

17 Oct 2024

To

National Institute of Disaster Management (NIDM),
Ministry of Home Affairs, Government of India,
Plot no. 15, Pocket-3, Block-B, Sector-29, Rohini, Delhi - 110042.

Respected Sir,

Sub: Kumaraguru Institutions - Acknowledgement Cover Letter for Best Practices - Reg

Kumaraguru Institutions (KI), founded in 1984 by Padma Bhushan Dr N Mahalingam, comprises Kumaraguru College of Technology (KCT), KCT Business School (KCT BS), Kumaraguru Institute of Agriculture (KIA), Kumaraguru College of Liberal Arts and Science (KCLAS), and Kumaraguru School of Business (KSB). The institution synergizes to provide cross-dimensional education and integrated knowledge, nurturing empowered and conscientious students.

We are committed to advancing sustainable urban development, implemented several impactful initiatives aimed at enhancing the resilience of our communities and Campus. Through our interdisciplinary approach, we have undertaken the following projects and implemented certain best practices that exemplify our commitment to urban resilience and sustainability.

We are excited about the opportunity to showcase our best practices for the NIDM - Knowledge platform on urban resilience. We believe that sharing our initiatives can inspire other institutions to adopt similar strategies for urban resilience and community upliftment. As we aspire to become a member of NIDM - IUIN DRR, we consider this application a significant first step for your collaboration.

Thank you for considering our submission. We look forward to showcasing our work with other institutions all over India and engaging in discussions about sustainable & social impact initiatives for the nation building.

Looking forward to hearing from you.



Mr Saravanan Chandrasekaran
Asst. Vice President

Kumaraguru Institutions: Leading the Path to Green print and Sustainable Campus

Kumaraguru Institutions, with a legacy of 4 decades of academic excellence, encompasses Educational Institutions and Centres of Excellence in the domains of Engineering, Technology, Management, Science, Agriculture, Innovation, Entrepreneurship, Liberal arts and Humanities, aspiring to offer world-class special education. Padma Bhushan Arutchelvar Dr N Mahalingam established the Kumaraguru Institutions (KI), including Kumaraguru College of Technology (KCT) instituted in 1984, KCT Business School in 2005 (KCT BS), Kumaraguru Institute of Agriculture in 2014 (KIA), Kumaraguru College of Liberal Arts and Science in 2018 (KCLAS) and Kumaraguru School of Business (KSB) in 2022 drawing strength from each other for cross-dimensional education and integrated knowledge that expands intellectual horizons and builds empowered and conscientious students. With sprawling 285 acres (about the total floor space of the Pentagon) spread across three campuses, Kumaraguru Institutions offers 25 Undergraduate programmes, 19 Postgraduate programmes and 15 Research programmes. With more than 800 teaching, research, administrative and support staff, and a dozen centres of excellence and industry-sponsored labs, KI currently impacts more than 8000 students annually. Kumaraguru Institutions have been accoladed by national accrediting and ranking agencies such as NAAC, NBA, NIRF and ATAL Ranking. Kumaraguru College of Technology has been accredited with the highest A++ Grade by NAAC, positioning Kumaraguru Institutions for national prominence.



Kumaraguru Institutions are very keen to emphasize the philanthropic approach towards Social Impact, Community engagement and coexisting sustainable lifestyle by encompassing across the entire Kumaraguru ecosystem. Witnessing the contribution,

Kumaraguru Institutions Campus in Coimbatore gets Platinum rated for 5 years by Indian Green Building Council (IGBC) for sustainability initiatives at our campus.

A milestone reached in Kumaraguru Institution's Campus Sustainability Journey! The Main Campus of Kumaraguru Institutions, Coimbatore has been honored with the prestigious Platinum rating by the CII - Indian Green Building Council (IGBC) for its outstanding sustainability initiatives.

This recognition positions Kumaraguru as only the second technical institution in the Southern Region to receive such certification, which is valid for five years. The institution excelled in the CII-IGBC Green Campus Certification - Existing Buildings category, securing a remarkable score of 81 out of 90.

