

SDG12 Responsible Consumption and Production

University campus is a perfect example of technology in harmony with nature. It is situated in sprawling, green, clean campus, with ICT enabled infrastructure and modern self-sufficient buildings. KAHER has evolved many eco-friendly and sustainable development facilities for energy conservation and alternative energy sources.

Energy consumption in the campus:

- Solar energy:61%
- Wind energy:14%
- Solar Heating Units:11%
- Electricity Board (HESCOM): 14%

System followed and utility:

- 89% of solar energy is derived from 977 roof top solar panels and 8 to 10 lakh kwh / month electricity from Solar wind Power Plant situated at Jamkhandi, Bagalkot. 11% is saved because of solar water heating pannels, thereby making maximum renewable energy consumption and very minimal electricity from electricity board i.e. only 11% of the total usage for the year 2023.
- Being a health science institute, the Institution has established norms and practices for E-governance and ICT assisted administration has reduced paper utilization.
- **Biomedical waste:** Occupational Safety and Health Administration (OSHA) standards are followed to manage biomedical waste generated at hospital that includes segregation, collection, transportation, storage, treatment and disposal with separate area for each. Bio hazardous waste is incinerated; ash generated is disposed in landfills. Hospital has unique feature of using heat produced by combustion of biomedical waste in the incinerator to heat up boilers. Steam produced is used in laundry and kitchen.
- **Organic waste:** Left over vegetables, food from kitchen sources and garden litter are converted to useful compost at various vermicompost units in the campus which is adequate for 100-acre campus.
- **Paper Waste:** Gets shredded. Institution along with NGO's practices '**Raddhi to Buddhi**'. The income generated by selling raddhi is used to educate economically backward KLE employee's children.
- **Liquid waste :**Channelized into disinfection units and treated
- **Sewage treatment plant:** 2000 m3/day capacity helps to treat the waste generated from hospital to useful manure. Similarly, the domestic water waste generated from other buildings is treated using activated sludge process by extended aeration system. Thus, the treated sewage after chlorination is pumped for gardening at hospital garden [6 acres] and University campus [15 acres]. Recycled water and waste water of RO system is used for flushing toilets, cleaning and gardening. **Water treatment plant** has capacity of purifying 2.25 million litre/day. Similarly, soiled water is channelized to disinfection units prior to disposal.
- Pressure compensating aerators fixed to the taps saves 15-20% water.

- **E-waste** is minimized by proper maintenance. If found faulty they are disposed at vendor under an MOU.
- **Hazardous chemicals and Radioactive Waste management:** systematically [sealed and unsealed waste] disposed through different storage chambers. AERB certification is obtained for all X-ray units.
- **Other Water conservation facilities practised are,** Rain water harvesting, Borewell /Open well recharge, Maintenance of water bodies and distribution system in the campus



- **Green campus initiatives include:** Restricted entry of automobiles, Battery-powered vehicles , Ban on use of Plastics, Pedestrian-friendly pathways , Landscaping.
- **Environment/ energy audits are regularly undertaken and institution has won many state and National level awards for green campus** and beyond the campus environmental promotion activities.

The campus has been awarded Fourth and Third Cleanest Campus in 2017 and 2018 by MHRD and is in Platinum band of sustainable institution of India since 2022.

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of RO system is used for flushing toilets, cleaning and gardening. E-waste, hazardous chemicals and radioactive waste are managed through different storage chambers.

- **Waste Treatment facility:** Sewage treatment plants (capacity of 2000 + 1000 KLD) helps to treat the water waste generated from hospital. The superfluous water after chlorination is used for gardening and to flush toilets. Water treatment plant has capacity of purifying 2.25 million litres/day.
- LED bulbs and power efficient equipment's
- 300 KWP ROOFTOP project structures installed Commissioning in progress

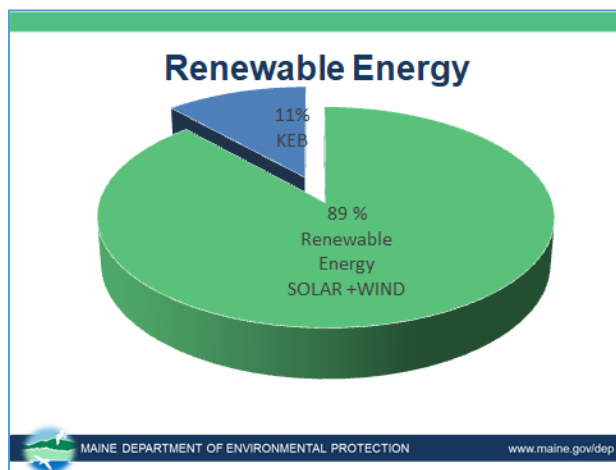
Our planet has provided us with an abundance of natural resources. But we have not utilized them responsibly and currently consume far beyond what our planet can provide. At KLE academy of Higher Education and Research every effort is been made to use, produce and evolve sustainable ways that will reverse the harm that we have inflicted on the planet.

Solar panels

Water treatment system




Renewable Energy									
HTS -46 (KLE Hospital)					HTS -106(J N Medical College)				
Month	Consumption	Solar/WIND	HESCOM		Month	Consumption	Solar/WIND	HESCOM	KFC
Jan-23	828450	826000	2450		Jan-23	284170	274000	10170	49010
Feb-23	814800	781000	33800		Feb-23	269303	250000	19303	44617
Mar-23	923850	888000	35850		Mar-23	301190	282000	19190	47050
Apr-23	1009050	520000	489050		Apr-23	299885	280000	19885	54775
May-23	1075350	670000	405350		May-23	255311	215000	40311	48829
Jun-23	1026000	1108000	0		Jun-23	251300	242000	9300	49420
Jul-23	852600	825000	27600		Jul-23	284436	250000	34436	46704
Aug-23	900450	845000	55450		Aug-23	276386	280000	0	42514
Sep-23	889200	850000	39200		Sep-23	282215	260000	22215	46465
Oct-23	953700	478000	475700		Oct-23	263587	262000	1587	48653
Nov-23	886200	865000	21200		Nov-23	258400	270000	0	45740
Dec-23	884700	875000	9700		Dec-23	255000	255000	0	48420
Total	11044350	9531000	1513350		Total	3281183	3120000	161183	
CONSUMPTION					Renewable Energy HESCOM				
14325533					12651000 1674533				





Sewage treatment plant



Prof. (Dr.) M. S. Ganachari
Registrar