



Towards Sustainability...

THE - Impact Rankings 2024

7 AFFORDABLE AND
CLEAN ENERGY

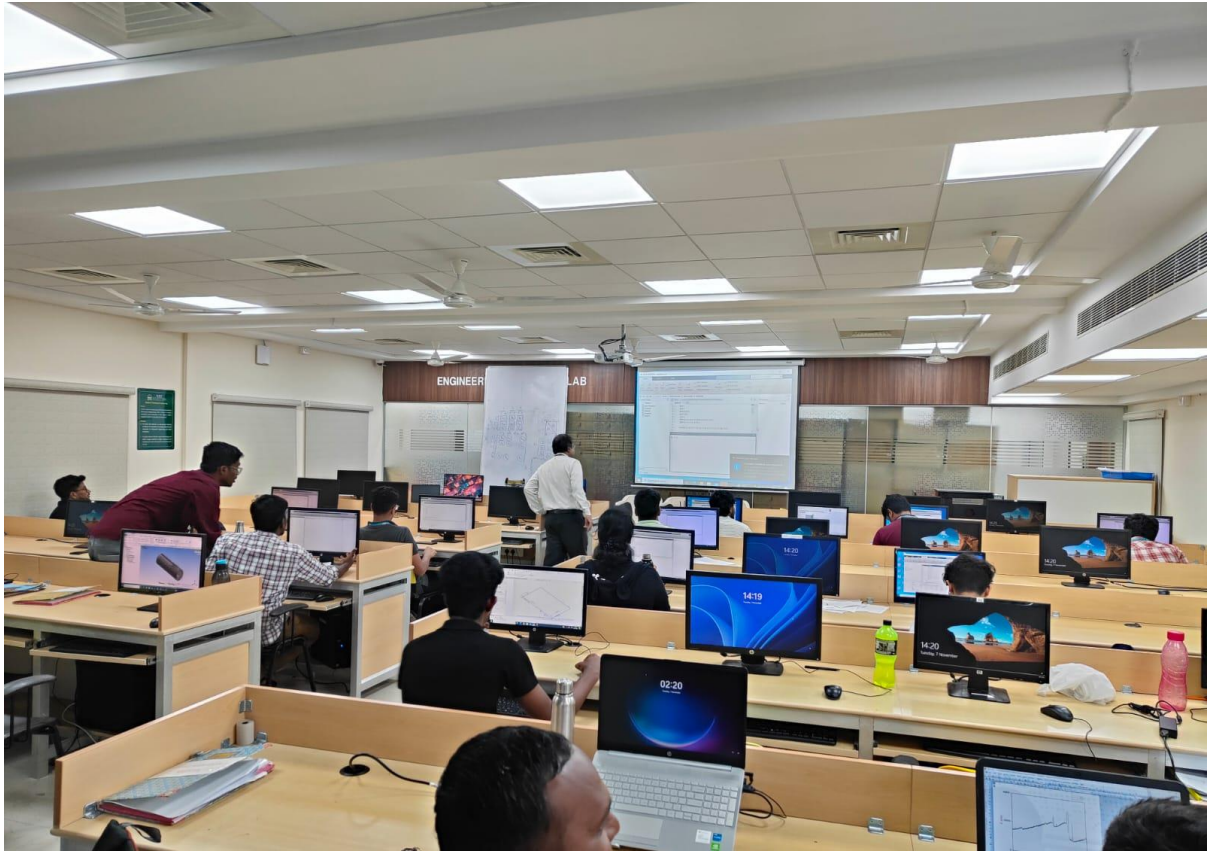


Ensure access to affordable, reliable,
sustainable and modern energy for all

7.2.1 Energy-Efficiency Renovation and Building

We are using energy efficient fixtures like LEDs, BLDC Fans, VFD lifts, HNS pumps for water supply, occupancy sensor based appliance control at rest rooms and Centralised water cooled HVACs/ VRF /VRV in the new Pearl Research park, R block Gents hostel, G and H Girls hostel building as well as renovated buildings.







Renewable Energy

This indicator addresses energy consumption, energy sources, energy monitoring, lighting, appliances, natural gas and vehicles. Energy use is clearly an important aspect of campus sustainability and thus requires no explanation for its inclusion in the assessment. However, many may not realize how much influence the higher education sector has in the larger energy market. Energy sources utilized by all the departments and common facility centers include electricity.

Major use of energy is in office, canteen, hostels and laboratories for lighting, and laboratory work. Energy consumption is by major energy. The total connected load is 6200 kVA and sanctioned demand from TNEB is 3600 kVA. The institute campus is achieved utilizing the Solar Energy to generation of 6 lakh units out of the total consumption of 6200 KVA of connected load. Furthermore the followings are adopted as energy conservation measures in the campus.

Transformer and Diesel Generator Details

Sl. No.	Power House	Transformer	Qty	Total Capacity	Generators	Qty	Total Capacity
1	Substation 1	1000 KVA	2	2000 KVA	500 KVA	2	1000 KVA
2	Substation 2	1000 KVA	2	2000 KVA	500 KVA	2	1000 KVA
3	Substation 3	1600 KVA	1	1600 KVA	500 KVA	2	1000 KVA

Electrical & LV Systems

- a. All lifts are provided with AC variable voltage, variable frequency drives (ACVVF). Recently lifts are grouped and configured to stop at particular floors instead of stopping at all floors instead of stopping at all the floors to save considerable energy.
- b. Power factor maintained at 0.95 or higher. This will reduce electric power distribution losses in the installation.
- c. Compact Fluorescent lamps (CFL's) with high frequency ballast is used for Hotel rooms and all corridors are fitted with 16/18 W LED lamps
- d. We are converting the entire Electronic T5 choke to LED tube lights and around 60% of lights converted in to LED bulb.