

ANNUAL REPORT

SDG

13

CLIMATE ACTION



UNIVERSITY OF CHITTAGONG
Chittagong-4331, Bangladesh

SDG 13: CLIMATE ACTION AND THE UNIVERSITY OF CHITTAGONG

In its serene landscape, the University of Chittagong has notable initiatives towards environmental stewardship and climate action. Established in 1966, this institution has excelled in academia and embraced its responsibility towards Sustainable Development Goal (SDG) 13 - Climate Action, demonstrating a profound commitment to mitigating climate change and fostering a sustainable future.

Restoring over 600 acres of barren hills is at the heart of its environmental efforts. Led by the Institute of Forestry and Environmental Sciences (IFES) and the Department of Botany, this initiative has transformed the once-barren terrain into a lush expanse of indigenous flora. This endeavor extends beyond mere conservation, as the university's campus now functions as a significant carbon sink. In an ongoing effort to quantify its impact, the university assesses these areas' total carbon stock and annual carbon removal.

The university's partnership with Teijin Ltd, a Dutch-based Japanese company through IFES, marks a significant milestone in its climate action journey. Together, they have embarked on an ambitious carbon capture project. By establishing a Miyawaki model forest on campus, the initiative targets the removal of over 100 tons of carbon. Completed in 2022, this project contributes to global carbon reduction efforts and offers a hands-on learning experience for students, embedding practical environmental education into the curriculum.

Chittagong University has also taken significant steps to reduce its carbon footprint in its quest for sustainability. A notable measure includes limiting air conditioner use across the campus, a policy move aimed at curbing energy consumption. The university's infrastructure – the academic buildings and student dormitories – have been deliberately designed to maximize natural lighting and ventilation to reduce energy consumption despite the large number of students and faculty. This is the only university in Bangladesh that has dedicated trains for commuting students, which has reduced the students' transpiration-related carbon footprint immensely.

The pursuit of renewable energy solutions is at the forefront of the university's climate strategy. A project proposal submitted in 2022 seeks to establish a solar park and install rooftop solar panels, marking a shift towards clean energy sources. This initiative reflects the university's proactive approach to reducing emissions from conventional energy use. Faculty members from the Department of Chemistry and Physics collaborate locally and internationally on solar cell research. Research endeavors at IFES are aligned with sustainable energy solutions, focusing on improved cookstoves and biogas production from waste to reduce dependence on biomass as primary fuels, thereby minimizing deforestation for fuelwood and lowering CO₂ emissions. Such innovative research contributes to local sustainability and offers scalable solutions for broader applications.

Education and advocacy form the backbone of Chittagong University's climate action efforts. A diverse range of courses, including dedicated content on climate change, is offered across various departments. Faculty members are pivotal in guiding government and non-government entities on energy and climate change matters, leveraging their

expertise for broader societal impact. Faculty members and students are engaged with government initiatives towards a net-zero emission future for Bangladesh. IFES faculty members were involved with reporting of Nationally Determined Contribution (NDC) reporting for the country.

The university plans to conduct an energy audit to further enhance its sustainability practices. Based on the student-centric energy audit at IFES, the institute has already taken measures to replace less efficient electrical appliances with more efficient ones. The university is in the process of formulating a comprehensive energy policy for climate actions through the promotion of energy efficiency and renewable energy. In coming years, annual reports on the total emissions by sectors of activities and the mitigative measures with net impacts will be reported.

In many departments and institutes, energy efficiency, climate change, adaptation, and mitigation towards climate change are part of the curriculum as an entire course or as part of related courses. IFES has full courses on climate change and energy management. The university also has plans to start dedicated undergraduate and MS programs on Climate change. Chittagong University stands as a testament to the power of academic institutions in driving positive environmental change. Through ecological restoration, cutting-edge research, policy initiatives, and educational programs, the university not only enriches the lives of its community but also contributes significantly to the global fight against climate change. Its comprehensive and proactive approach serves as an inspiring model for universities worldwide, illustrating how academic institutions can be at the forefront of environmental sustainability and climate action.