

GNIOT

ENGG. INSTITUTE

7.1.2.

The Institution has facilities and initiatives for

1. Alternate sources of energy and energy conservation measures
2. Management of the various types of degradable and non-degradable waste
3. Water conservation
4. Green campus initiatives
5. Disabled-friendly, barrier free environment

Geo tagged photographs and Videos of Solar Energy



Greater Noida Institute of Technology (Engg. Institute)

**Plot No. 7, Knowledge Park II, Greater Noida
Uttar Pradesh 201310 India**

Environmental Consciousness and Sustainability**Point 7.1.2**

The Institution has facilities for alternate sources of energy and energy conservation measures:

Solar energy

Solar energy/power is generated by the sun's radiations -solar energy offers many advantages that make it one of the most promising energy. There are several advantages of solar energy which are as follows: 1) Renewable, 2) Infinite in nature, 3) Environment-friendly, 4) Avoids global warming, 5) Reduces use of non-renewable energy sources, 6) Reduces energy imports, 7) Devotes to sustainable augmentation. Moreover, the use of renewable especially solar energy is comparatively economical and reduces the carbon foot prints. The Ministry of New and Renewable Energy (MNRE), Govt. of India has been promoting the idea to develop and deploy renewable energy for strengthening the energy needs of the country. The rooftop solar PV power plant of capacity 291KWp had been installed on the rooftops of various buildings of the college.

Detailed description of Roof-top Solar PV Plant in campus:

- 1) Solar Plant Total Capacity: 291 kW
- 2) Generation Capacity: 291 kW
- 3) Total Load (GNIOT): 650 kW
- 4) Load compensation by Solar plant in percentage: $291/650*100= 44.46\%$.

The images of roof-top solar PV plant are attached below.