The evaluation encompassed various parameters, with a focus on green concepts and techniques implemented on the campus to address national concerns such as water efficiency, energy efficiency, reduction in fossil fuel use for commuting, consumer waste management, and the conservation of natural resources. Kudos and wishes to all the students, faculty and staff who are leading various campus sustainability initiatives with Kumaraguru Microcosm at their capacities across our campus.



Practice 3

Thematic Area: Sustainable Urban Development

Sub-Thematic Area: Energy Efficiency in Urban Areas

Cover Image



Title: Energy Practices

Location: Kumaraguru Campus

Before Situation

- **Higher reliance on Non-Renewable Energy**

The campus was primarily dependent on conventional energy sources by using Diesel Generators- leading to higher carbon emissions and increased energy costs.

- **Increased Power Generation Costs**

The expenses for the raw materials required to generate electricity on campus were found to be significantly high.

- **Blind Spots: The Hidden Costs of Energy Monitoring Gaps**

Without the Energy Monitoring System, the campus faced challenges in tracking and optimizing energy usage, resulting in higher electricity bills.

- **Beyond the Meter: The Realities of Energy Inefficiency**

Lacking the integration of energy-efficient LED lighting and sensor-based automation systems, the campus would face considerably higher electricity consumption from relying on traditional lighting methods.

Implemented Measures

- **250 kW Onsite Rooftop Solar PV System:** As part of its green energy initiative, KCT has installed a 250-kW solar power station. The first installation, a 50-kW solar power station, was set up on the rooftop of B-Block (spanning 5,000 square feet). Subsequently, an additional 200 kW solar power station was installed on the rooftops of C and E Blocks (covering 20,000 square feet) and is now fully operational. The 250 KW Solar Power Station uses Poly crystalline based Photovoltaic panels of 25,500 sq. ft area installed with 763 panels (on B, C, E Blocks).
- **65,000 Units Wind Energy Procurement :** In addition to the onsite solar power station, KCT purchases 65,000 units of wind energy each month, further decreasing reliance on non-renewable energy sources and reinforcing its commitment to sustainable energy solutions.
- **LED Lighting & Sensor-based Automation:** High-efficiency LED lighting has been installed along with sensor-based automation systems to maximize energy savings by reducing unnecessary energy consumption.
- **Energy Monitoring System:** The Energy Monitoring System has been implemented at our Campus to track real-time energy consumption and ensure efficient energy management. This system enables optimized energy use while enhancing overall operational efficiency.

Significant Effect After Implementation

- **Real-time Monitoring and Optimization:** The implementation of the Energy Monitoring System has enabled us to monitor energy consumption in real-time,

identify inefficiencies, and promptly resolve any issues, ensuring optimized energy management system. Implementing the Energy Monitoring system at our campus has enabled us to identify ways to reduce energy consumption. Introducing Sensor Automation has reduced energy wastage translating to further savings on energy costs and increased operational efficiency.

- **Reduction in Carbon Footprint:** As part of its green energy initiative, KCT has installed a 250-kW solar power station. The first installation, a 50-kW solar power station, was set up on the rooftop of B-Block (spanning 5,000 square feet) and has been operational. Subsequently, an additional 200 kW solar power station was installed on the rooftops of C and E Blocks (covering 20,000 square feet) and is now fully operational.
- **Contributions to Green Certifications:** We are an IGBC platinum certified institution, recognizing its efforts toward sustainability and making it a role model for other institutions.

Financial Details

The total investment cost for the solar power panels amounts to ₹1.5 Crore. To support this initiative, we have received a grant of ₹45 Lakhs from the Ministry of New and Renewable Energy (MNRE) and Tamil Nadu Energy Development Agency (TEDA).

Additionally, we have Installed the Energy Monitoring System - Power Monitoring Expert system at a cost of ₹ 4,00,000. This system has enhanced our ability to monitor and manage energy consumption, ensuring optimal performance and efficiency of Campus Electricity Usage.

Other Major Details

Expansion of 230 kW Onsite Solar Power Generation

This initiative will enhance our capacity to generate clean energy and reduce reliance on non-renewable resources. It will increase solar power generation, and also advance energy management systems to monitor and optimize performance, ensuring peak efficiency. This will lower the carbon footprint, reduce energy costs, and support a sustainable future for campus and community.