SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, Tirupati – 517 102

Environmental Consciousness and Sustainability

7.1.2 Facilities for Alternate Sources of Energy and Energy Conservation Measures

Environmental Consciousness and Sustainability

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

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/power efficient equipment

Options:

A. Any 4 or All of the above

B. Any 3 of the above

C. Any 2 of the above

D. Any 1of the above

E. None of the above

Upload:

- **Geotagged Photographs**
- **Any other relevant information** ***(5)***

- Roof Top Solar Power Plant of capacity 500 kWp is installed and it will meet most of the power demand by the institute.
- Wheeling to the Grid Agreement is signed with Ministry of New and Renewable Energy, Govt. of India for 500 kWp Grid Connected Solar Roof Top System.
- Five numbers of solar street light systems are installed along the roads in the campus for energy conservation.
- Wind Integrated Solar Hybrid (WISH) System Sponsored by ORB, Hyderabad is in place in the campus.
- LED bulbs were used for newly constructed buildings and some of the incandescent and fluorescent tube lights are replaced with LED bulbs. Majority of the class rooms, laboratories, administrative blocks, computer centers, libraries, seminar halls and staff rooms were provided with LED lighting system which are supposed to be the energy efficient.

Now, the power consumption through lighting system about 20 percentage is met by LED bulbs.

- Electric cars are available on campus for the benefit of the movement of the people on campus
- Energy efficient electronic gadgets like **5 STAR** rated air conditioners are used and maintained regularly to achieve energy conservation.
- Signages on awareness on energy conservation are made available in all relevant locations.
- Institution organizes awareness programs on energy conservation practices for non-teaching and supporting staff annually.
- Institution organizes outreach activities on energy conservation practices in around villages for the benefit of society.
- Unwanted usage of power is discouraged in Institute.
- Institute has participated at national level as **Recognized SES REC (Social Entrepreneurship, Swachhta & Rural Engagement Cell) Institution**, Mahatma Gandhi National Council of Rural Education, Department of Higher Education, Ministry of Human Resource Development, Govt. of India for improving the facilities in the campus and community in the areas of Sanitation & Hygiene, Waste Management, Water Management, Energy Conservation and Greenery.
- Institute has participated in Swachh Campus Rankings of Higher Educational Institutions 2018.
- Institute has participated in AICTE Clean and Smart Campus Awards 2020, AICTE Clean and Smart Campus Awards 2019, AICTE Clean Campus Awards 2017 and AP Green Awards 2017.
- Institute is participating in International Level NAE Grand Challenges Scholars Program, National Academy of Engineering, USA as one and only institute from India working on the themes related to environment i.e., make **solar energy economical**, provide access to clean water and restore urban infrastructure.
- Institute has established the Student Chapter of Indian Green Building Council (IGBC) by name **"IGBC SVEC Student Chapter"** to inspire the student members to create a sustainable built environment for all and

facilitate India to be one of the global leaders in the sustainable built environment which are **energy efficient.**

