper functioning, systematic operation and reliability of data generated at the laboratory.
6. It is also mandatory for the Lab to renew ISO 9001 and OHSAS 18001 from time to time.

*M. Raina*

(Dr. M. Raina)  
Director

Encl: as above



जहाँ है हरियाली /  
वहाँ है खुशहाली //

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003  
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003  
Website : moef.nic.in



XI Conference of Parties  
CONVENTION ON BIOLOGICAL DIVERSITY  
HYDERABAD INDIA 2012

# Certificate of Registration

GMCSPL hereby certify that the organization

## KIWIS ECO LABORATORIES PRIVATE LIMITED

Sy.No. S-342, Plot No.19, Gajularamaram Village,  
Qutubullapur (M), Ranga Reddy District – 500 043,  
Telangana State, India.

Has established and applies a Quality Management System in accordance with

### ISO 9001:2015

For the scope of activities :

Environmental and other Relevant Laboratory  
Services including Microbiology

Q-210210

Certificate Number

23 February 2021

Date of Last Issue

03 February 2017

Date of Initial Registration

22 February 2024\*

Date of Expiry



\* Subjected to Successfully Completion of Yearly Surveillance Audits

  
Signed on behalf of GMCSPL

Global Management Certification Services Pvt.Ltd.

#402, Plot No.410, Matrusri Nagar, Miyapur, Serilingampally, Hyderabad – 500 049, India.

www.mcsglobal.in, E.mail:info@mcsglobal.in

This certificate is the property of GMCSPL, and shall be returned upon request by GMCSPL.  
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180206R-E

Certificate Number

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Date of Last Issue

08 February 2018

Date of Initial Registration

05 February 2024\*

Date of Expiry



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RBVRR Women's College Of Pharmacy





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Dr. Sudha Parimala	Member	<i>su</i>
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Figure.1 Site Location of the College

# ENERGY AND RENEWABLE ENERGY

## **Energy and Renewable Energy :**

India is on a path to rapid energy transition, started at a normal pace in 2008 as part of the then announced Climate Change Action Plan for India, with a target of installing 20,000 MW of renewable energy generation facilities including Solar and Wind electricity by 2022. Prime Minister Shri. Narendra Modi, after taking over reviewed this target and called upon the people of India to target 175,000 MW of renewable by 2022 – composed of 100,000 MW of Solar PV; 60,000 MW of Wind Power; 10,000 MW of Biomass based power and 5,000 MW of Small Hydro Power and all other renewable energy routes. At the historic 21<sup>st</sup> UNFCCC (UN Framework Convention on Climate Change) held in Paris in December 2015, India declared its INDC (Intended Nationally Determined Contribution) in which these targets are also explicitly stated. Therefore, it is only natural that through a Green Audit, any Higher Education Institution should identify opportunities for developing Renewable Energy (RE) Sources within its own premises.

The Institute has **20 KW** Solar PV Grid Connected in an area of **200 sft** and there is available area of **350 sft** for further addition of Solar PV plant.

The annual energy consumption of the institute represented as **Table.1, 2 and Figure.3 &4**

**Table:1 Total Electrical Energy Consumption as per Utility Bills**

TOD -> 2021-22	From Conventional	Solar	Total Amount Paid Rs.
March			0
April	1386	912	20748
May	1263	1255	2787
June	1779	611	14003
July	1973	286	19301
August	2246	348	21410
September	1976	509	17084
October	1618	412	14500
November	2193	346	21007
December	2589	343	25098
January	1827	0	20598
February	3399	0	36724
<b>Year Total</b>	<b>22249</b>	<b>5022</b>	<b>213260</b>
<b>Minimum</b>	<b>1263 May 2021</b>	<b>0 Jan - Mar 2022</b>	<b>23829 October 2022</b>
<b>Maximum</b>	<b>3399 February 2022</b>	<b>1255 May 2021</b>	<b>54557 June 2022</b>

### Annual Power Consumption

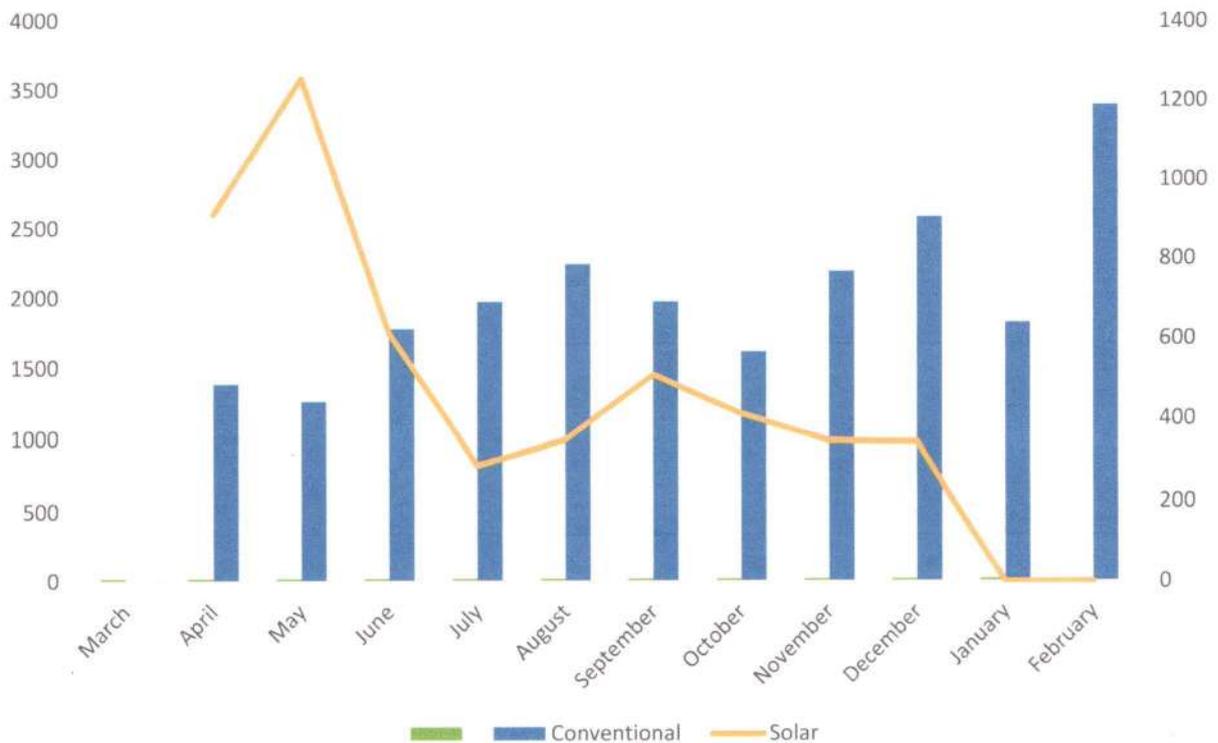


Figure. 3: Share of Solar PV in RBVRR Campus [With 20 kW SPV]

