REPORT ON SDG-13 CLIMATE ACTION

A brief description of activities on United Nations SDG-13 undertaken by Tezpur University

Low-Carbon Energy Use

Tezpur University measures the total amount of energy used across the entire campus, with 5,839,028 kWh recorded for 2023, of which 1,033,905 kWh (18%) comes from low-carbon sources. Committed to achieving carbon neutrality by 2050, the university follows Greenhouse Gas Protocols to strategically reduce emissions. By this target year, over 90% of its energy will be derived from renewable sources, primarily solar and biomass, with solar photovoltaic (SPV) panels installed on all suitable rooftops. Additionally, the university plans to cut fossil fuel use in transportation by over 90% through green electricity and hydrogen-based alternatives, while Scope 2 emissions from thermal energy will be neutralized by adopting green fuels, like Bio-CNG. Starting in 2025, LPG cooking in hostels will be systematically replaced with solar thermal systems. These initiatives underscore Tezpur University's dedication to sustainability and its vision of a carbon-neutral campus by 2050.

Link- https://luit.tezu.ernet.in/naac2/Best%20Practice/TU%20Best%20Practice.html

Environmental Education Measures

Local Education Programmes on Climate

Tezpur University actively provides education programs and campaigns on climate change risks, impacts, mitigation, adaptation, impact reduction, and early warning. On March 21, 2023, the Department of Environmental Science organized the National Workshop on Climate Action and SDGs (CAS-2023), emphasizing the critical role of universities in climate change awareness and action. The university has also established a Centre of Excellence on Climate Change to further these efforts. While these initiatives mark significant progress, expanding outreach to local communities, schools, farmers, businesses, and policymakers through targeted climate adaptation and mitigation programs would enhance the university's impact. Such focused initiatives would contribute to fostering climate resilience in Assam and across India.



National Workshop on Climate Action and SDGs Link- https://www.tezu.ernet.in/sustainable/doc/National Workshop 2023.pdf

Climate Action Plan, shared

Tezpur University recognizes the importance of a comprehensive Climate Action Plan to address climate change challenges collaboratively. The National Workshop on Climate Action and SDGs (CAS-2023) underscored the vital role of universities in climate action. While Tezpur University has made significant strides in sustainability efforts, developing and sharing a formal University Climate Action Plan would enhance these initiatives. Such a plan would serve as a roadmap for the university's climate actions, fostering transparency, partnerships, and alignment with local government and community goals. This collaborative approach would enable Tezpur University to play a leading role in driving sustainable development throughout the region.

Link- https://www.tezu.ernet.in/sustainable/Training Environmental Sustainability.php

Inform And Support Government

Tezpur University plays a vital role in supporting local and regional governments in climate change monitoring and disaster risk management. Through its five-year project, Climate Change Impacts and Adaptation for a Climate Resilient North East India, launched on March 23, 2020, with a funding of ₹6.35 crores, the university actively contributes to climate resilience efforts. Led by Dr. N.H. Ravindranath, Retd. Professor from IISc Bangalore, and supported by Professor Nirmali Gogoi from Tezpur University, this project focuses on adaptation strategies specific to Northeast India. Professor Gogoi's research on net ecosystem exchange, biosphere-atmosphere interactions, and ecohydrology provides critical insights into ecosystem dynamics, carbon exchange, and climate impacts. The project includes carbon stock estimation, climate impact modeling, and habitat vulnerability assessments, all of which strengthen the university's ability to support local and regional climate change monitoring, early warning systems, and adaptation strategies, contributing to building regional climate resilience.

Link-

- https://www.tezu.ernet.in/denvsc/coe/
- https://www.researchgate.net/profile/Nirmali-Gogoi

Commitment To Carbon Neutral University

Tezpur University is committed to achieving carbon neutrality by 2050, in alignment with the Greenhouse Gas Protocols. The university's carbon neutrality plan includes a structured approach to reducing Scope 1 and Scope 2 emissions. More than 90% of the university's energy will be sourced from renewable sources, primarily solar and biomass, with solar photovoltaic (SPV) panels installed on all available rooftops. Fossil fuel-based energy for transportation will be reduced by over 90% through a shift to green electricity and hydrogen alternatives. Additionally, Scope 2 thermal energy emissions will be fully addressed by 2050 through the adoption of green fuels such as Bio-CNG. Starting in 2025, the university will begin phasing out LPG-based cooking systems in hostels, replacing them with solar thermal solutions. These initiatives highlight Tezpur University's strong commitment to sustainability and its goal of a carbon-neutral campus by 2050.

Tezpur University: Building a Sustainable Future Together

Link- https://www.tezu.ernet.in/sustainable/doc/Net Zero Commitment Statement.pdf