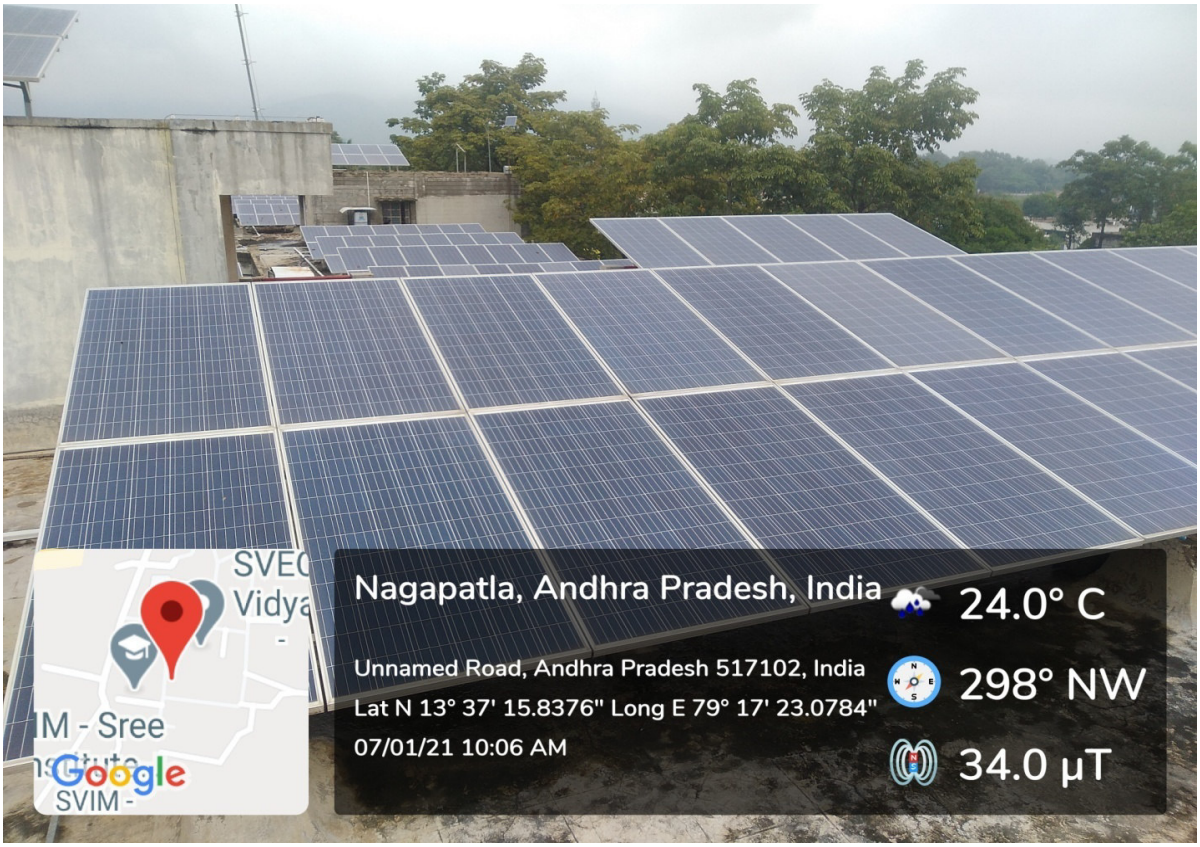
- Many of the members of the faculty are encouraged to do vehicle pooling to reduce energy consumption and thereby to achieve energy conservation.
- Education on Energy Conservation is part of the contemporary curriculum to create awareness among students on energy conservation.
- Institute conducts energy audit annually to improve energy conservation.

