



Sustainability Report

2023-24

KARE Sustainability Report

STRUCTURE

PROLOGUE

VISION

MISSION OBJECTIVES

SUSTAINABLE POLICY

UI GREEN METRIC CRITERIA REPORTS

EPILOGUE

SUSTAINABILTY GOVERNANCE

KARE Sustainability Report

PROLOGUE

From Chancellor's desk.....

I am very much pleased to know that the Green Army of Kalasalingam Academy of Research and Education (KARE) is releasing its "Sustainability Report – 2023-24" for creating awareness on environmental issues among students and faculty members. The KARE is fully committed to improve the environmental ambience by using energy efficient technologies, enhancing the green cover and recycling wherever possible. I am very happy to note that Green army volunteers and Green team members have shown a spontaneous involvement in creating a tempo of environment consciousness to make this campus greener and Clean. I very much appreciate the efforts and achievements of our Green Army volunteers for bringing in a new dimension of activities within the campus.

Dr.K.Sridharan



Message from Vice President

I am very much delighted to see the Green Army emerging out of this campus. No doubt we all should join hands in keeping our environment clean and green. Student power is magnificent and everything is possible if they are motivated in right direction. I am sure that the Green Army will do wonders not only in campus but also outside the campus. I congratulate them for coming forward to shoulder the responsibility. Wish you all a great success.

Dr. S. Shasi Anand



Message from the Vice Chancellor

It gives me immense pleasure to know that a new dimension of activity emerging from the campus on environmental consciousness – The Green Army. KARE has taken many initiatives to make the campus environment- friendly. This campus is being maintained plastic-free for many years and plantation is a continuous activity within and outside the campus. KARE has a dedicated effluent treatment plant for recycling the waste water which is an example, a proof how much KARE is conscious on conserving natural resources. I wish all the Green Army volunteers and Green Team faculty members for organizing successful events in the academic year 2023-24.

Dr. S. Narayanan



KARE Sustainability Report

Message from the Registrar

This year's most striking activity of the campus is the initiation of a battalion of Green Army. It was a longtime need of the KARE to have a dedicated team of volunteers to take care of the natural resources within the campus via water, energy and forest. KARE is fully committed with the support of Management not to leave any stone unturned towards safeguarding the environment. I am sure that the Green Army will emerge as one of the best volunteers in making not only the University campus but also the surrounding areas synergize with environment. I wish all the very best to all Green Army volunteers and Green Team faculty members.



Dr.V.Vasudevan

Vision:

To bring zero pollution level in the university by means of adopting new technologies and continuous monitoring.

Mission:

To inspect, survey and analyze energy usage and emission of greenhouse gases in the area in order to reduce the amount of carbon foot print without affecting the output(s).

Objectives:

- ✓ Ensure judicious usage of fans and lights inside and outside the class rooms to minimize electricity consumption.
- ✓ Ensure litter-free environment inside the class room and corridor of the respective classroom
- ✓ Organize minimum two events in line with “Swachh Bharath” campaign within the campus and outside the campus under the leadership of Green Team (Faculty) members in a semester.
- ✓ Educate and advice co-students to follow environment friendly practices inside and outside the class room and in the campus as well.
- ✓ Report to the Green Team if any abuse of environment by any stack holders observed within the campus.

KARE Sustainability Report

SUSTAINABLE POLICY



KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION

Anand Nagar, Krishnanakoil

Sustainable Policy of KARE

We at Kalasalingam Academy of Research and Education are committed in achieving carbon neutrality and to reduce the environment impacts.

We shall achieve this by:

- **Reducing the carbon foot prints of our Direct and Indirect Energy usage**
- **Implementing Reduce, Reuse, and Recycle (RRR) principle wherever possible**
- **Reduction in Energy and Water Consumption**
- **Usage of renewable resources**
- **Purchase of Energy Efficient products**
- **Conform to applicable legal and other requirements**
- **Adopting Waste segregation and proper disposal**
- **Increasing green cover**
- **Creating awareness, Trainings all concerned stakeholders**
- **Setting and reviewing the sustainable objectives and targets**

We will ensure the availability of information and required resources to achieve the above objectives

KARE Sustainability Report

About KARE

Kalasalingam Academy of Research and Education (KARE) formerly Arulmigu Kalasalingam College of Engineering was established in 1984 by Kalvivallal Thiru. T. Kalasalingam, Founder Chairman who was a freedom fighter and Philanthropist. KARE is located at the pristine foothills of scenic Western Ghats of Southern Tamil Nadu at Krishnankoil, Virudhunagar District, TamilNadu and it is situated near the Thirumangalam-Kollam highway (NH 744) at a distance of 65 km from Madurai and 12 km from Srivilliputtur.



