THE - Impact Rankings 2026

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**.

   https://www.bis.gov.in/standards/technical-department/national-building-code/?lang=en

2. 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.
3. 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.

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

4. Most new buildings are designed in a **square or rectangular shape, with open space left in the middle of the buildings get more sunlight**. This layout allows natural sunlight to enter the buildings, making the interiors brighter and more comfortable. so that electricity usage for the lighting of halls is reduced.

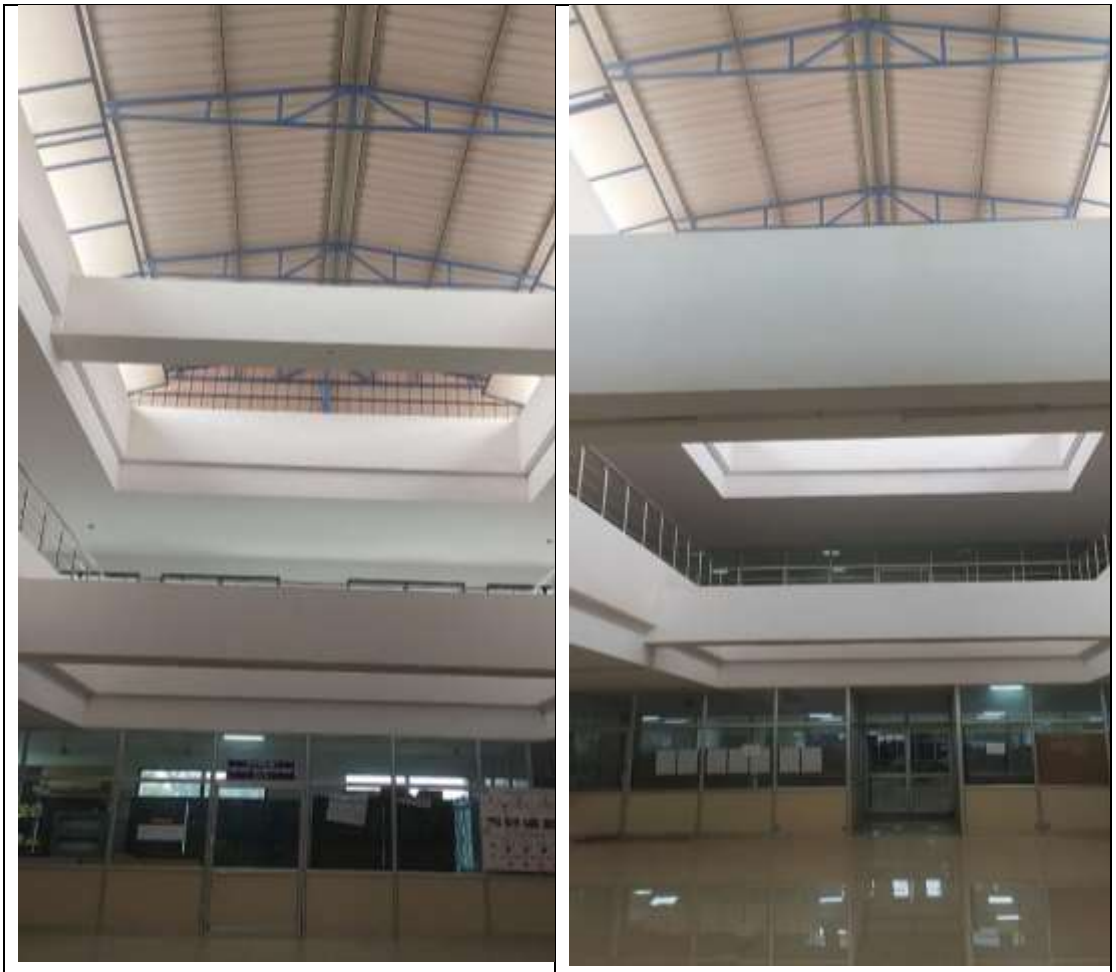
Maximizing Daylight using square shape construction

5. **Indoor Environment: Thermal Comfort:**

The construction of buildings with a focus on environmental parameters, particularly those related to thermo-hydrometric comfort, is essential for creating sustainable and livable spaces. To achieve this balance, **modern building designs are constructed in North-East direction to avoid excessive heating due to sunlight inside the classrooms**. Additionally, All the classrooms are incorporated with **natural ventilation** systems.