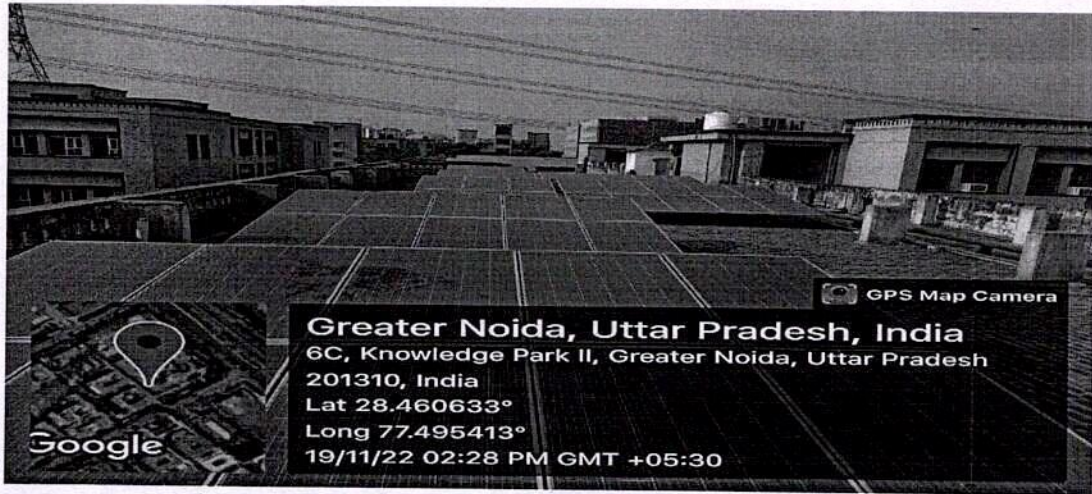


Figure 1: Roof top Solar panel 1 on main campus towards Boys hostel

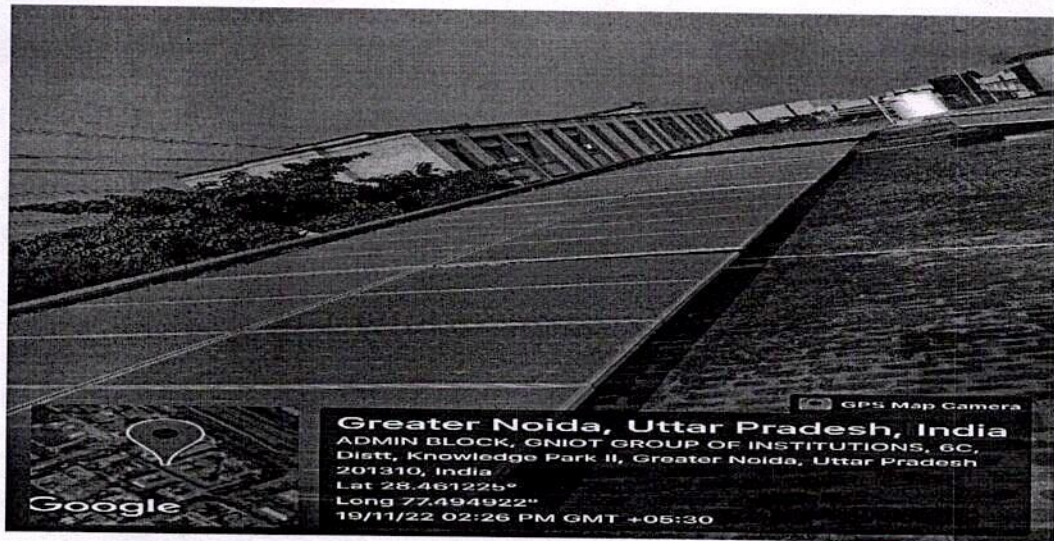


Figure 2: Roof top Solar panel 2 on main campus towards main ground



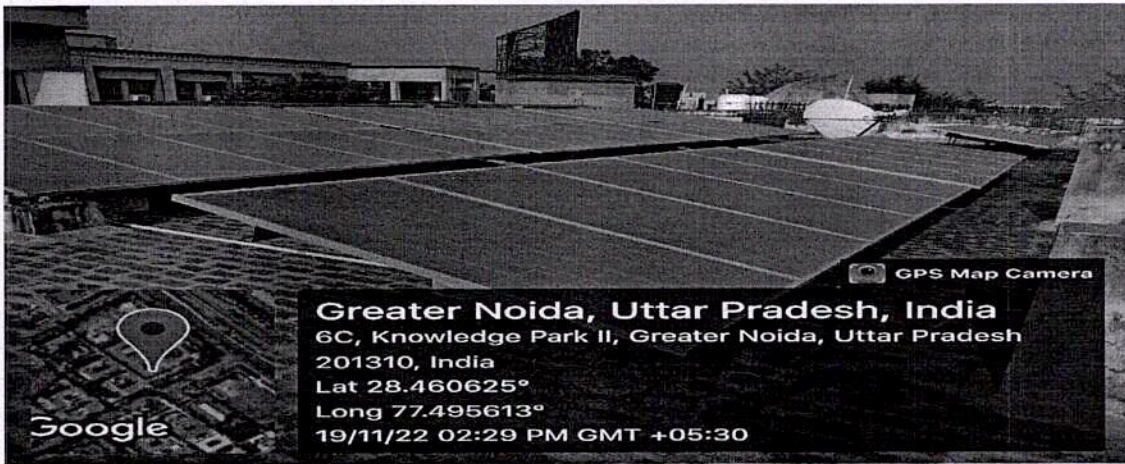


