

## Manipal University Jaipur Identifies and Tackles Energy Waste

In today's environmentally conscious world, adopting sustainable practices to reduce the carbon footprint is amongst the most impactful strategies. Energy consumption in educational institutions is a significant contributor to overall carbon emissions. Addressing energy waste is not only an ethical commitment but also a financial one. By identifying and rectifying energy inefficiencies, universities can reduce operational costs and redirect resources towards their core mission of education and research. Manipal University Jaipur has taken the initiative to undergo energy reviews, shedding light on where energy waste is highest. Manipal University Jaipur has embarked on a proactive journey to identify and mitigate energy waste on its campus. Their approach involves regular energy reviews conducted by dedicated teams of experts.

The process begins with comprehensive energy audits that encompass all aspects of the university's operations. These audits analyze energy consumption patterns in buildings, equipment, transportation, and more. Advanced technology, including data loggers and thermal imaging, is employed to gain precise insights. Data is the linchpin of Manipal University Jaipur's energy review process. It collects detailed data on energy usage, considering seasonal variations and peak demand periods. This data is then meticulously analyzed to pinpoint areas of high energy waste. Through thorough analysis, Manipal University Jaipur identifies the specific culprits of energy waste. These could include outdated equipment, inefficient building systems, or behavioral factors such as leaving lights on when not needed. Once the energy waste culprits are identified, the university's experts develop a set of targeted recommendations for improvement. These recommendations are presented in a detailed report, highlighting cost-effective solutions to increase energy efficiency. Manipal University Jaipur takes swift action to implement recommended efficiency measures. This could involve upgrading equipment to energy-efficient models, improving insulation, optimizing heating and cooling systems, and implementing lighting controls. Manipal University Jaipur does not stop at implementation. Continuous monitoring and data analysis are integral to ensuring that energy efficiency measures deliver the expected results. Real-time monitoring systems help identify any deviations from expected energy savings.

Manipal University Jaipur's dedication to identifying and addressing areas of energy waste through systematic energy reviews displays its leadership in the pursuit of sustainability. By reducing energy waste, the university lowers its operational costs and carbon footprint, contributing to a more environmentally responsible future.

### **7.1.6.1 The institutional initiatives to preserve and improve the environment and harness energy are confirmed through the following:**

#### **Green audit**

The main objective of this project is to develop and propose recommendations for a lower carbon emission roadmap for the entire campus of Manipal University, based on the understanding of direct and indirect GHG emissions through energy use on the campus, energy monitoring, benchmarking of embodied energy for existing buildings, aligning the campus strategies with Sustainable development goals (SDGs), Energy Efficiency, renewable energy, and environmental performance.

Integrative Design Solution (IDSPL) has been appointed by MUJ to conduct the Green Audit for the campus covering the Energy and Environmental assessments along with the calculations of the Carbon footprint of the university.

#### **Energy audit and green audit**

Energy and Green Audit serve to identify opportunities for sustainable development practices, enhance environmental quality, improve health, hygiene, and safety, reduce liabilities, and save money. Energy & Green audits are a highly valuable tool for colleges in a wide range of ways to improve their environmental and economic performance reputation while reducing wastage and operating costs. Once baseline data is prepared after the auditing process, the data served as a point of departure for further action in campus greening. It helps the university to benchmark its programs and activities with other peer institutions, identify areas for improvement and prioritize the implementation of future projects. The data will also provide a basis for calculating the economic benefits of resource conservation projects by establishing the current rates of resource use and their associated costs.

#### **Clean and green campus recognitions/ awards**

Manipal University got the award named IGBC Performance Challenge 2022 in the educational category.



### **Beyond the campus activity**

University has conducted various events on environmental promotional activities like; Tree Plantation in collaboration with NCC, “Cleanliness Awareness Program @ Govt. Sr. Sec. School, Begas”, “awareness about Environmental and Plantation drive with NGO Bhor”.