Table 2: Annual Utilization of Electricity

Academic Year	Annual Utilization			
	Conventional Electricity	Solar Electricity Export to the Grid	Total Consumption	%Solar
2018-19	30300	7710	22590	25.4
2019-20	38914	6956	31958	21
2020-21	3136	4341	3136	138
2021-22	22249	5022	17227	22.5
<b>Average</b>				<b>51.7%</b>

For the consumption as in Table 1, the monthly charges are paid. The charge payable for peak time is Rs. 10.70 and the Normal time will be Rs8.90. Along with this 0.06% electricity duty is added up with the unit cost. Total for the year: Rs.213260. The 0.05% solar energy is supplied to against the to the grid and remaining is utilized as from conventional Energy for day to day activities.

Among all the benefits of solar energy the most important thing is that solar energy is a truly renewable energy source. It can be harnessed in all areas of the world and is available every day . We can not run out of solar energy as energy source.

Some of the key benefits of solar energy on the environment include:

- Using less water-Water is one of our most precious natural resources,
- Reducing air pollution-Help to slow climate change,
- Reducing your household's carbon footprint
- Reducing our dependence on fossil fuels.

The following housekeeping measures in Energy saving required for achieving the cited gains were introduced during year:

- Displayed stickers to switch off equipment - like Computers, Printers, Photocopiers, etc. when not required also to isolate them from power supply, whenever possible.
- Maintenance schedules for switchboards and distribution boards prepared and followed.
- Log Books for recording energy consumption, extent of power failures and running of standby generators were introduced.

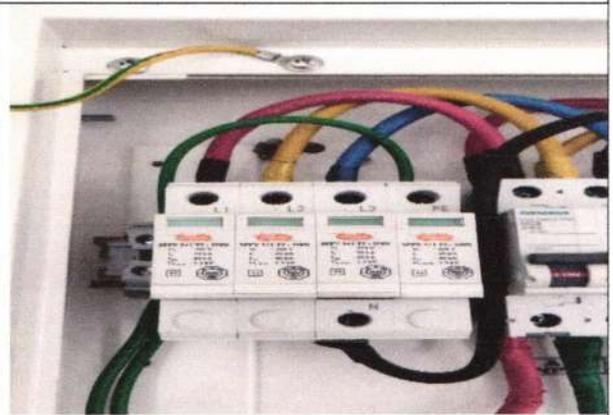
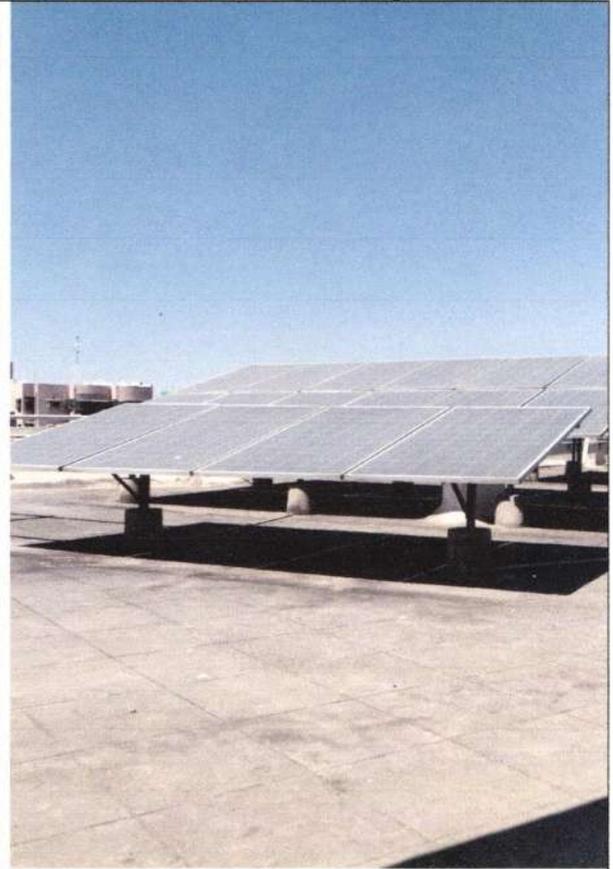


Figure.4 Installed Solar Energy Plant Photographs

**Present Status:** Presently installed 20 KW Grid Connected Solar PV to Harness the Solar Power and further enhancement of solar PV is in the pipe line.

Groundwater meets 25 per cent of total supply of water in the world, remaining 75 per cent supply is met by surface water sources of rivers, lakes etc. Demand for groundwater

## Summary

### Goals of the College

In the effort to Enhancing an environmentally literate campus where students can learn the idea of protection of environment and stay healthy. The college Management is proactively working on the several facets of “Green Campus” including renewable energy and utilization etc

### STATEMENT OF ASSURANCE

The Green Audit conducted for the **February 2022** in the college. The Management had taken initiative to carryout the Green Audit externally. As mentioned above it is in the process of improving the awareness towards the renewable energy and sustainable development .The conclusions are based on a comparison of the situations as they existed at the time of the audit. The evidences presented are in support of the conclusions.

