



#### 7.1.2: The Institution has Facilities and Initiatives for Green Measures

#### 1. Alternate sources of energy and energy conservation measures:

The institute has established system of a 120kW Solar system since 2017 as a part of an alternate energy initiative. Percentage of power requirement of the College met by the solar system is 41-45 kW.



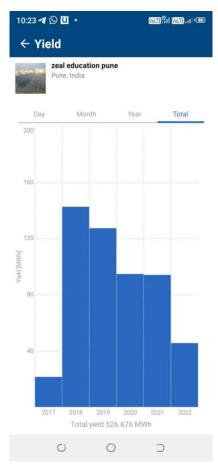


Rooftop Solar power grid of capacity 45kW





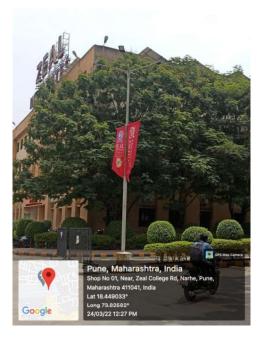
The power generated through this solar grid is monitored through android technology.



Typical screen of android application showing solar power generation



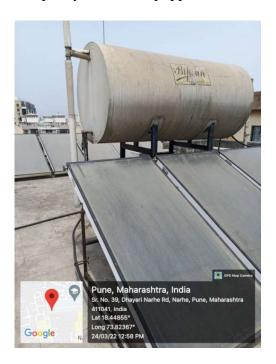




Solar street lights

The campus has solar powered street lighting. Each building entrance light is being equipped with sensor based lighting system.

The institute has girls hostel of capacity which is equipped with solar hot water system.







#### 2. Management of the various types of degradable and non-degradable waste

The campus has an efficient system for waste management. The housekeeping team takes care of the segregation of solid waste which mainly includes waste paper, garden waste, and plastic waste. Handling over the collected waste in a segregated manner to local authorities is practiced weekly. No biomedical waste is generated on the campus. In case of any occasions like blood donation camps, sports, etc.; care is taken to hand over the biomedical waste to authorized agencies whenever required.

For the collection of E-waste separate drive is arranged once a year. The collected E-waste is handed over to authorized agencies. Dustbins with standard color codes are placed at various locations for dry, wet, and e-waste.



Photograph showing typical segregated solid waste collection system







Photograph showing typical solid waste collection system

A paper shredding machine is maintained by the store department and these shredded papers are donated to industrial activities. The use of one-sided pages is practiced.



Photograph paper shredding system





#### 3. Water conservation

Institute has open well in premises as water source which is able to fulfill water demand of campus for drinking, sanitation and gardening.



Open well in campus

In campus rainwater is harvested and recharging of this open well is followed effectively.







Photograph showing open well recharge through rain water harvesting

#### 4. Green Campus Initiatives

The institute premises has excellent greenery along internal pathways. The internal roads are dust free and provided with appropriate plantation as divider.









Our Civil Engineering students conducts ambient air quality monitoring periodically to measure particulate matter concentration in premises. Accordingly, students are appealed to use college bus facility rather to travel with individual vehicle.



Ambient Air Quality Monitoring in campus

Students are made aware to conserve electricity through various displays.



Typical display board near each switch board

A wastewater is collected in sump tank and reused for gardening.







#### 5. Disabled-friendly, barrier free environment:

The Institution has disabled-friendly, barrier free environment with a built environment with ramps/lifts for easy access to classrooms.





Photograph showing lift and ramp facility
A special arrangement is made for Divyanjan to access washrooms.





Photograph showing lift and ramp facility



PRINCIPAL
ZES's Zeal College of
Engineering & Research
Narhe, Pune-411 041