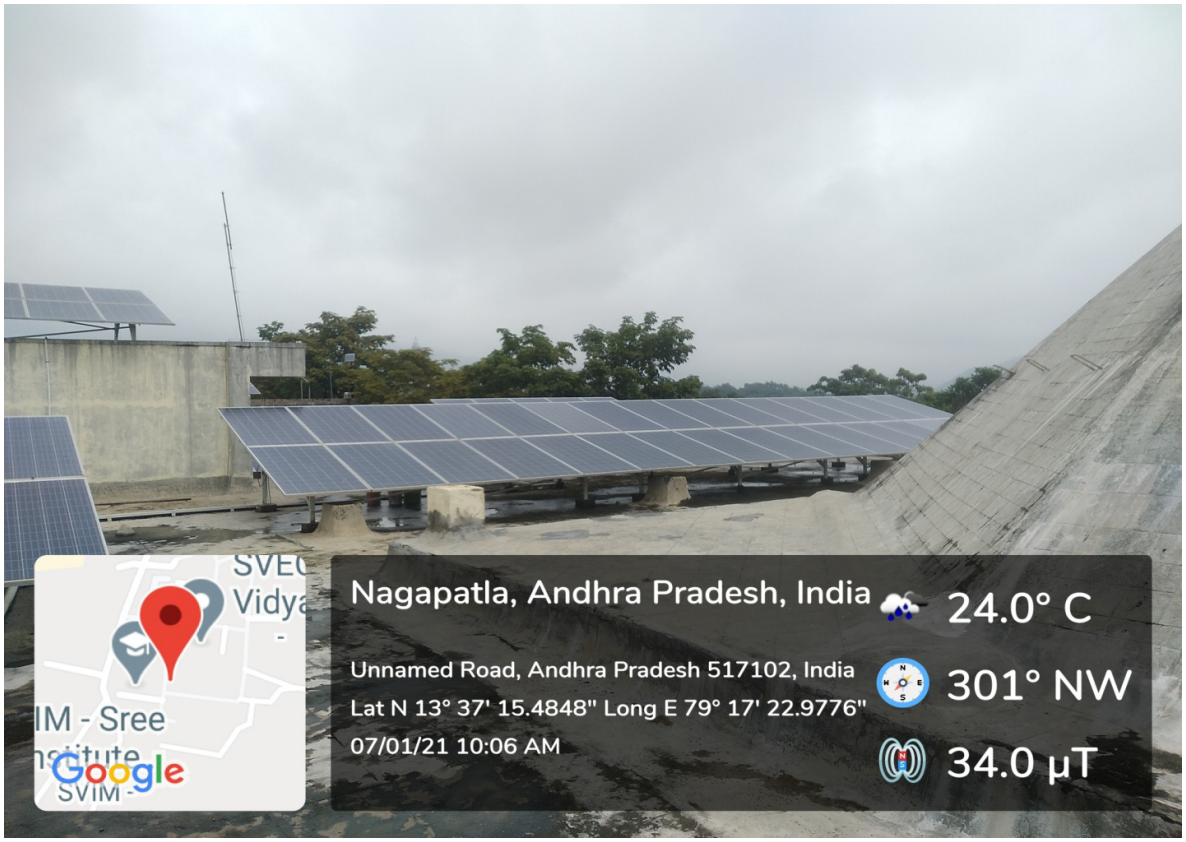
PRINCIPAL

PRINCIPAL
SREE VIDYANIKETHAN ENGINEERING COLLEGE
(AUTONOMOUS)
Sree Sainath Nagar, A. RANGAMPET
Chittoor (Dist.) - 517 102, A.P., INDIA.

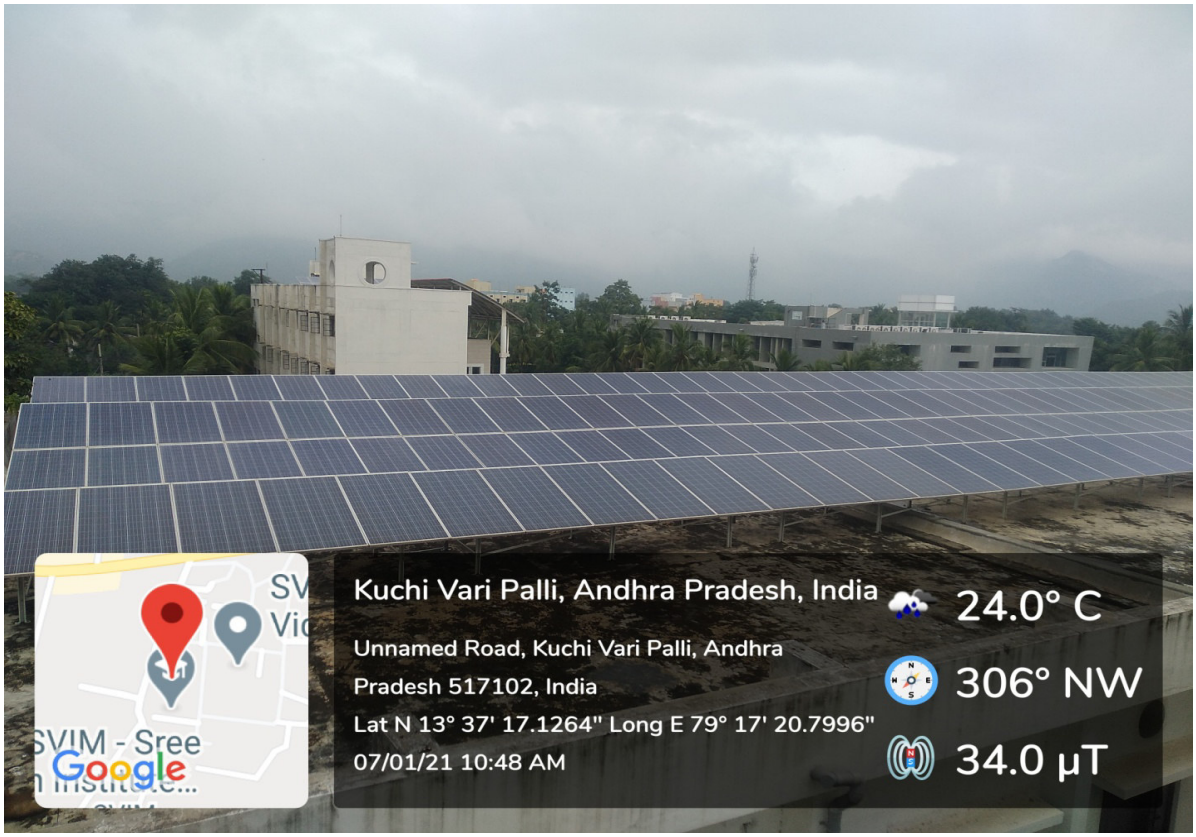
ROOF TOP SOLAR POWER PLANT OF CAPACITY 500 kWp

