Shiv Nadar Institution of Eminence

100% Renewable Energy Pledge

Shiv Nadar IoE is committed to promoting use of renewable energy and green energy at its campus, thereby contributing to the overall socio-environmental sustainability. We have taken multiple initiatives in the structured sustainability framework with specific targets and timelines for achieving substantial carbon emission reductions and Net Zero campus as per the government of India's scheme of U75.

The university has adopted many initiatives for using renewable energy sources.

1. On-Site Renewable Energy Generation and exploring green energy

    - A 1.6 MW solar power plant is installed and commissioned on the campus that takes care of as much as 26 percent of the needs of the campus. The goal is to go to 30 percent and beyond
    - Solar panels are installed on campus across academic and residential blocks to transition from complete captive power and generate clean, sustainable energy on campus
    - We have a fleet of E-buses and Golf carts with over 150 seating capacity. To transition to clean power and reduce dependence on fossil fuels, we plan to transition 50% of the car fleet to electric vehicles. The university currently has 60% CNG, 30% petrol, and 10% diesel cars. The plan is that any new inventory added to this would be an electric vehicle.
    - Through our research and industry collaborations we are exploring other renewable sources of energy to reduce dependency on fossil fuels for our energy needs.

2. Enhancing Energy Efficiency

    Many energy-efficient appliances have been incorporated, such as:

- Energy Optimization Monitors in our LEED and IGBC- Gold certified building with integrated sensors, IoT devices, and automation systems for optimized energy use and reduced overall environmental impact.
- Modular sewage treatment plant technology is installed on campus and has a capacity of 734 KLD. The STP currently treats 550 KLD of water from the entire campus, including campus housing.
- Monitoring platforms installed to track energy usage, waste generation, water consumption, and other sustainability metrics to enable informed decisions for continuous improvement
- Energy-saving policy embraced, replacing 11 KV grid power with a 33 KV grid power supply and removing the need to run standby power through diesel generators.
- Replacement of the conventional fans consuming 70 watts with new BLDC (Brass-less Direct Current) ceiling fans, which consume about 30 watts.
- Maintenance of the capacitor bank to ensure a high-power factor.
- Replacement of street lights with less energy-consuming options while maintaining the same lux level.
- Water efficiency initiatives in the buildings under construction include:

- Installation of prismatic taps.
- Installation of occupancy and motion sensors in the washrooms of the academic blocks and hostels.

3. Energy Conservation Initiatives

- Plans for energy conservation and reduction of greenhouse gas emissions at the university include:
- Provision of PNG connections for all residents, dining halls, clubs, etc.
- Review, analysis, and refurbishment of labs for the safety of operations and environmental conservation.
- Revival and enhancement of the organic compost plant capacity from 200 kg to 400 kg.
- Wastepaper recycling and product development.
- Tree plantation and sequestration.
- Undertook carbon footprint determination and analysis of changes in trend to identify further opportunities for improvement and roll out projects

4. Advocacy

Our students were selected as UN Millennium Fellows for 2024. This fellowship is presented by the United Nations Academic Impact and MCN and supports undergraduate leadership for the UN Sustainable Development Goals. From 52,000+ applicants from 6,000+ campuses worldwide, 280+ campuses (just 5%) have been selected to host 4,000+ Millennium Fellows in 2024. The students were guided by their Professors, Dr. Paromita Goswami and Dr. Aadya Kaktikar from the School of Management and Entrepreneurship and the School of Humanities and Social Sciences. The award is a testament to the university's commitment to addressing SDGs while empowering and nurturing global leaders who will direct and shape policies, advance research, and encourage local action to protect the larger global community from future risks.