**Audit Framework and detailed findings of the Audit**

<b>Objective</b>	<b>Observation/ Present status</b>	<b>Remarks / Recommendation</b>
Renewable Energy – Harness Solar Power , Wind Power etc	A Grid Connected Solar plant is installed with capacity of 20 KW	The Solar PV plant is functional and exporting clean energy to the grid. It is recommended to explore the vacant areas to increase the solar roof top plants to harness more solar energy



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**KIWIS ECO LABORATORIES PRIVATE LIMITED**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

PLOT NO.19, ALEAP INDUSTRIAL ESTATE, SY NO. 342, GAJULARAMARAM VILLAGE, QUTBULLAPUR  
MANDAL & MUNICIPALITY, HYDERABAD, RANGA REDDY, TELANGANA, INDIA

in the field of  
**TESTING**

Certificate Number: TC-8699

Issue Date: 24/10/2019

Valid Until: 23/10/2021\*

\*The validity is extended for one year up to 23.10.2022

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(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Identity : KIWIS ECO LABORATORIES PRIVATE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



No.Q.15018/27/2013-CPW

Dated: 10 -9-2014

To

M/s Kiwis Eco Laboratories Pvt. Ltd.  
Plot No. 19, Sy. No. 342,  
ALEAP Industrial Estate,  
Gajularamaram Village,  
Quthbullpur,  
Rangareddy District  
Andhra Pradesh

**Sub: Recognition of Environmental Laboratory under the Environment (Protection) Act, 1986 of M/s Kiwis Eco Laboratories Pvt. Ltd., Rangareddy District, Andhra Pradesh.**

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2. It is desired that the period of recognition of the laboratory under E(P)A 1986, as Gazette notified may also be mentioned wherever "MoEF recognized Lab" is written. A copy of the Gazette notification is enclosed.
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6. It is also mandatory for the Lab to renew ISO 9001 and OHSAS 18001 from time to time.

*M. Raina*

(Dr. M. Raina)  
Director

Encl: as above



जहाँ है हरियाली /  
वहाँ है खुशहाली //

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003  
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003  
Website : moef.nic.in



XI Conference of Parties  
CONVENTION ON BIOLOGICAL DIVERSITY  
HYDERABAD INDIA 2012

# Certificate of Registration

GMCSPL hereby certify that the organization

## KIWIS ECO LABORATORIES PRIVATE LIMITED

Sy.No. S-342, Plot No.19, Gajularamaram Village,  
Qutubullapur (M), Ranga Reddy District – 500 043,  
Telangana State, India.

Has established and applies a Quality Management System in accordance with

### ISO 9001:2015

For the scope of activities :

Environmental and other Relevant Laboratory  
Services including Microbiology

Q-210210

Certificate Number

23 February 2021

Date of Last Issue

03 February 2017

Date of Initial Registration

22 February 2024\*

Date of Expiry



\* Subjected to Successfully Completion of Yearly Surveillance Audits

A handwritten signature in black ink, appearing to read "Lesang".

Signed on behalf of GMCSPL

Global Management Certification Services Pvt.Ltd.

#402, Plot No.410, Matrusri Nagar, Miyapur, Serilingampally, Hyderabad – 500 049, India.

www.mcsglobal.in, E.mail:info@mcsglobal.in

This certificate is the property of GMCSPL, and shall be returned upon request by GMCSPL  
The Registration does not assure the quality of yields under the firm's production.

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Telangana State, India.

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### ISO 14001:2015

For the scope of activities :

**Environmental and other Relevant Laboratory  
Services including Microbiology**

180206R-E

Certificate Number

06 February 2021

Date of Last Issue

08 February 2018

Date of Initial Registration

05 February 2024\*

Date of Expiry



\* Subjected to Successfully Completion of Yearly Surveillance Audits

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Signed on behalf of GMCSPL

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#402, Plot No.410, Matruri Nagar, Miyapur, Serilingampally, Hyderabad - 500 049, India.  
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# Energy Audit of RBVRR WOMEN'S COLLEGE OF PHARMACY

3-4-343, Barkathpura, Hyderabad - 500027

**2020-2021**



Prepared by



**M/s KIWIS ECO LABORATORIES PVT LTD.,**  
(Recognized by MoEF, GOI, New Delhi  
Certified by ISO 9001:2015, ISO 14001:2015 & OHSAS 45001:2018)  
Plot No. 19, ALEAP Industrial Estate, Sy.No.342  
Near Pragathi Nagar, Quthbullapur Mandal  
Rangareddy Dist, Hyderabad, Telangana - 500090  
Tel: +91- 9966661485

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## ACKNOWLEDGEMENT

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RBVRR Women's College Of Pharmacy has been working at the forefront since its inception to bring about social change for national and international development by conducting workshops and other extension activities. RBVRR Women's College Of Pharmacy is aware of the needs of the green audit for the maintenance and future development of the campus. In its pursuit of excellence, RBVRR Women's College Of Pharmacy has recognized itself to improve the environmental quality and maintain its unique pristine ecosystem for the future generation of students and all the inhabitants of the campus. Although we have been taking a number of steps to conserve and protect our environment. This report of 2020-21 is the first formal effort to document the results of our investigation and interpret the information of all the required parameters of the Green audit process. RBVRR Women's College Of Pharmacy aims to take up the policy and efforts at every level to avert ecological catastrophe on a global scale by supporting the climate neutrality goals committed by the Government of India. As a part of this, efforts will take to continuously monitor the sustainability of the academic process by constituting the Green Audit Committee consisting of faculty members working in this arena to collect basic data of the environmental parameters within the campus so that the environmental issues are resolved within the campus. The Green Audit Committee has tried to identify the current / emerging environmental issues so as to monitor the environmental management practices adopted in the college along with subsequent impact of these on the campus environment.

The Green audit conducted is an external audit that aims towards creating awareness healthy and sustainable environment. Though nascent, the initiative will taken up to foster the concept of environmental sustainability. Hopefully, all stakeholders will pay attention to this report, allowing us to develop a bottom-up approach to addressing future challenges.

