



RESEARCH CELL REPORT

Bengal College of Engineering and Technology, Durgapur

Report for the Month of July 2026

1. Introduction

The Research Cell of Bengal College of Engineering and Technology (BCET), Durgapur, has been actively engaged in promoting research, innovation, and campus sustainability. In accordance with the decisions taken in the meeting held on 9th January 2026, the Cell has given special emphasis to **solar street lighting** and **waste management** as key initiatives during the first half of 2026.

2. Key Focus Areas

Two major sustainability-cum-research themes were prioritised:

- Installation of solar street lights across the campus (executed as a project by the Department of Electrical Engineering).
- Development and strengthening of an integrated waste management system.

3. Solar Street Lights Project

A major achievement of the Research Cell during this period has been the successful installation of a large number of **solar street lights** as a project undertaken by the **Department of Electrical Engineering**. The key highlights are:

- Solar street lights have been installed along internal campus roads, near Boys' and Girls' Hostels, academic blocks, administrative areas, and other open spaces.
- The project was planned, executed, and monitored under the guidance of the Research Cell in coordination with the Electrical Engineering Department.
- The installed lights operate on solar power, reducing dependence on conventional electricity and contributing to energy savings and reduced carbon footprint.
- Improved illumination has enhanced campus safety and security during night hours.

4. Waste Management System

Alongside the solar lighting initiative, the Research Cell has also focused on improving the campus **waste management system**. Progress achieved includes:

- Placement of colour-coded segregation bins (dry and wet waste) at key locations across academic and residential areas.
- Awareness programmes and drives conducted among students and staff for proper waste segregation and disposal.
- Steps initiated for better collection, storage, and exploration of recycling options for campus waste.
- The initiative aims to move the campus towards a cleaner, greener, and more sustainable environment.

5. Outcomes and Benefits

- Significant improvement in outdoor lighting and campus safety after sunset.
- Reduction in conventional electricity consumption for street lighting.
- Creation of a live demonstration site for renewable energy applications, useful for student projects and laboratory learning in the Electrical Engineering Department.
- Improved awareness and practices related to waste segregation and management among the campus community.
- Enhanced scope for research, technical papers, and funded projects in renewable energy and sustainable campus management.

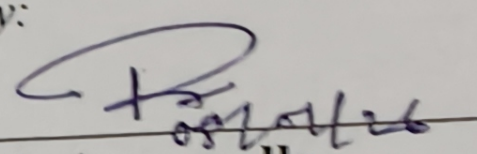
6. Future Plans

- Expansion of solar street lighting to remaining areas of the campus, if required.
- Performance monitoring and energy-saving analysis of the installed solar street lights as student/faculty research projects.
- Further strengthening of the waste management system, including possible composting and recycling linkages.
- Encouragement of research publications and external funding proposals in renewable energy and sustainability domains.

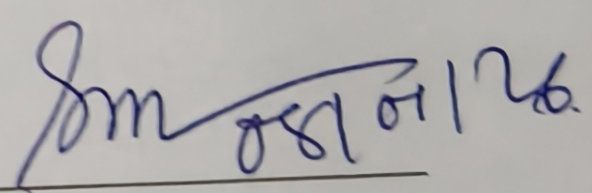
7. Conclusion

The Research Cell has made notable progress in campus sustainability through the successful installation of numerous solar street lights by the Department of Electrical Engineering and the ongoing development of a structured waste management system. These initiatives not only contribute to a greener and safer campus but also provide excellent opportunities for research, innovation, and experiential learning. The Committee remains committed to further strengthening research and sustainability activities in the coming months.

Prepared by:


Dr. Rajesh Agrawalla
Convener, Research Cell

Approved by:


Dr. Santanu Modak
Dean (R&D)

Dr. Santanu Modak
Dean (Research)
Bengal College of Engineering & Technology (CC-125)