



REPORT ON SDG-7 AFFORDABLE AND CLEAN ENERGY



A brief description of activities on United Nations SDG-7 undertaken by Tezpur University

Tezpur University: Building a Sustainable Future

University Measures Towards Affordable And Clean Energy

Tezpur University promotes affordable and clean energy through initiatives like a biogas plant that converts food waste into cooking gas, reducing reliance on non-renewable sources. The university also explores renewable energy options, such as solar power, for campus energy needs. Additionally, research on clean energy technologies is encouraged, contributing to sustainable and efficient energy solutions. These efforts align with global sustainability goals, particularly SDG 7.



Sources: Tezpur University Campus

Energy Use Density

The university's current connected load is 2 MW. To ensure power supply during utility grid outages, the university has installed five diesel generator units, each with a 500 kVA capacity. Additionally, a 1000 kWp rooftop grid-connected solar power plant was commissioned on campus in 2018. The largest portions of electricity consumption at the university come from the academic departments, offices, hostels, residential accommodations, street lighting, and sports lighting. It has been observed that the hostels account for 22% of total electricity usage, while residential accommodations contribute 10%.

Energy And The Community

Tezpur University provides programs to educate the local community about energy efficiency and clean energy. These include workshops, seminars, and awareness campaigns on renewable energy and energy conservation. The university collaborates with local authorities and NGOs to promote sustainable practices and offers training programs in areas like solar energy and biogas production. Additionally, the university runs sustainability projects and shares research findings on clean energy solutions through community outreach. These initiatives help raise awareness and build skills for adopting clean energy practices in the region.

The university has demonstrated a strong commitment to sustainable energy practices, which includes installing a 1000 kWp rooftop solar power plant and exploring other renewable energy technologies like biogas. Tezpur University provides direct services to local industries to improve energy efficiency and promote clean energy. These services include energy audits, where the university assesses energy consumption and recommends efficiency measures. It also offers

Tezpur University: Building a Sustainable Future

workshops and training programs on renewable energy and energy-saving technologies. Additionally, the university conducts research on renewable energy options like solar, wind, and biogas, collaborating with industries to integrate these solutions. Through consultancy services and partnerships, Tezpur University helps local industries adopt sustainable energy practices, reduce costs, and minimize environmental impacts, contributing to cleaner and more efficient energy use. The university conducts research on renewable energy technologies like solar and biogas, providing valuable insights for policy-making. It also collaborates with government agencies to align its findings with national energy goals. University experts may participate in advisory panels or committees, offering technical expertise on energy efficiency and clean energy strategies. Through these efforts, Tezpur University helps inform and shape evidence-based policies that promote sustainable energy and energy-efficient technologies at local, regional, and national levels. The university's research in renewable energy and environmental science also supports green technology development.

Low Carbon Energy Use

In 2023, Tezpur University used 5,839,028 kWh of energy, with 1,033,905 kWh (about 17.7%) sourced from low-carbon energy.