*y.j.kaur*  
Principal



**To WHOM SO EVER IT MAY CONCERN**

This is to certify that the first Energy Audit Report 2020-21 of **RBVRR Women's College Of Pharmacy, Bharkatpura** is an original External audit work conducted by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi)** dated **22-02-2021** on behalf of the terms of agreement with the College. The Green Audit Committee to monitor the environmental management practices adopted in the **RBVRR Women's College Of Pharmacy**, which is in line with the terms of the International Standards of External Auditing. After going through the report, it is obvious that adequate and appropriate audit procedures were followed for Environmental Quality Audit, Water Audit, Waste Management Audit, and Energy Audit and Carbon Footprint. The gathered evidences support the conclusions reached and contained in this report.

The suggestions and recommendations prescribed and the conclusions derived are quite genuine within the achievable limits, and I understand that RBVRR Women's College Of Pharmacy is competent to fulfil those to meet the Sustainable Development Goals.

I recommend and firmly believe that this report meets the requirement prescribed for development of a Green Campus.

*M.S. Karth*  
**Principal**

**(Dr.M. Sumakanth)**  
RBVRR Women's College Of Pharmacy





## DECLARATION

Energy Audit Report for M/s. **RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** during **09<sup>th</sup> and 10<sup>th</sup> February 2021** and following Observations were presented below. The Management is proactive towards Green Initiative by Harvesting Solar Energy, Planting Trees, Better water conservation, Waste Management, Carbon Footprint, A continual improvement in Green Initiative is appreciated. We appreciate the efforts of the **M/s. RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** in this regard. This Energy Audit Report has been prepared by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi, ISO 9001:2015,14001:2015)** dated **21-02-2021** is for the use of the Customer with due consideration and skill as per our general terms and conditions of business and the terms of agreement with the customer.

Authorized Signatory



(Ch. Rajani Kumari)  
Managing Director

**KIWIS ECO LABORATORIES PRIVATE LIMITED**

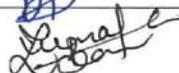
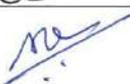
(NABL, MoEF and ISO Certified Laboratory)

Plot No. 19, ALEAP Industrial Estate, SY. No's 342, Gajularamaram Village, Quthbullpur Mandal and Municipality, Hyderabad, Ranga Reddy Dist 500 090. Email: [kiwislabhyd@gmail.com](mailto:kiwislabhyd@gmail.com) | Website: [www.ssmntgroup.com/kiwis-eco-labs](http://www.ssmntgroup.com/kiwis-eco-labs). ☎ 040 - 23816333.

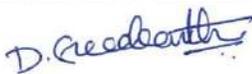
CIN NO : U85110TG2013PTC087604

## GREEN AUDIT ASSESSMENT TEAM

## INTERNAL: RBVRR Women's College Of Pharmacy,

Dr. M. Sumakanth, Principal	Chairman	
Dr. Tripura Sundari. IQAC	Member	
Dr. A. Krishna Sailaja	Member	
Ms. Zeenath Banu	Member	
Dr. Sudha Parimala	Member	
Dr. G. Uma Rani	Member	
Dr. J. Archana	Member	

## EXTERNAL: KIWIS ECO LABORATORIES PRIVATE LIMITED

Dr. Ch. Rajani Kumari Managing Director,	Team Member	
Dr. D. Sivaramakrishna HOD-LAB	Team Member	
Dr. D. Sreekanth Quality Manager	Team Member	
Dr. Nalini Vijayalaxmi Manager-Laboratory	Team Member	
Dr. S. U. B Ramakrishna Sr Chemist	Team Member	

### **Green Audit scope of work**

The Green Audit is carried out in view of assessing all necessary environmental components and their impact on the campus physically by visiting the premises with reference to following.

- ❖ I Identifying the Green Area in total area of the campus and increase the process of planting trees so that Heat /Global warming is mitigated.
- ❖ Harvest the Solar Power in the campus, Encourage Renewable Energy usage to reduce the fossil fuel dependency,

### **ABOUT THE COLLEGE**

RBVRR Women's College of Pharmacy was established in the year 2006 under "Hyderabad Mahila Vidya Sangham" to provide education to women students. The college was self-financed, approved by **PCI, AICTE** and is affiliated to **Osmania University**, accredited by **NBA** for B.Pharmacy Course with an objective to nurture the pharmacy education and to support the healthcare system through skilled Women Pharmacy graduates.

RBVRR Women's College of Pharmacy Institute is one of the leading institutions which have taken a leap forward in the quality professional education. This institution has emerged as a unique centre of academic excellence of higher learning in the field of pharmacy. All the efforts are focused to provide a congenial environment to educate and train girl students into competent professionals and mould them into confident women to succeed in their lives both personally and professionally which helps in fulfillment of vision of the college. The college is footing with achievements like "**Recognition as Research Centre**" by Osmania University, has Certified "**Institute Innovation Council**" jointly by **AICTE** and **MHRD**.

From the past 14 years of standing period, the institute has created its own identity by adopting innovative practices. The phenomenal academic achievements of our students have always added glory to the college.

The college has a tradition of excelling in Sports and extracurricular activities, in which our students continue to bring us laurels. The success in all spheres is the combined product of all our little efforts- the contribution of highly qualified, dynamic and multi-talented faculty, non-teaching staff and our students. Our teachers aim at providing high quality educational experience to the students in the form of debates, group discussions, workshops, symposia, seminars, Environmental activities, social activities (NSS) and cultural competitions. Eminent personalities are invited from all walks of life to address our students and expose them to new ideas and thoughts for our better society.

**RBVRR Women's College of Pharmacy** is centrally located in the city at Plot No 3-4-343, Barkatpura, Hyderabad District, Hyderabad -50002, and Telangana State. The site is located at the intersection of 17°23'36.64" (N) latitude and 78°29'40.92" (E) longitude. The site location of the buildings and facilities in RBVRR and some photographs given in (Fig 1). The total area of the Institute is 0.8 acres in which 0.2 acres of area is covered with green belt and 0.56 acres is covered with buildings and roads and the layout of the same is presented as above.



Figure.1 Site Location of the College

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The Institute has **20 KW** Solar PV Grid Connected in an area of **200 sft** and there is available area of **350 sft** for further addition of Solar PV plant.

