

# **THE - Impact Rankings 2025**



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

#### 7.2.1 Energy-efficient renovation and building

The Institution follows **NBC 2016** (National Building Code of India - 2016) design guidelines for the construction of new buildings and the improvement of existing ones. Also, it deals with the installations and the replacements of the equipment.

## **Green Building Infrastructure:**

- 1. All the buildings are constructed under NBC 2016 (National Building Code of India 2016) guidelines.
- The university follows the concept of Smart buildings equipped with efficient ventilation systems and surrounded by green belts and plantation for healthy environment around the buildings.
- 3. Most new buildings are designed in a **square or rectangular shape**, with open space left in **the center**. This layout allows natural sunlight to enter the buildings, making the interiors brighter and more comfortable.
- 4. The buildings are designed with open courtyards, ensuring that both the inner and outer areas get plenty of light. All the **corridors are properly ventilated** and roof tops have vents for maximum utilization of day light.
- 5. **Roof skylights and large windows** bring in plenty of sunlight, reducing the need for artificial lighting and saving energy. Central courtyards and ceiling lights also help increase daylight inside.
- 6. New buildings of the university have a middle garden with or without a glass roof. These **open areas in the middle of the buildings get more sunlight** so that electricity usage for the lighting of halls is reduced.
- 7. Fly ash, marble dust, granite dust, Ground Granulated Blast-furnace Slag (GGBS), paper burnt ash and sugarcane bagasse ash are used as **source materials for the manufacture of eco-friendly construction products** such as concrete bricks and paver blocks.



- 8. All classrooms and laboratories are provided with wide windows to have plenty of natural ventilation and maximum illumination. These arrangements help to reduce the electricity consumption and provides natural environment for studies.
- 9. The **energy efficient appliances** are installed when constructing new buildings and during the replacement in all areas like, lightings, Air conditioners, fans and Geysers.
- 10. 152 automatic day-light sensors are installed in the **solar street lights.** Sensor-based automatic light switching is interfaced with the movement of persons.
- 11. To tap the alternate energy sources, the institution 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. Further, solar water heaters are installed in the hostels and solar pumps are installed in the agriculture farms to tap solar energy.
- 12. The institution has power **grid substations** to move electricity use from busy times to quieter times. This helps keep the power grid stable and makes our power supply more efficient and reliable.
- 13. All lifts are grouped and configured to stop at particular floors instead of stopping at all the floors to save considerable energy.

## **Academic Programs:**

To ensure the success of the sustainable development, the institute offers the following academic programmes. Foundation course on Sustainable development that aimed at educating the campus community about the importance of energy conservation:

- 1) B. Arch.,
- 2) M. Arch. (Habitat Design)
- 3) B.Tech., Civil Engineering
- 4) M. Tech., Structural Engineering
- 5) M.Tech., Renewable Energy Technologies

#### **Related Policies:**

The university have separate **policies** to ensure the efficient use and upkeep of all campus infrastructure.



Name of the Policy	Link
Energy-efficient	https://www.kalasalingam.ac.in/unsdg-sdg7/
renovation and building	
Maintenance Policy	https://kalasalingam.ac.in/wp-content/uploads/2021/11/Maint
	enance-Policy.pdf
Sustainable Environment	https://kalasalingam.ac.in/wp-content/uploads/docs/Sustainab
Policy	le_Environment.pdf
Energy policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/
	Energy-Policy.pdf



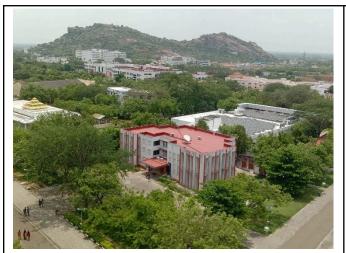




Roof skylights

Electrical Ventilation fans are replaced with Natural Flow (Power less) Ventilation Turbines







Green belts and plantation for healthy environment around the buildings





Building constructed in square or rectangular shape, with open space left in the center to allow more sunlight and ventilation





Usage of Recycled materials for Construction









Natural Ventilation

Ramps and handrails are installed fordiffrently abled persons.



20w Slim lights





2x2 Drop Ceiling LED Light Fixtures

Solar street lighting (Single pole view)







Energy Efficient BLDC fans

Ceiling Lamps





Solar Water Pumps

Solar Water Heater (Close view)