Kalasalingam Academy of Research and Education (KARE) obtained Deemed to be University status in 2006. KARE offers 45 UG, 21 PG & 23 PhD programmes in all domains. KARE is the first institution in India to offer B. Tech in Computer Science and Engineering for Speech & Hearing Impaired Students (SHIP). A special B. Ed.-(HI) programme approved by Rehabilitation Council of India (RCI) is offered. University has been ranked 29th in the University Category, 36th in Engineering Category and 48th in Overall category by the Ministry of Education, Govt of

India under National Institutional Ranking Framework during the year 2023. KARE has been accredited by ABET, USA for 11 B.Tech Programs. University has been accredited by NAAC (National Assessment Accreditation Council) with A++ Grade with the CGPA of 3.51 out of 4 in the third cycle of accreditation during the year 2024. 8 UG programs (Mechanical Engineering, Biotechnology, Civil Engineering, Computer Science and Engineering, Electronics and Communication Engineering, Electrical and Electronics Engineering, Food Technology, Information Technology) and 3 PG programs (Industrial Safety Engineering, Structural Engineering, Biotechnology) of the university have been accredited by NBA (Nation Board of Accreditation). KARE has numerous sanctioned projects this year from various funding agencies including DST, DBT, DRDO, CSIR, ICSSR, MOEF, TNSCST, etc and continues to maintain high ranking among the private institutions by Scimago Institutional Ranking for quality research and with h-index of 103. Stanford University has recently published an update of the list of the top 2% most widely cited scientists in various disciplines, which is considered to be the most prestigious ranking in the world. 10 faculties from KARE have been listed in the World Ranking of Top 2% Scientists in the year 2023 updated database made at the Stanford University. KARE produces “AKCE

KARE Sustainability Report

International Journal of Graphs and Combinatorics” which is being published by ELSEVIER as the only journal in the country. KARE has also established an International Research Center, which houses an Advanced Instrumentation Center that caters to the needs of researchers in the field of material science with high end instruments worth more than Rs 2 crores with research focus on composite materials, crystallography, solid state Ionics including nano materials for energy and biological applications. 30+ crores worth sponsored projects are under-stream with government funding.

Our Sustainability Plan

Our sustainability plan revolves around the energy uses, development of carbon neutral campus, clean water and water conservation, plantation and biodiversity conservation, sustainable farm practices, climate change education, and raising awareness campaigns. The plan is executed through our participation in the sustainable development goals (SDGs) impact rankings, UI Green Metric world university rankings, green, environmental and energy auditing, outreaches programs.

Green Campus Infrastructure and Setting :

KARE has a total land area of 1274761m² and total building area of 314431m². KARE has sprawling infrastructure spread over 315 acres encompassing 58 blocks with air-conditioned gallery type classrooms, 9 hostel blocks, an air-conditioned auditorium for staging major cultural programmes, air-conditioned seminar halls to support co-curricular activities, outstanding sports facilities including the avenue for yoga, gymnasium, indoor stadium, faculty and nonteaching residences and support services such as cafeteria/canteens/shops and other facilities. The entire campus has 100% power backup. KARE is a green eco-friendly campus with rich flora and fauna and the extent of greenery accounts for 449201.46 m² of the total area. The environment is green, clean and free from noise and pollution fostering the learning experience. All the roads, blocks and hostels within the campus are decked with trees and plants, crowned with emerald leaves and colourful flowers.