The solar system has generated energy, the energy bills will drop. How much we save on bill will be dependent on the size of the solar system and electricity usage. Moreover, not only will you be saving on the electricity bill, there is also a possibility to receive payments for the surplus energy that you export back to the grid. If you generate more electricity than you use (considering that your solar panel system is connected to the grid). The annual energy consumption of the institute represented as **Table.1, 2 and Figure.3 &4**

**Table:1 Total Electrical Energy Consumption as per Utility Bills**

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March			
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August	0	365	0
September	0	458	0
October	0	543	0
November	0	421	0
December	377	125	0
January	611	352	0
February	1898	495	0
<b>Year Total</b>	<b>3136</b>	<b>4341</b>	<b>54074</b>
<b>Maximum</b>	<b>1898 February 2021</b>	<b>756 May 2020</b>	<b>27037 February 2020</b>

### Annual Power Consumption

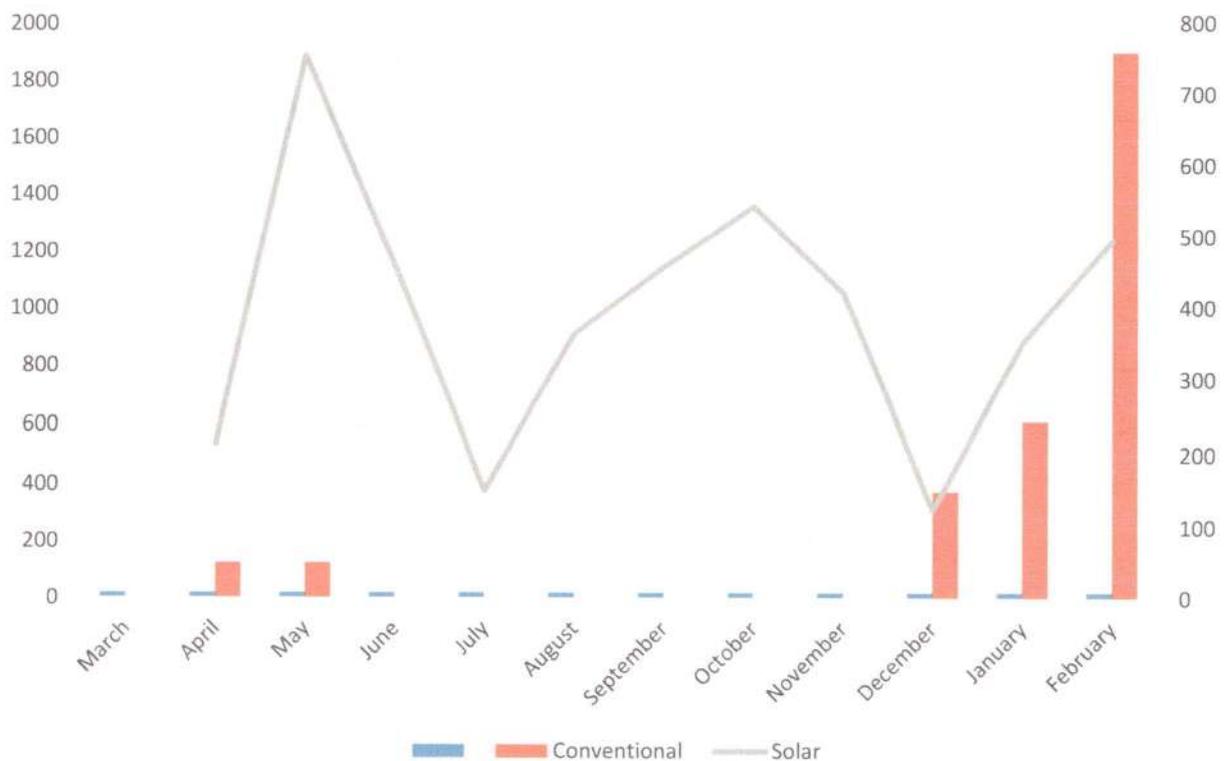


Figure. 3: Share of Solar PV in RBVRR Campus [With 20 kW SPV]

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**Figure.4 Installed Solar Energy Plant Photographs**

**Present Status:** Presently installed 20 KW Grid Connected Solar PV to Harness the Solar Power and further enhancement of solar PV is in the pipe line.

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Name of Legal Identity : KIWIS ECO LABORATORIES PRIVATE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



सत्यमेव जयते



भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT AND FORESTS

No.Q.15018/27/2013-CPW

Dated: 10 -9-2014

To

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*M. Raina*

(Dr. M. Raina)  
Director

Encl: as above



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पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003  
PARYAVARAN BHAWAN, C.G.O. COMPLEX, LODHI ROAD, NEW DELHI - 110 003  
Website : moef.nic.in



XI Conference of Parties  
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HYDERABAD INDIA 2012

# Certificate of Registration

GMCSPL hereby certify that the organization

## KIWIS ECO LABORATORIES PRIVATE LIMITED

Sy.No. S-342, Plot No.19, Gajularamaram Village,  
Qutubullapur (M), Ranga Reddy District – 500 043,  
Telangana State, India.

Has established and applies a Quality Management System in accordance with

### ISO 9001:2015

For the scope of activities :

**Environmental and other Relevant Laboratory  
Services including Microbiology**

Q-170201R

Certificate Number

03 February 2020

Date of Last Issue

03 February 2017

Date of Initial Registration

02 February 2021

Date of Expiry



Certificate is Valid for 3 Years (03.02.2020 to 02.02.2023) From the Date of Last Issue. Upon Successful Completion of Surveillance Audit New Certificate With an Extended Validity will be issued.

  
Signed on behalf of GMCSPL

**Global Management Certification Services Pvt.Ltd.**

#402, Plot No.410, Matrusri Nagar, Miyapur, Serilingampally, Hyderabad – 500 049, India.

