



University : Karunya Institute of Technology and Sciences  
Country : India  
Web Address : [www.karunya.edu](http://www.karunya.edu)

## [2] Energy and Climate Change (EC)

### [2.9] Elements of Green Building Implementation as Reflected in All Construction and Renovation Policies

#### 1. Solar Water Heaters



30 numbers of Solar Water Heaters Across the Campus



## 2. Solar Power Plant



95kW Solar Power Plant in Admin Block & 20kW Solar Power Plant in EVR/Oprah Mess Building



### 3. Electronic Fan Regulators



Electronic Fan Regulators in place of Electric fan regulator for Power savings across the campus



#### 4. Energy Efficient Computers



Green Computing - Energy efficient computers

#### 5. Star Rated Air Conditioners for Power Saving in the Campus



Star Rated Air Conditioners for Power Saving





## 6. LED Street Lights & LED Tubelights

### LED Street Lights



## 7. High Volume Low Speed Fans





## 8. Biogas Plants



Biogas Plants across the campus - 5

### Description:

#### 1. Solar Water Heaters

30 solar water heaters are strategically installed across the campus, providing hot water while reducing reliance on conventional energy sources. This initiative aligns with Karunya Institute of Technology and Sciences commitment to sustainability by lowering carbon emissions and promoting renewable energy use, contributing to SDG 7: Affordable and Clean Energy and SDG 13: Climate Action.

#### 2. Solar Power Plants

The Institution operates a 95kW solar power plant in the Admin Block and a 20kW plant at the EVR/Oprah Mess Building. These installations significantly reduce electricity costs while contributing to eco-friendly power generation on campus, supporting SDG 7: Affordable and Clean Energy and SDG 12: Responsible Consumption and Production.

#### 3. Electronic Fan Regulators

Electronic fans Regulators are replaced in place of electric fan regulator across the campus to reduce heat loss and energy loss to provide efficient airflow with minimal energy consumption. They support the Institution's sustainability efforts by optimizing power usage, especially in classrooms, labs, and hostels, contributing to SDG 12: Responsible Consumption and Production and SDG 13: Climate Action.



#### **4. Green Computing**

Karunya promotes green computing by using energy-efficient computers, which consume less power and have longer lifespans. This practice not only reduces operational costs but also minimizes the environmental impact of electronic waste, aligning with SDG 9: Industry, Innovation, and Infrastructure and SDG 12: Responsible Consumption and Production.

#### **5. Star Rated Air Conditioners**

The use of star-rated air conditioners ensures optimal cooling with energy-saving compressors, reducing electricity consumption. This initiative helps the campus maintain comfort while adhering to power-saving standards, contributing to SDG 7: Affordable and Clean Energy and SDG 13: Climate Action.

#### **6. LED Street Lights & LED Tube lights**

Conventional street lights & Tube lights are being replaced by LED street lights & LED Tube lights to illuminate the campus, providing bright, energy-efficient lighting with reduced maintenance. These lights improve visibility and safety while significantly lowering the Institution's energy consumption, supporting SDG 7: Affordable and Clean Energy and SDG 11: Sustainable Cities and Communities.

#### **7. High Volume Low Speed Fans [HVLS]**

HVLS Fans are installed in Auditoriums to avoid installation of more number of Conventional Fans to provide Air flow for large span area at low power consumption with reduced maintenance.

#### **8. Biogas Plants**

Five biogas plants convert organic waste into clean energy, supporting the Institution's waste management efforts. This eco-friendly solution not only reduces waste but also produces biogas for cooking and other energy needs in Hostel, aligning with SDG 12: Responsible Consumption and Production and SDG 13: Climate Action.

#### **Additional evidence link**

<https://www.karunya.edu/iqac/ranking/UIGreenMetric>