KARE Sustainability Report



Forest and Vegetation :

The Livestock Forage crop like Hedge lucerne, Cumbu Napier hybrid grass Fodder sorghum and Fodder maize are cultivated as semi-permanent basis. A Separate Orchard were established with different varieties of Mango, Sapota, Guava, Amala and Jackfruit. In Dry land Multi-purpose tree Agro-forestry model were established with tree Species of Teak, Casuarina Eucalyptus, Maha Neem (Melia dubia) in which the annual crop of Banyard millet and Black gram were cultivated on seasonal basis



KARE Sustainability Report



At KARE farm we have a brooding setup for small chicks and rearing shed. Students utilize this facility for their livestock and poultry management course. At KARE we have a brooding setup for small chicks and rearing shed. Students utilize this facility for their livestock and poultry management course. In this they learn how to set up a brooding system for young chicks, preparation of their own food and feed management. Vaccination for the chicks. A judicious mix of agricultural enterprises like dairy, poultry, piggery, fishery, sericulture etc. suited to the given agro-climatic conditions and socio-economic status of the farmers would bring prosperity in the farming.



Sericulture is one of the most important allied agricultural activities which gives higher return in small investment, provides employment for the farming and rural community and also generates income throughout the year, thus increasing the socio-economic status of the rural households. Sericulture comprises cultivation of mulberry, silkworm rearing and post cocoon processing leading to production of silk yarn

KARE Sustainability Report



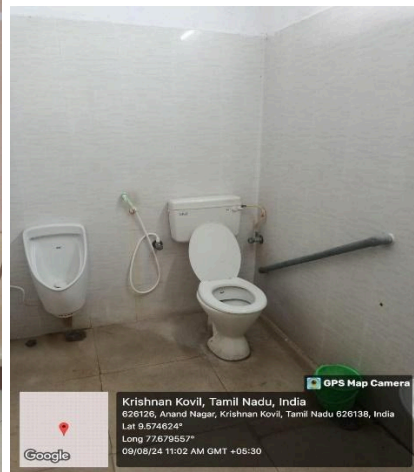
The rainwater collected is also used to recharge the groundwater through the campus's bore wells and open wells. Open well and Bore wells, which are strategically placed throughout the campus, are also used to recharge the ground water. To meet the water needs of the campus community and also to help the nearby communities, the institution maintains open wells on its land near the campus.



Campus facilities for disabled, special needs and or maternity care

Ramps and handrails are installed at all academic blocks with wheel chairs at various locations for the ease and safe access of facilities in the campus for the disabled persons. Assistive persons in lifts for disabled students at a university can significantly enhance accessibility and support.

KARE Sustainability Report



Maternity care (Day care center at KARE)



The campus has a daycare center to cater to the needs of infants and children of the faculty and staff members. This is equipped with cradles and a play area for children. Trained caretakers, who are in charge of the facility take care of the children.

Health infrastructure facilities

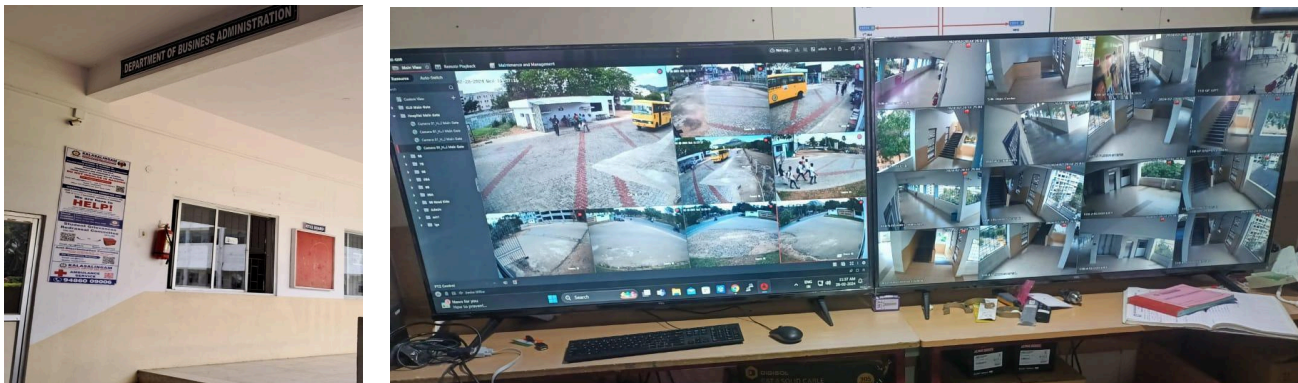
Kalasalingam Academy of Research and Education) has a separate Medical College and Hospital which provides all medical facilities for Students, Academic and Administrative Staff wellbeing.