Figure 3: Roof top Solar panel 3 on main campus near Gate number 1 & 2

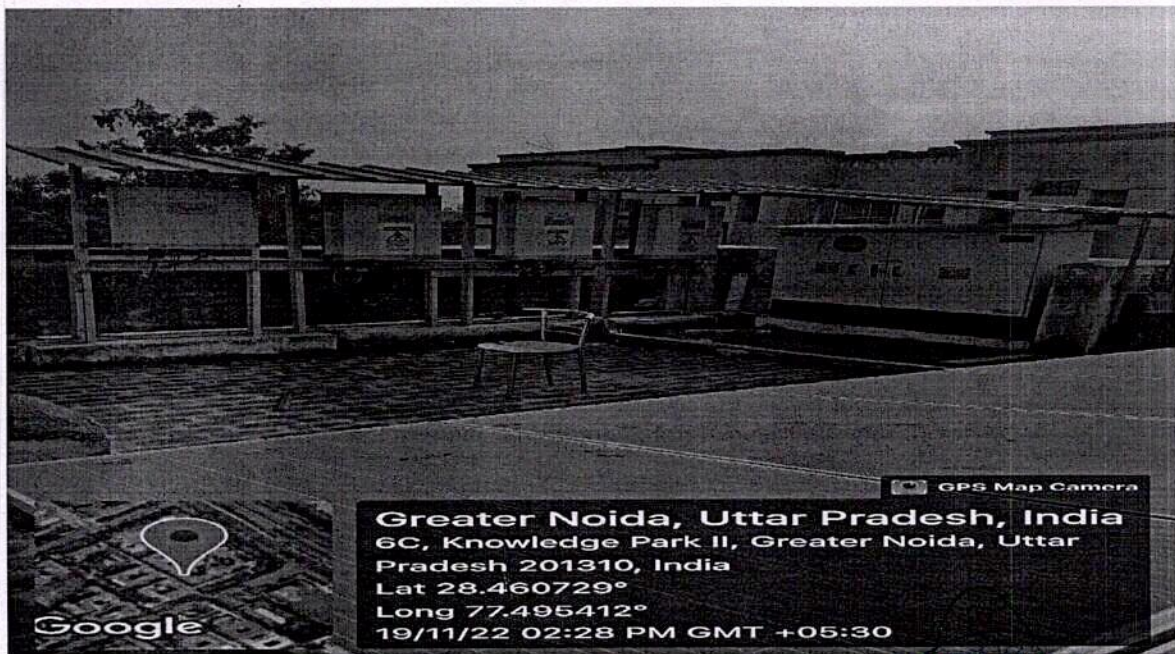


Figure 4: Roof top Solar panel Control compartment



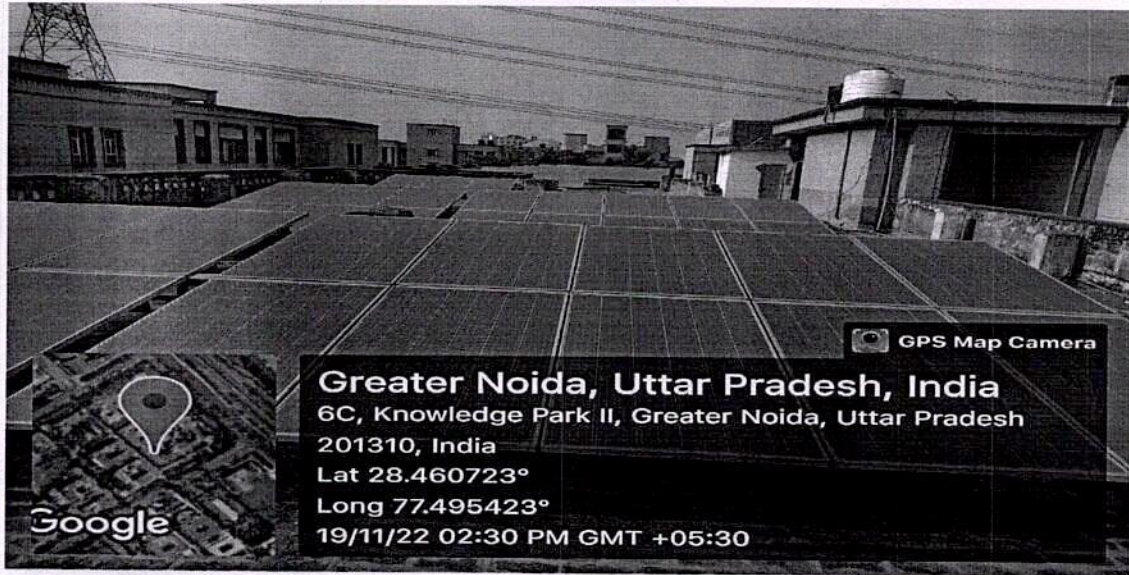


Figure 2: Roof top Solar panel 4 on main campus towards main ground

