

University : Karunya Institute of Technology and Sciences
 Country : India
 Web Address : www.karunya.edu/

[2] Energy and Climate Change (EC)

[2.4] Renewable Energy Sources in Campus

[2.5] Renewable energy sources and their amount of the energy produced

Number of renewable energy sources on campus	<u>2 No.s</u> [4 No.s of Solar Power Plant + Solar Water heaters]
Renewable energy sources and their amount of the energy produced	<u>1,704,783.71 kWh</u> [87,473.71 kWh + 24,388 kWh + 38,829 kWh + 8,375 kWh + 15,45,718 kWh]
Biomass	17520 m ³ /year = 184836 kWh



95kW Solar Power Plant in Admin Block: 87,473.71 kWh



20kW Solar Power Plant in EVR/Oprah Mess Building: 24,388 kWh

Description:

Located at 30 km from Coimbatore, Tamil Nadu, Karunya Institute of Technology and Sciences (KITS) is situated amidst the mountain ranges of Western Ghats, one of the world's eight 'hottest hotspots' of biological diversity, as declared by UNESCO.

The vast residential campus experiences a perfect monsoon system that provides an ideal ambience for living and learning. KITS in South India has a student population around 7863 and staff population around 665. The campus has a built-up area of 2.44 lakh sq.m and an institutional agriculture farm of 329 acres, or 840498.58 square meters.

Solar Power Generation from 95kW Solar Power Plant in Admin Block

Sl.No	Month	Solar Power Generation in kWh
1	Apr'2024	2227.71
2	May'2024	2628
3	Jun'2024	3210
4	Jul'2024	6530
5	Aug'2024	8323
6	Sep'2024	9378
7	Oct'2024	8098
8	Nov'2024	3899



9	Dec'2024	5211
10	Jan'2025	11759
11	Feb'2025	12607
12	Mar'2025	13603
Generation for Year'2024-2025		87473.71

Solar Power Generation from 20kW Solar Power Plant in EVR/Oprah Mess Building

Sl.No	Year	Solar Power Generation in kWh
1	Apr'2024	1949
2	May'2024	429
3	Jun'2024	3270
4	Jul'2024	1348
5	Aug'2024	2034
6	Sep'2024	1923
7	Oct'2024	1885
8	Nov'2024	1890
9	Dec'2024	1966
10	Jan'2025	2179
11	Feb'2025	2720
12	Mar'2025	2795
Generation for Year'2024-2025		24388

Solar Power Generation from 95kW Solar Power Plant in the CTC Building

Sl.No	Month	Units Generated
1	May'2024	7,863.90
2	Jun'2024	7,611.50
3	July'2024	5,972.90
4	Aug'2024	7,130.50
5	Sep'2024	10,250.20
Total		38,829.00



Solar Power Generation from 50kW Solar Power Plant in EGR Hostel Building

Sl. No	Month	Units Generated
1	May'2024	8,375
2	Jun'2024	
3	July'2024	
4	Aug'2024	
5	Sep'2024	

The institution encourages the use of energy-efficient equipment and has made steps to upgrade antiquated infrastructure to make it more energy-efficient. The University follows a robust policy to ensure that all renovations / new builds are following energy efficiency standards. The constant monitoring of the policy in the campus has resulted in decrease of Carbon emissions, optimizing the electricity consumption and minimizing wastage by using energy efficient fixtures and reducing the running cost.

- As part of energy conservation initiatives, a functional 95 kW solar power plant – 2 units, 50kW solar power plant, 20kW solar power plant, 30 solar water heaters, 15,288 LED lights are in place saving approximately 42,47,020 units/annum.
- Another initiative in managing wastewater in the students residences is the replacement of septic tanks with four biogas plants that generate 114kg/day of cooking gas, thereby reducing the consumption of LPG.