KARE Sustainability Report



Security and safety facilities

KARE provides campus security is important for protecting students, faculty, and staff, and for creating a safe environment for learning. Cameras are installed in all blocks entrance and in roads etc.



Renewable source of Energy :

Implementing energy-efficient appliances is a strategic move that includes promoting sustainability, reducing energy costs, and minimizing environmental impact. Kalasalingam Academy of Research and Education (KARE) is committed to reducing its carbon footprint and promoting energy conservation by implementing energy-efficient appliances across the campus. The usage of energy efficient appliances reduces the energy consumption up to 45%.

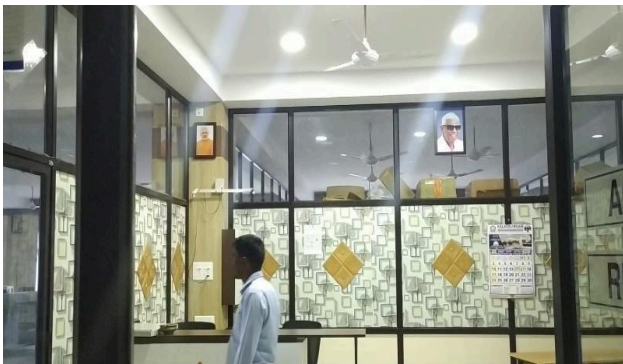
No of solar lights	152
Wattage of solar light	125 numbers 74W and balance 27 numbers 25W
No of days burning	365

KARE Sustainability Report

No of working hrs/day	10 hr
Total energy used from solar	$(50*40 + 117*20) * 10 * 365$
	34,875 kWh
Emission factor for CO2	1.0 tCO2/MWh
Total CO2 emission reduction	34.875 tCO2



Solar street lighting arrangement in KARE



Motion Lights



LED lights installed in all building

KARE Sustainability Report



Solar panels in all buildings



Solar panels in all buildings

Summary of units saved by usage of energy efficient appliances per annum:

S. No	Appliances	Total Energy saved (in MWh/year)	CO2 emission saved (t CO ₂ /annum)
1.	Slim tube lights & LED bulbs	255.15	255.15
0.	Energy Efficient fans	216.7	223.63
0.	Air conditioners	200.8	207.8
	Total	672.65	686.58

KARE Sustainability Report

Renewable energy sources and their amount of the energy produced (in kilowatt-hour)

To tap the alternate energy sources, KARE has installed 1124.22kWp rooftop solar power panels on top of nine blocks. About 45% of the energy consumption is met by the solar energy leading to the reduction in carbon foot print. The institution has also installed 152 solar street lights throughout the campus which amounts to a saving of about 9.56 kWh per annum. Further, solar water heaters are installed in the hostels and solar pumps are installed in the agriculture farms to tap solar energy.



Solar Plant

Energy produced by Biogas Plant

For the production of biogas, a fixed dome digester was constructed to utilize part of the kitchen waste. The radius of the digester is 1.25 m and its height 2.5 m. The total volume of the digester is 12 m³. About 1500 kg of kitchen waste is processed everyday resulting in the production of 4.6 kg of biogas per day. This results in savings in the usage of LPG in the kitchen

KARE Sustainability Report



Biogas plant

Total Renewable Energy generation (in kWh per annum)

S. No	Renewable Energy Source	in kWh
1	Solar Plant	3910216
2	Solar Street lights	9.56
3	Biogas	1938
4	Wind power	6000
Total		39,18,163.56

Months	Solar Generation								
	Library	5 th block	ADMI N & 8,9 th block	Core Building	11 th Block	KMC H, A, B, block	SS-3 Pharmacy	Mens' Hostel -3	Total solar Power Generation
Jul-23	45930	38080	49324	39610	36450	36680	38547	39267	323888
Aug-2	49940	3946	49500	39860	3356	39154	39024	39489	329987