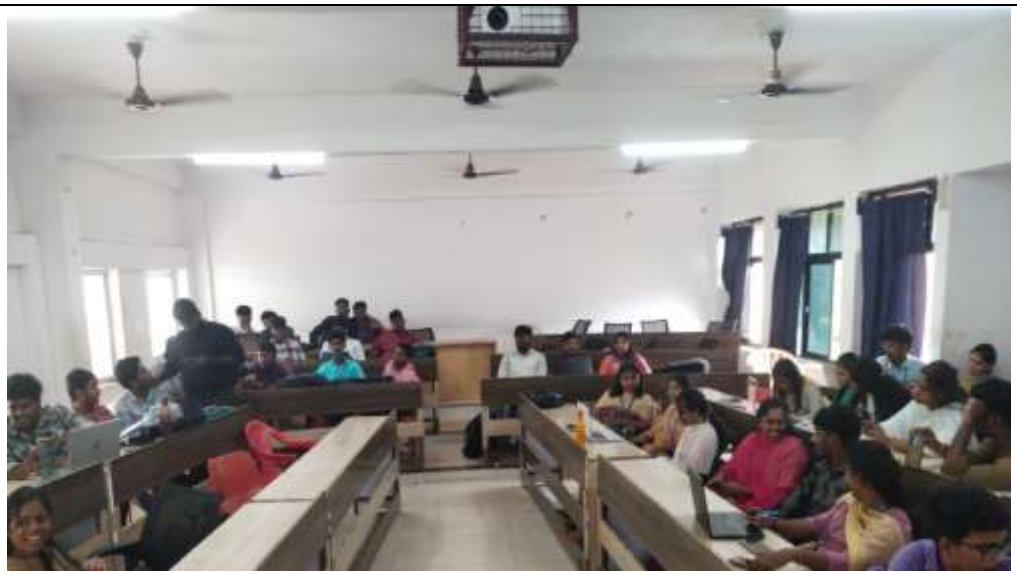
Modern building designs constructed in North-East direction to avoid excessive heating due to sunlight inside the classrooms

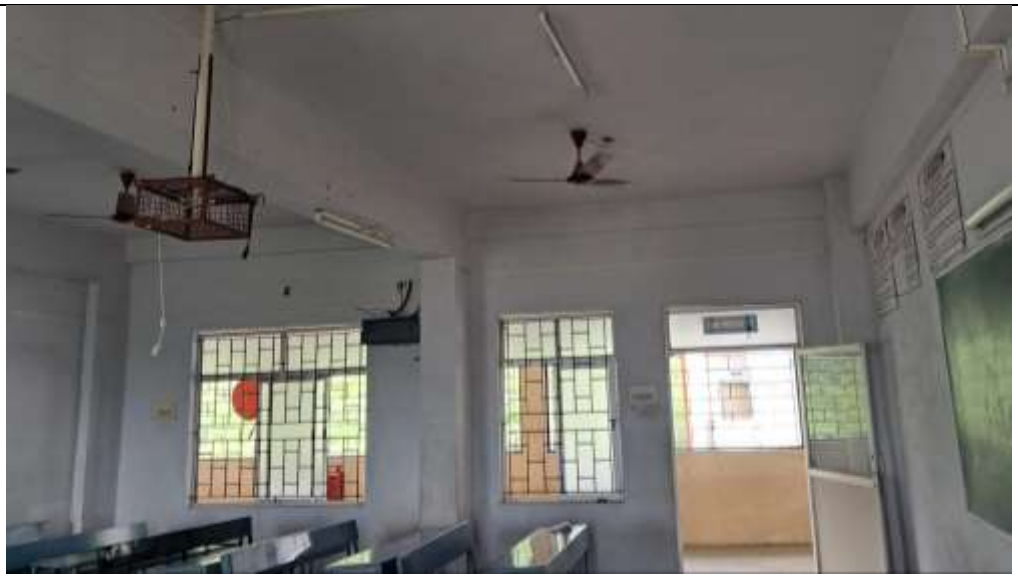
6. **Roof skylights and large windows** bring in plenty of sunlight, reducing the need for artificial lighting and saving energy. Central courtyards and ceiling lights also help increase daylight inside.



Roof skylights

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.





Natural Ventilation to the classrooms

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**.