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180206-E

Certificate Number

08 February 2020

Date of Last Issue

08 February 2018

Date of Initial Registration

07 February 2021

Date of Expiry



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# Energy Audit of RBVRR WOMEN'S COLLEGE OF PHARMACY

3-4-343, Barkathpura, Hyderabad - 500027

2019-2020



Prepared by



**M/s KIWIS ECO LABORATORIES PVT LTD.,**

(Recognized by MoEF, GOI, New Delhi)

Certified by ISO 9001:2015, ISO 14001:2015 & OHSAS 45001:2018)

Plot No. 19, ALEAP Industrial Estate, Sy.No.342

Near Pragathi Nagar, Quthbullapur Mandal

Rangareddy Dist, Hyderabad, Telangana - 500090

Tel: +91- 9966661485

## ACKNOWLEDGEMENT

RBVRR Women's College Of Pharmacy has been working at the forefront since its inception to bring about social change for national and international development by conducting workshops and other extension activities. RBVRR Women's College Of Pharmacy is aware of the needs of the green audit for the maintenance and future development of the campus. In its pursuit of excellence, RBVRR Women's College Of Pharmacy has recognized itself to improve the environmental quality and maintain its unique pristine ecosystem for the future generation of students and all the inhabitants of the campus. Although we have been taking a number of steps to conserve and protect our environment. This report of 2019-20 is the first formal effort to document the results of our investigation and interpret the information of all the required parameters of the Green audit process. RBVRR Women's College Of Pharmacy aims to take up the policy and efforts at every level to avert ecological catastrophe on a global scale by supporting the climate neutrality goals committed by the Government of India. As a part of this, efforts will take to continuously monitor the sustainability of the academic process by constituting the Green Audit Committee consisting of faculty members working in this arena to collect basic data of the environmental parameters within the campus so that the environmental issues are resolved within the campus. The Green Audit Committee has tried to identify the current / emerging environmental issues so as to monitor the environmental management practices adopted in the college along with subsequent impact of these on the campus environment.

The Green audit conducted is an external audit that aims towards creating awareness healthy and sustainable environment. Though nascent, the initiative will taken up to foster the concept of environmental sustainability. Hopefully, all stakeholders will pay attention to this report, allowing us to develop a bottom-up approach to addressing future challenges.

*Y.J. Kantu*

Principal



**To WHOM SO EVER IT MAY CONCERN**

This is to certify that the first Environmental Audit Report 2019-20 of **RBVRR Women's College Of Pharmacy, Bharkatpura** is an original External audit work conducted by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi)** dated **26-02-2020** on behalf of the terms of agreement with the College. The Green Audit Committee to monitor the environmental management practices adopted in the **RBVRR Women's College Of Pharmacy**, which is in line with the terms of the International Standards of External Auditing.

After going through the report, it is obvious that adequate and appropriate audit procedures were followed for Environmental Quality Audit, Water Audit, Waste Management Audit, and Energy Audit and Carbon Footprint. The gathered evidences support the conclusions reached and contained in this report.

The suggestions and recommendations prescribed and the conclusions derived are quite genuine within the achievable limits, and I understand that RBVRR Women's College Of Pharmacy is competent to fulfil those to meet the Sustainable Development Goals.

I recommend and firmly believe that this report meets the requirement prescribed for development of a Green Campus.

*M. Sumakanth*  
Principal

**(Dr. M. Sumakanth)**  
RBVRR Women's College Of Pharmacy





## DECLARATION

Energy Audit Report for **M/s. RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** during **01<sup>st</sup> and 02<sup>nd</sup> February 2020** and following Observations were presented below. The Management is proactive towards Green Initiative by Harvesting Solar Energy, Planting Trees, Better water conservation, Waste Management, Carbon Footprint, A continual improvement in Green Initiative is appreciated. We appreciate the efforts of the **M/s. RBVRR Women's College Of Pharmacy Barkathpura, Hyderabad-500027, Telangana** in this regard. This Energy Audit Report has been prepared by **M/s. Kiwis Eco Laboratory Pvt. Ltd., Hyderabad (Recognized by NABL& MOEF, GOI, New Delhi, ISO 9001:2015,14001:2015)** dated **25-02-2020** is for the use of the Customer with due consideration and skill as per our general terms and conditions of business and the terms of agreement with the customer.

Authorized Signatory

(Ch. Rajani Kumari)  
Managing Director

### KIWIS ECO LABORATORIES PRIVATE LIMITED

(NABL, MoEF and ISO Certified Laboratory)

Plot No. 19, ALEAP Industrial Estate, SY. No's 342, Gajularamaram Village, Quthbullpur Mandal and Municipality, Hyderabad, Ranga Reddy Dist 500 090. Email: [kiwislabhyd@gmail.com](mailto:kiwislabhyd@gmail.com) | Website: [www.ssmntgroup.com/kiwis-eco-labs](http://www.ssmntgroup.com/kiwis-eco-labs). ☎ 040 - 23816333.

CIN NO : U85110TG2013PTC087604

## GREEN AUDIT ASSESSMENT TEAM

## INTERNAL: RBVRR Women's College Of Pharmacy,

Dr. M. Sumakanth, Principal	Chairman	
Dr. Tripura Sundari. IQAC	Member	
Dr. A. Krishna Sailaja	Member	
Ms. Zeenath Banu	Member	
Dr. Sudha Parimala	Member	
Dr. G. Uma Rani	Member	
Dr. J. Archana	Member	

## EXTERNAL: KIWIS ECO LABORATORIES PRIVATE LIMITED

Dr. Ch. Rajani Kumari Managing Director,	Team Member	
Dr. D. Sivaramakrishna HOD-LAB	Team Member	
Dr. D. Sreekanth Quality Manager	Team Member	
Dr. Nalini Vijayalaxmi Manager-Laboratory	Team Member	

### **Energy Audit scope of work**

The Energy Audit is carried out in view of assessing all necessary environmental components and their impact on the campus physically by visiting the premises with reference to following.

- ❖ Identifying the Green Area in total area of the campus and increase the process of planting trees so that Heat /Global warming is mitigated.
- ❖ Harvest the Solar Power in the campus, Encourage Renewable Energy usage to reduce the fossil fuel dependency,

### **ABOUT THE COLLEGE**

RBVRR Women's College of Pharmacy was established in the year 2006 under "Hyderabad Mahila Vidya Sangham" to provide education to women students. The college was self-financed, approved by **PCI, AICTE** and is affiliated to **Osmania University**, accredited by **NBA** for B.Pharmacy Course with an objective to nurture the pharmacy education and to support the healthcare system through skilled Women Pharmacy graduates.

