



Progress Report on SDG 13

Rajshahi University of Engineering & Technology (RUET)

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Climate Action at Rajshahi University of Engineering & Technology (RUET)

RUET is committed to taking urgent action to combat climate change and its impacts, in alignment with **Sustainable Development Goal 13**. The university integrates climate awareness into its academic programs, research initiatives, campus planning, and community engagement to strengthen resilience and mitigation efforts.

Key Highlights

- **Research on Climate Adaptation and Mitigation:**
 - The Department of Civil Engineering conducts studies on **flood risk management, riverbank erosion, and urban drainage systems** in northern Bangladesh, directly contributing to climate resilience planning.
 - The Institute of Energy and Environmental Studies (IEES) engages in research on **renewable energy systems, solar and biomass integration, and energy efficiency**, promoting low-carbon solutions. (iees.ruet.ac.bd)
- **Curriculum Integration:**
 - Courses in Urban & Regional Planning (URP), Industrial & Production Engineering (IPE), and Mechanical Engineering integrate **climate change, sustainable energy, and environmental management** into practical design and project work.
 - In November 2023, the URP department launched a module on **Sustainable Urban Agri-Food Systems**, which addresses climate-adaptive urban agriculture strategies. (bssnews.net)
- **Campus Climate Initiatives:**
 - RUET campus, spanning **152 acres**, integrates **green spaces, tree plantations, and water-sensitive design features** to reduce heat islands and enhance carbon sequestration.
 - The university's renewable energy assessments indicate **average solar radiation of 4–6.5 kWh/m²/day**, demonstrating potential for on-campus solar energy deployment. (research.library.mun.ca)

- **Community Engagement and Awareness:**

- RUET conducts workshops and seminars on climate change, disaster risk reduction, and sustainable energy for students and local communities. For example, the “**Self-Sustainable Green Energy System**” seminar (Dec 2024) brought together faculty, students, and local stakeholders to discuss practical mitigation strategies. (ruet.ac.bd)
- Student-led research projects explore **urban heat island reduction, rainwater harvesting, and microclimate studies**, directly supporting local adaptation efforts.

Impact & Next Steps

RUET’s multi-pronged approach—integrating research, curriculum, campus planning, and community outreach—strengthens climate awareness, enhances adaptation capacity, and promotes low-carbon solutions in northern Bangladesh.

Planned Directions for Improvement:

- Publish **quantitative metrics**: campus carbon footprint, annual energy consumption reductions, and renewable energy generation capacity.
- Implement **solar PV and biomass systems** on campus, aiming to meet **10–15% of energy demand from renewables** by 2026.
- Expand **community climate programs** in Rajshahi city and nearby rural areas, targeting **1,000+ participants annually** in climate mitigation and adaptation training.
- Develop a **campus-wide climate action plan**, including disaster preparedness, energy efficiency, sustainable transportation, and carbon-neutral infrastructure projects.