KARE Sustainability Report

3		0			0				
Sep-23	46190	38960	48780	39090	34810	39230	38087	38267	323414
Oct-23	46100	39370	49720	39232	30750	38220	39023	39290	321705
Nov-23	43870	39710	49350	38940	31890	39966	39097	38365	321188
Dec-23	45220	39320	49650	39000	35150	39700	39021	39325	326386
Jan-24	43065	39670	48350	39560	36140	39310	39654	39365	325114
Feb-24	40250	39150	49960	39843	38900	38200	38763	38888	323954
Mar-24	43060	39920	49960	38480	38750	39470	39987	39327	328954
Apr-24	44140	38140	48970	39580	38620	39025	39034	39548	327057
May-24	47530	38590	48400	39524	38093	39050	39587	39478	330252
Jun-24	43550	38890	48340	39692	39456	39610	39346	39433	328317
Total									3910216

No of solar lights	152
Wattage of solar light	125 numbers 74W and balance 27 numbers 25W
No of days burning	365
No of working hrs/day	10 hr
Total energy used from solar	$(50*40 + 117*20) * 10 * 365$
	34,875 kWh
Emission factor for CO2	1.0 tCO2/MWh
Total CO2 emission reduction	34.875 tCO2

Water Conservation and Recycling

KARE has established a sustainable water management system that includes rain water harvesting pits, trenches, check dams, canals and percolation ponds. The rainwater is harvested from the roof-top of the academic buildings and hostels. Our campus maintains separate canals for sewage water, rainwater and drinking water so there is no possibility In our campus of mixing polluted water with drinking water.

KARE Sustainability Report



The wastewater is treated using advanced sequential batch bioreactor, followed by tertiary treatment using dual sand, activated carbon filtration and UV – Chlorine disinfection. The treated water is recycled using a dual piping system to flush urinals and for gardening purposes.



The Sewage Treatment Plant has a capacity to process 5 lakh litres a day. They operate 24x7 and the treated water is used for watering to the gardens throughout the campus. Recycled water is periodically tested for ppm and composition, and it is ensured within permissible limits to ensure it is hygienic. Cleaning of collection tanks is done every six months. The STPs are operated by a team of Operators who ensure the safety measures. The STPs play a major role in Keeping our Campus Green.

KARE Sustainability Report



KARE has analysed the water quality parameters and it is compared with BIS standards. The following table shows the quality of drinking water and it proves that it is pure, safe and clean.

Drinking water quality in KARE Campus:

N o.	Parameters	KARE Value	BIS Standards
1	pH	7.6	6.5-8.5
2	Turbidity	NIL	1 NTU
3	Conductivity (μ mhos)	90.4	<250
4	Hardness (ppm)	40.71	200
5	Total Dissolved Solids (ppm)	58.5	500
6	Chloride (ppm)	32.07	<250
7	Salinity (ppm)	74.3	<500
8	Nitrates (ppm)	-	45

KARE Sustainability Report

9	Sulphates (ppm)	6.85	200
10	Phosphate (ppm)	0.01	1.5
11	Fecal Coliform counts/ml	-	-



Tertiary treatment of sewage water using rapid sand filter, activated charcoal, UV and Chlorine disinfection

Waste Management :

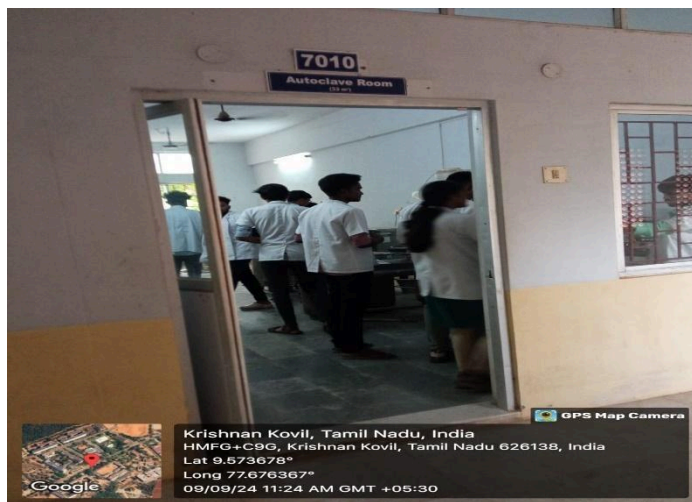
KARE has established a system for the management of various wastes produced in the campus, to provide a clean environment through the concept of (3R) Reduce, Recycle, Reuse which in turn creates wealth and also supports wellbeing of students, faculty and staff and to enhance the quality of life within the campus. All necessary facilities for the management of wastes are also in place. The wastes generated such as paper, cardboard, computers, electronic equipment, glass batteries, wood, concrete, agriculture and food wastes