RBVRR Women's College of Pharmacy Institute is one of the leading institutions which have taken a leap forward in the quality professional education. This institution has emerged as a unique centre of academic excellence of higher learning in the field of pharmacy. All the efforts are focused to provide a congenial environment to educate and train girl students into competent professionals and mould them into confident women to succeed in their lives both personally and professionally which helps in fulfillment of vision of the college. The college is footing with achievements like "**Recognition as**

**Research Centre**" by Osmania University, has Certified **"Institute Innovation Council"** jointly by **AICTE** and **MHRD**.

From the past 14 years of standing period, the institute has created its own identity by adopting innovative practices. The phenomenal academic achievements of our students have always added glory to the college.

The college has a tradition of excelling in Sports and extracurricular activities, in which our students continue to bring us laurels. The success in all spheres is the combined product of all our little efforts- the contribution of highly qualified, dynamic and multi-talented faculty, non-teaching staff and our students. Our teachers aim at providing high quality educational experience to the students in the form of debates, group discussions, workshops, symposia, seminars, Environmental activities, social activities (NSS) and cultural competitions. Eminent personalities are invited from all walks of life to address our students and expose them to new ideas and thoughts for our better society.

**RBVRR Women's College of Pharmacy** is centrally located in the city at Plot No 3-4-343, Barkatpura, Hyderabad District, Hyderabad -50002, and Telangana State. The site is located at the intersection of 17°23'36.64" (N) latitude and 78°29'40.92" (E) longitude. The site location of the buildings and facilities in RBVRR and some photographs given in (Fig 1). The total area of the Institute is 0.8 acres in which 0.2 acres of area is covered with green belt and 0.56 acres is covered with buildings and roads and the layout of the same is presented as above.



Figure.1 Site Location of the College

# **ENERGY AND RENEWABLE ENERGY**

## Energy and Renewable Energy :

India is on a path to rapid energy transition, started at a normal pace in 2008 as part of the then announced Climate Change Action Plan for India, with a target of installing 20,000 MW of renewable energy generation facilities including Solar and Wind electricity by 2022. Prime Minister Shri. Narendra Modi, after taking over reviewed this target and called upon the people of India to target 175,000 MW of renewable by 2022 – composed of 100,000 MW of Solar PV; 60,000 MW of Wind Power; 10,000 MW of Biomass based power and 5,000 MW of Small Hydro Power and all other renewable energy routes. At the historic 21<sup>st</sup> UNFCCC (UN Framework Convention on Climate Change) held in Paris in December 2015, India declared its INDC (Intended Nationally Determined Contribution) in which these targets are also explicitly stated. Therefore, it is only natural that through a Green Audit, any Higher Education Institution should identify opportunities for developing Renewable Energy (RE) Sources within its own premises.

The Institute has **20 KW** Solar PV Grid Connected in an area of **200 sft** and there is available area of **350 sft** for further addition of Solar PV plant.

The solar system has generated energy, the energy bills will drop. How much we save on bill will be dependent on the size of the solar system and electricity usage. Moreover, not only will you be saving on the electricity bill, there is also a possibility to receive payments for the surplus energy that you export back to the grid. If you generate more electricity than you use (considering that your solar panel system is connected to the grid). The annual energy consumption of the institute represented as **Table.1, 2 and Figure.2&3**

**Table:1 Total Electrical Energy Consumption as per Utility Bills**

TOD -> 2019-20	From Conventional	Solar	Total Amount Paid Rs.
March	5568	654	51709
April	5048	897	39797
May	2719	1215	18161
June	3492	675	30691
July	2806	285	27699
August	2553	395	24101
September	3646	346	35415
October	2193	451	19954
November	4100	658	39962
December	3527	524	32518
January	3262	856	26573
February			
<b>Year Total</b>	<b>38914</b>	<b>6956</b>	<b>346580</b>
<b>Minimum</b>			
<b>Maximum</b>	<b>1898 February 2021</b>	<b>756 May 2020</b>	<b>27037 February 2020</b>

### Annual Power Consumption

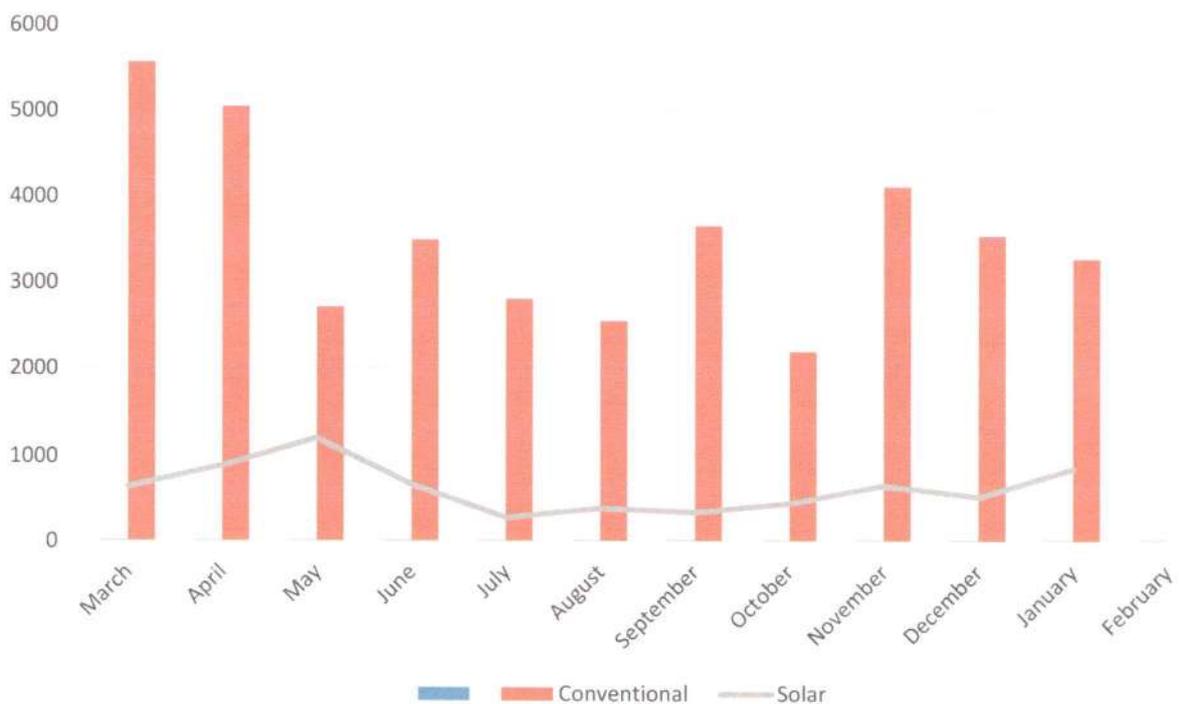


Figure. 2 Share of Solar PV in RBVRR Campus [With 20 kW SPV]

