

The University has undertaken significant initiatives aimed at developing alternative energy sources and implementing power-efficient electrical equipment. Significant efforts have been made for energy conservation.

Brief Details of this Matrix on -

1. Solar Energy

RNB Global University has **installed a solar energy plant** within its campus, currently operating at a capacity of **50 KW**, with plans to increase it to 500 KW.

2. Wheeling to the Grid

The energy generated by the solar power plant is **integrated into the state electricity grid** for utilization. For this a MOU has been done with Electricity Supplying Company, BKESE, Bikaner

3. Sensor Based Energy Conservation

In academic and administrative buildings, the University has **deployed motion sensors** that **automatically deactivate** electrical equipment when rooms are unoccupied.

The University's **air conditioning system** utilizes **timer-based technology** and is **centrally controlled**, employing a **Smart Touch Management system** from DAIKIN. **AC timings are synchronized with the timetable** to prevent unnecessary operation during idle periods.

Street lights across the campus are **equipped with timers**, programmed according to sunset and sunrise times to minimize electricity wastage.

4. Use of LED bulbs and Energy-efficient Equipment: LED bulbs have been installed throughout the campus to reduce electricity consumption. Power efficient equipments are installed in the university campus.

5. Other Measures taken for Energy Conservation-

a. Fly Ash Bricks

Bricks made up of Fly Ash has been used in the construction of university building, these bricks **act as thermal insulator** and keeps the inner building temperature low in summers & prevents heat to escape out in winters. **As the result less energy is consumed by the cooling system.**

b. **Use of Energy Efficient Glasses in façade of buildings**

These glasses comes with a special **pyrolitic coating that provides superior UV protection** while ensuring indoor temperatures remain unaffected or lower than outdoor temperatures.

Hence it allows **optimum daylight to pass** through but is capable of **cutting radiation and reflecting up to 40% of heat**. This also helps in reducing the use of electricity/ AC Consumption

c. **Power Efficient Projectors**

Classroom projectors are equipped with **automatic shutdown mechanisms** for periods of non-use.

d. The University consistently **encourages both staff and students to power off electrical devices when not in use.**

e. **Save Energy signage** are installed in campus **to encourage students to conserve energy.**