KARE Sustainability Report



Biomedical Waste Management

Biomedical waste is being generated by the health center present in the campus and by the Department of Biotechnology that uses animals for their research. The bacterial cultures are autoclaved and disposed of. The solid biomedical wastes such as blood-stained cotton, animal carcasses generated within the campus are subjected to sterilization using an autoclave that kills harmful pathogens and disposed through an MoU signed with a designated agency



Solid Waste Management :

Solid waste generated in the campus is collected at various points as degradable and non-degradable waste using separate bins for collection. Sufficient number of collection bins is present throughout the campus. They are collected and brought to a central location by designated workers using trucks.

KARE Sustainability Report



KARE has developed technology to convert organic and food waste into nutrient rich manure. Each of the waste materials generated has a different decomposition rate in the environment. The microbial degradation of different solid waste materials within 15-17 days and the differences in decomposition rates in normal processes and inoculated consortia of bacteria, were studied. KARE is also offering consultation both for establishing such production centers as well help in research under this area.

The KARE does not use radioactive materials and hence there is no radioactive waste generated. Chemical wastes generated include chemical wastes from laboratories such as acids and solvents, batteries and oil. MoU is signed with a designated agency for the disposal of wastes. The major toxic waste generated inside the campus is spent oil, glass waste, from cathode ray tubes, other activated glasses, electrical fittings and e-waste.



Transportation

The campus is easy to reach by public transport. Besides public transport, the university provides services for staff and students. These buses take staff and students from home to the campus, but they do not enter the campus. Passengers are dropped off in the university's parking area. There is no need for shuttle services on

KARE Sustainability Report

campus. The campus is also closed to private vehicles. When needed, transport on campus is done using zero-emission vehicles. KARE provides regular shuttle services to the teaching & non-teaching staff and students. Few (2 EV Vehicles of 20 seating capacity and 2 EV Auto of capacity 4 seats) number of shuttle services are available within the campus. This helps the university reduce carbon emissions on a national level.



KARE has disabled friendly, barrier free environment. Ramps and handrails are installed at all academic blocks with wheel chairs at various locations for the ease and safe access of facilities in the campus for the disabled persons.

KARE Sustainability Report



Pedestrian pathway

KARE Sustainability Report

Research and Development :

KARE focused all sustainability and published many papers published in various sustainability goals and various new sustainability courses are introduced in curriculum of UG and PG programmes. Various sustainability events are conducted throughout the year . Few events are as follows :



Cocoon Production and Handy Crafts - 22.08.2023 & 23.08.2023

KARE Sustainability Report



One Day Seminar on Crime Against Women and Children -08.08.2023



One Day Seminar on Embracing Millets: Nourishing Lives, Sustaining Earth -16.08.23

KARE Sustainability Report



Workshop on Integrated Crop Protection in Coconut – 02.09.2023



One Day Workshop on Materials Characterization Techniques – 11.01.2024

KARE Sustainability Report



MoU's with International University



Semester Exchange Programs for student exchange

KARE Sustainability Report



International Conference on Sustainable in Materials, Manufacturing, and Automation (ICSIMMA2024) - 17-18 April, 2024.



International Disability Day – Dec 2022

KARE Sustainability Report



SPARKZ - 01.03.2024 & 02.03.2024

KARE Sustainability Report



Fiesta - 07/01/2023



Valam - 11.12.23

KARE Sustainability Report



Ugadi Utsav - 06.04.2024

KARE Sustainability Report



Tree plantation - Jan 2024

KARE Sustainability Report



Vehicle Free Day and Energy Conservation Day - 05/08/20203

KARE Sustainability Report

EPILOGUE

Student's society is a well-being of nature and Environment. Here our university students are willingly participate in environmental development activities. This gives them the importance of Green Earth Goal for Sustainable Energy generation. Thus the new team of volunteers under the name of "GREEN ARMY" will work continuously in taking care of the campus environment. This activity will give an additional opportunity to the students to learn more on nature and resource conservation. This team will work in all four aspects namely

- Energy Conservation
- Water conservation
- Environment Protection
- Tree Plantation
- Cleaning nearby villages
- Helping hands
- Plastic Campaign
- Vehicle Free Day
- Pollution Monitoring
- Industrial Visit

Their effort will certainly yield results in the form of enhanced green area, optimal use of resources and harvesting of water. These activities are continuously encouraged by the management of our University for the students to make ease of clean and litter free campus. With this new evaluation of activity KARE poised to emerge as one of the best environment for educational activities.

