

100% renewable energy pledge document

Shoolini University have pledged for converting and utilization of 100% renewable energy w.e.f year 2016 and is being followed for creating Awareness among students and local community .The follow-up implementation is being done through Centre of Excellence in Energy Science & Technology.

Existence of 100% renewable energy pledge promotion

- As a part of the promotion Shoolini University has already installed 400kWp grid-connected Solar Photovoltaic Power Plant in the university campus to generate green electricity which generates 1400-1600 units of electricity per day.
- Additionally, solar water heating systems of capacity 38000 lpd are also installed in the university campus.
- In the girls' hostel of the Shoolini University a concentrated solar powered community cooking system was installed for cooking food for 500 persons. This system has the capacity to replace 3 commercial LPG cylinders per day which also results in the major reduction of carbon dioxide emissions.
- Moreover, University has introduced Electric Carts in the University campus for local transportations and has restricted all other conventional petroleum-based modes of transportation inside the campus. This initiative also contributes reductions in carbon dioxide emissions in the university campus to make it Green campus.
- Extensive use of solar streetlights can be seen throughout the campus

Measures Towards Use of Renewable Energy

1) Utilization of clean photovoltaic power to meet electricity needs

A 400 kWp photovoltaic power plant is installed in the university to meet the energy requirements.



Figure 1: PV Power plant installed on various buildings of Shoolini University

2) Use of animal and Agriculture Waste for bio-gas production for cooking

A 1.5 m³ biogas system is installed in the agricultural farm of Shoolini University for recycled use of animal waste and utilization of sustainable non-polluting energy source.



Figure 2: Biogas system installed in Shoolini University

3) Use of Solar Thermal Power for Cooking



Figure 3: Steam cooking system for 500 students at girls hostel rooftop at Shoolini University

4) Automatic Weather Station

An automatic weather station is installed in the university for measurement of solar radiation and other meteorological parameters. The data is useful for research and development of sustainable energy systems and technologies.



Figure 4: Automatic Weather Station installed on top of Library Building at Shoolini University

5) Use of solar street lights in place of conventional lighting posts



Figure 5: One of solar street lights installed in the campus