Table 2: Annual Utilization of Electricity

Academic Year	Annual Utilization			
	Conventional Electricity	Solar Electricity Export to the Grid	Total Consumption	%Solar
2018-19	30300	7710	22590	25.4
2019-20	38914	6956	31958	21
<b>Average</b>				<b>23.2</b>

For the consumption as in Table 1, the monthly charges are paid. The charge payable for peak time is Rs. 9.70 and the Normal time will be Rs7.90. Along with this 0.06% electricity duty is added up with the unit cost. Total for the year: Rs.346580. The 21% solar energy is supplied to against the to the grid and remaining is utilized as from conventional Energy.

Among all the benefits of solar energy the most important thing is that solar energy is a truly renewable energy source. It can be harnessed in all areas of the world and is available every day . We can not run out of solar energy as energy source.

Some of the key benefits of solar energy on the environment include:

- Using less water-Water is one of our most precious natural resources,
- Reducing air pollution-Help to slow climate change,
- Reducing your household's carbon footprint
- Reducing our dependence on fossil fuels.

The following housekeeping measures in Energy saving required for achieving the cited gains were introduced during year:

- Displayed stickers to switch off equipment - like Computers, Printers, Photocopiers, etc. when not required also to isolate them from power supply, whenever possible.
- Maintenance schedules for switchboards and distribution boards prepared and followed.

- Log Books for recording energy consumption, extent of power failures and running of standby generators were introduced.



**Figure.3 Installed Solar Energy Plant Photographs**

**Present Status:** Presently installed 20 KW Grid Connected Solar PV to Harness the Solar Power and further enhancement of solar PV is in the pipe line.

## Summary

### Goals of the College

In the effort to Enhancing an environmentally literate campus where students can learn the idea of protection of environment and stay healthy. The college Management is proactively working on the several facets of “Green Campus” including Plantation of more trees, Water Conservation, Efficient water usage by eliminating leaking water taps, Installation of STP, Water Harvesting Pits and interconnecting them to Recharge the Ground Water table. Effective Waste Management which includes Food Waste, Plastic, Paper, carbon footprints etc.



National Accreditation Board for  
Testing and Calibration Laboratories

**CERTIFICATE OF ACCREDITATION**

**KIWIS ECO LABORATORIES PRIVATE LIMITED**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2017**

**"General Requirements for the Competence of Testing &  
Calibration Laboratories"**

for its facilities at

PLOT NO.19, ALEAP INDUSTRIAL ESTATE, SY NO. 342, GAJULARAMARAM VILLAGE, QUTBULLAPUR  
MANDAL & MUNICIPALITY, HYDERABAD, RANGA REDDY, TELANGANA, INDIA

in the field of  
**TESTING**

Certificate Number: TC-8699

Issue Date: 24/10/2019

Valid Until: 23/10/2021\*

\*The validity is extended for one year up to 23.10.2022

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Name of Legal Identity : KIWIS ECO LABORATORIES PRIVATE LIMITED

Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



सत्यमेव जयते



भारत सरकार  
पर्यावरण एवं वन मंत्रालय  
GOVERNMENT OF INDIA  
MINISTRY OF ENVIRONMENT AND FORESTS

No.Q.15018/27/2013-CPW

Dated: 10 -9-2014

To

M/s Kiwis Eco Laboratories Pvt. Ltd.  
Plot No. 19, Sy. No. 342,  
ALEAP Industrial Estate,  
Gajularamaram Village,  
Quthbullpur,  
Rangareddy District  
Andhra Pradesh

**Sub: Recognition of Environmental Laboratory under the Environment (Protection) Act, 1986 of M/s Kiwis Eco Laboratories Pvt. Ltd., Rangareddy District, Andhra Pradesh.**

Please refer to your application seeking recognition of your environmental laboratory under the Environment (Protection) Act, 1986. As approved by the competent authority, it has been decided to accord recognition to your laboratory under Environment (Protection) Act 1986. The terms & conditions as given in the Annexure – III, IV & V have already been agreed by you.

2. It is desired that the period of recognition of the laboratory under E(P)A 1986, as Gazette notified may also be mentioned wherever "MoEF recognized Lab" is written. A copy of the Gazette notification is enclosed.
3. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) exercise conducted by the Central Pollution Control Board, atleast once a year, to ascertain the capability of the laboratory and analysts from time to time.
4. The laboratory has to submit quarterly reports to the Ministry in the enclosed format regarding its activities and the number of samples analysed during the reporting period.
5. It may also be noted that periodic surveillance of recognized environmental laboratory under the Environment (Protection) Act, 1986 will be undertaken by the Central Govt. to assess its proper functioning, systematic operation and reliability of data generated at the laboratory.
6. It is also mandatory for the Lab to renew ISO 9001 and OHSAS 18001 from time to time.

*M. Raina*

(Dr. M. Raina)  
Director

Encl: as above



जहाँ है हरियाली /  
वहाँ है खुशहाली //

पर्यावरण भवन, सी.जी.ओ. कॉम्प्लेक्स, लोदी रोड, नई दिल्ली - 110 003  
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Signed on behalf of GMCSPL

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Date of Last Issue

07 February 2020

Date of Expiry



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Audit New Certificate With an Extended Validity will be issued.

  
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Global Management Certification Services Pvt.Ltd.

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