The need of the hour is "GREEN AND CLEAN ENVIRONMENT"

KARE Sustainability Report

Sustainability Governance

KARE has constituted a committee on the Sustainable development goals and UI Green Metric. The committee is monitoring all activities related to the sustainability on the campus. The SDG expert responsible for Submitting the reports and organize various events.

KARE CDS - Centre for Sustainable Development

S.No	SDG details	In-Charge(s)
Overall Coordinator : Dr. L. Muthulakshmi, Deputy Director/AR		
1.	SDG 1 : No Poverty	Dr. R. Selvapalam, Admission Officer Dr.R.Ramalakshmi- Director –CDOE
2.	SDG 2 : Zero Hunger	Dr. V. Arumuga Prabhu, Deputy Director/Campus Residence Dr. R. Rajam, HoD/ Food Technology
3.	SDG 3 : Good Health and Well-being	Dr. M. Pallikonda Rajasekaran, Director/R&D. Dr. T. Arunprasath, HoD/Biomedical (Centre for Biomedical Device and Diagnostics) Dr.Maria Antony Raj/ HOD/MSW
4.	SDG 4 : Quality Education	Dr. N. Rajini, Director/ Academics Dr. R. Baburaj Ragubalan, Asst. Director/KalTec office
5.	SDG 5 : Gender Equality	Dr. M. Kalpana, President/ WEC. Dr.M.S.Revathy Presiding officer / ICC
6.	SDG 6 : Clean Water and Sanitation	Dr. S. Vanitha, Center for Water Technology Dr. Naresh Kumar Sharma, Center for Water Technology.
7.	SDG 7 : Affordable and Clean Energy	Dr. R. Ramkumar, HoD/EEE Dr. K. Vijayakumar, Asso. Prof/EEE
8.	SDG 8 : Decent Work and Economic Growth	Dr. Kundhavai, Director/HR Dr.A.Alavudeen Director / OCR
9.	SDG 9 : Industry, Innovation and Infrastructure	Dr. J. Deny, Director/IEDC Dr. V. Muneeswaran, Deputy

KARE Sustainability Report

		Director/R&D.
10.	SDG 10 : Reduced Inequalities	Dr. A. Samson Nesaraj, Director/Student Affairs Dr Raja Krishnamoorthy, Director/IR
11.	SDG 11 : Sustainable Cities and Communities	Dr. Premkumar, Associate Professor/Civil (Estate office) Dr. S.J.Kabilan, Assistant Director/SA
12.	SDG 12 : Responsible Consumption and Production	Dr. Edward George, Dean/Agri. Dr. R. Kannan, Asst. Prof./Agri.
13.	SDG 13 : Climate Action	Dr. A. Samson Nesaraj, Director/Student Affairs Dr. M.Siva Subramaniam, Director/Transport
14.	SDG 14 : Life Below Water	Dr. S. Vanitha, Center for Water Technology Dr. Naresh Kumar Sharma, Center for Water Technology.
15.	SDG 15 : Life On Land	Dr. Edward George, Dean/Agri. Mr.G.poomari Muthukumar/ AGRI
16.	SDG 16 : Peace, Justice and Strong Institutions	Dr. G. Bharathi, HoD/Law. Dr. K.Gurusamy Depury Registrar
17.	SDG 17 : Partnerships for the goals	All SDG teams + All Directors offices coordinated by AR Office

UI Green Metric In-charges

S. No.	Criteria of UI Green Metric	In-Charges
1	SI: Setting & Infrastructure	Dr. R.Sumathi
2	EC: Energy & Climate Change	Dr.M.Raja
3	WS: Waste	Dr.Naresh Kumar Sharma
4	WR: Water	Dr.L.Muthulakshmi
5	TR: Transportation	Dr. R.Sivasubramanian
6	ED: Education & Research	Dr.R.Kottaimalai

KARE Sustainability Report