VIT®
Vellore Institute of Technology
(Deemed to be University under section 3 of UGC Act, 1956)

Towards Sustainability…

THE - Impact Rankings 2022

Ensure access to affordable, reliable, sustainable and modern energy for all

7.2.3 Carbon Reduction and Emission Reduction Process

Steps taken by the institute to reduce its carbon footprints:

1. Installed 2103 kWp of solar PV and planned to install 750 kW more.
2. Buying 90,00,000 units from wind power and planned to procure more in the near future through open energy market.
3. Used 70 % lighting as LED lamps and other fitting are will be replace in a phased manner. All the replacement of old lights are only with LED fittings
4. Used Centralised chiller plant for cooling which consumes only 60 % of the conventional ACs
5. Developed innovative cooling method which combines the radiant cooling, indirect evaporative and centralised chiller system which reduces the 50 % of energy consumption.
6. Developed green landscape inside the campus
7. Planted 2,00,000 trees in and around Vellore in last three years
8. Banned the student vehicle inside the campus
9. Installed solar water heater and heat pump which is the best energy efficient method of heating water
10. Biogas plant of 200 kW is in operation which takes food and STP wastes
11. Biomass plant of 100 kW which uses the trimmed plants from the garden

The VIT had initiated the following projects to attain Carbon Reduction and Emission it its activities.

The green campus initiatives of VIT can be view at

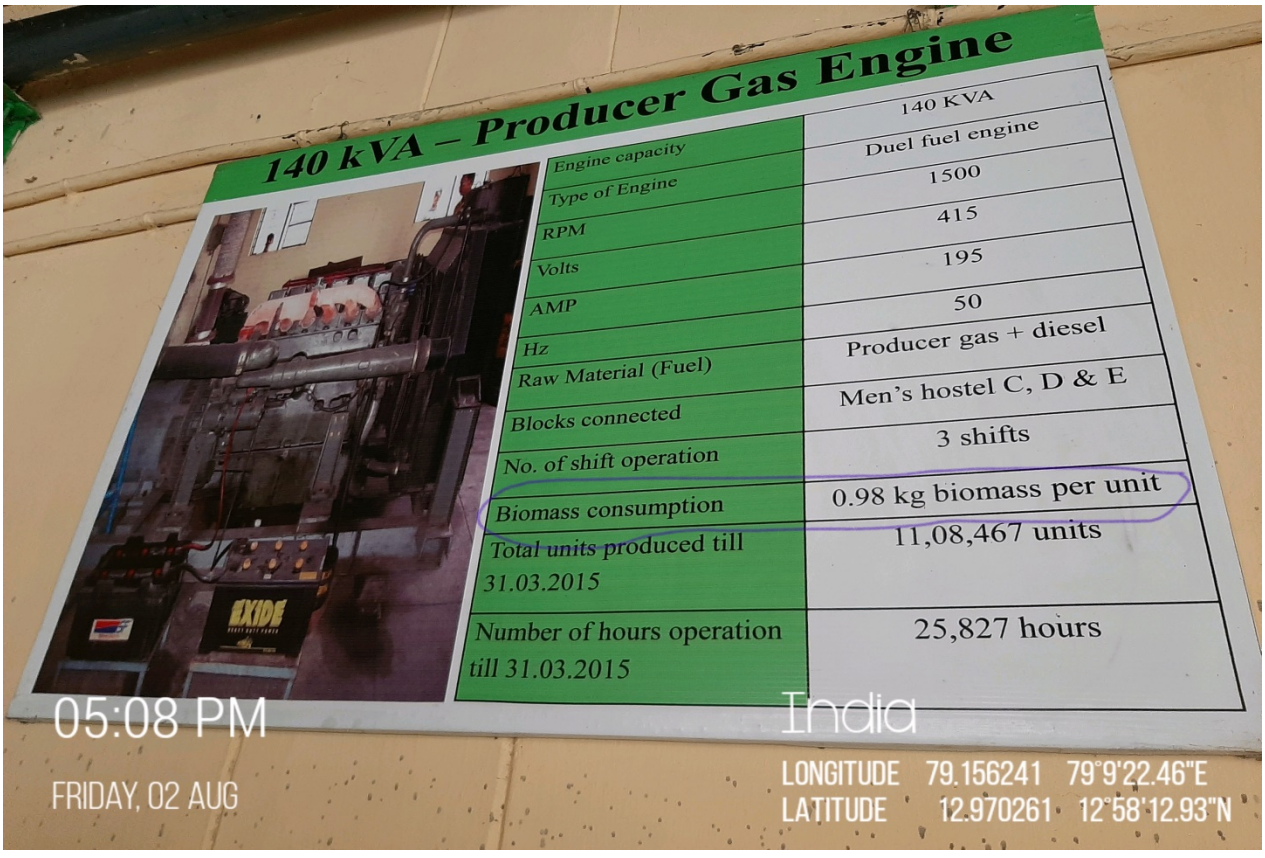
https://vit.ac.in/detailview/green-vit

Solar Power Plant with Overall capacity of 1.12 MW

Roof top Solar PV

Biomass based power plant of 100 kW capacity and a A 300 m3 capacity biogas plant


P1 P2 P3 ΔP1 ΔP2
Latitude: 12.97397
Longitude: 79.15902
Elevation: 206.01m


140 kVA – Producer Gas Engine
EXIDE
Engine capacity 140 KVA
Type of Engine Duel fuel engine
RPM 1500
Volts 415
AMP 195
Hz 50
Raw Material (Fuel) Producer gas + diesel
Blocks connected Men's hostel C, D & E
No. of shift operation 3 shifts
Biomass consumption 0.98 kg biomass per unit
Total units produced till 31.03.2015 11,08,467 units
Number of hours operation till 31.03.2015 25,827 hours
05:08 PM
FRIDAY, 02 AUG
India
LONGITUDE 79.156241 79°9'22.46"E
LATITUDE 12.970261 12°58'12.93"N

Solar PV and online energy monitoring