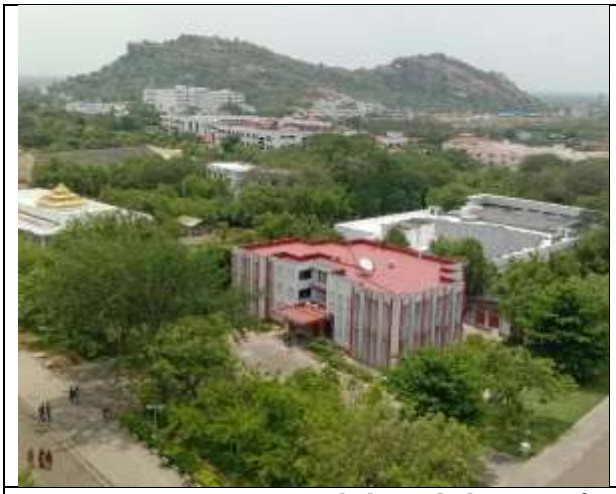
Academic Programs:

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**

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

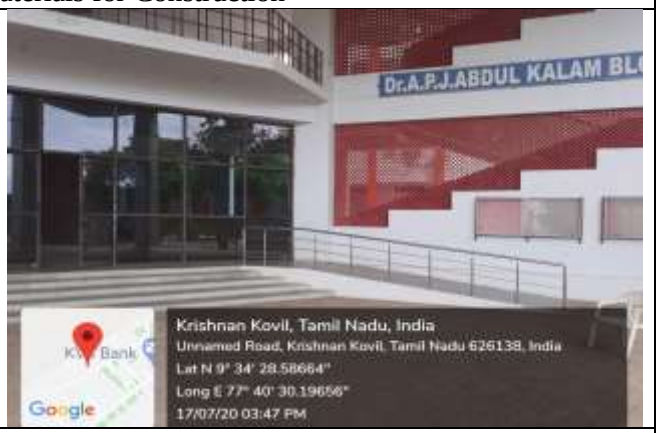
Name of the Policy	Link
Energy efficient and Renovation Building policy	https://www.kalasalingam.ac.in/wp-content/uploads/2024/11/Energy-efficient-and-Renovation-Building-policy-1.pdf
Maintenance Policy	https://www.kalasalingam.ac.in/wp-content/uploads/2025/11/Maintenance-Policy_2.0.pdf
Sustainable Environment Policy	https://kalasalingam.ac.in/wp-content/uploads/docs/Sustainable_Environment.pdf
Energy policy	https://www.kalasalingam.ac.in/wp-content/uploads/2021/11/Energy-Policy.pdf



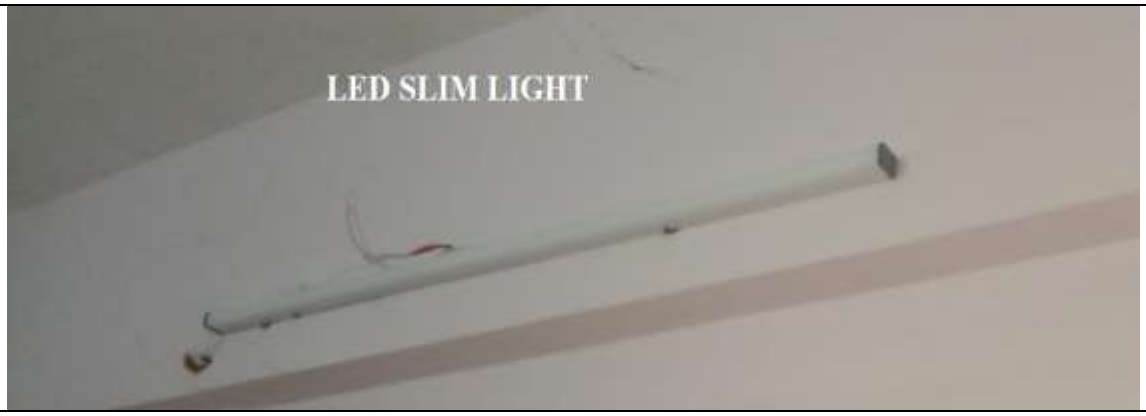

Green belts and plantation for healthy environment around the buildings


Usage of Recycled materials for Construction

Natural Ventilation



Ramps and handrails are installed for diffrently 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)