Roof Top Solar Power Plant at West Wing of M-Plaza



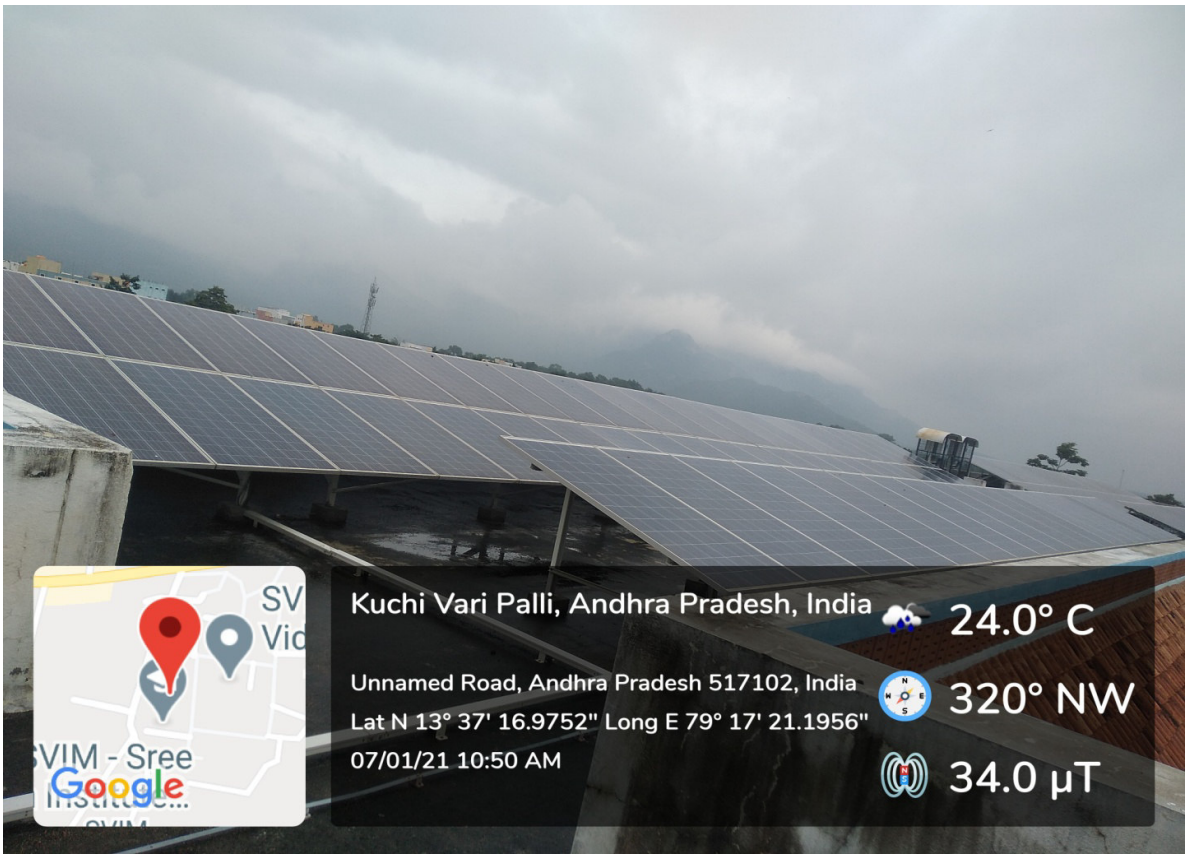


Roof Top Solar Power Plant at West Wing of M-Plaza near Dasari Auditorium

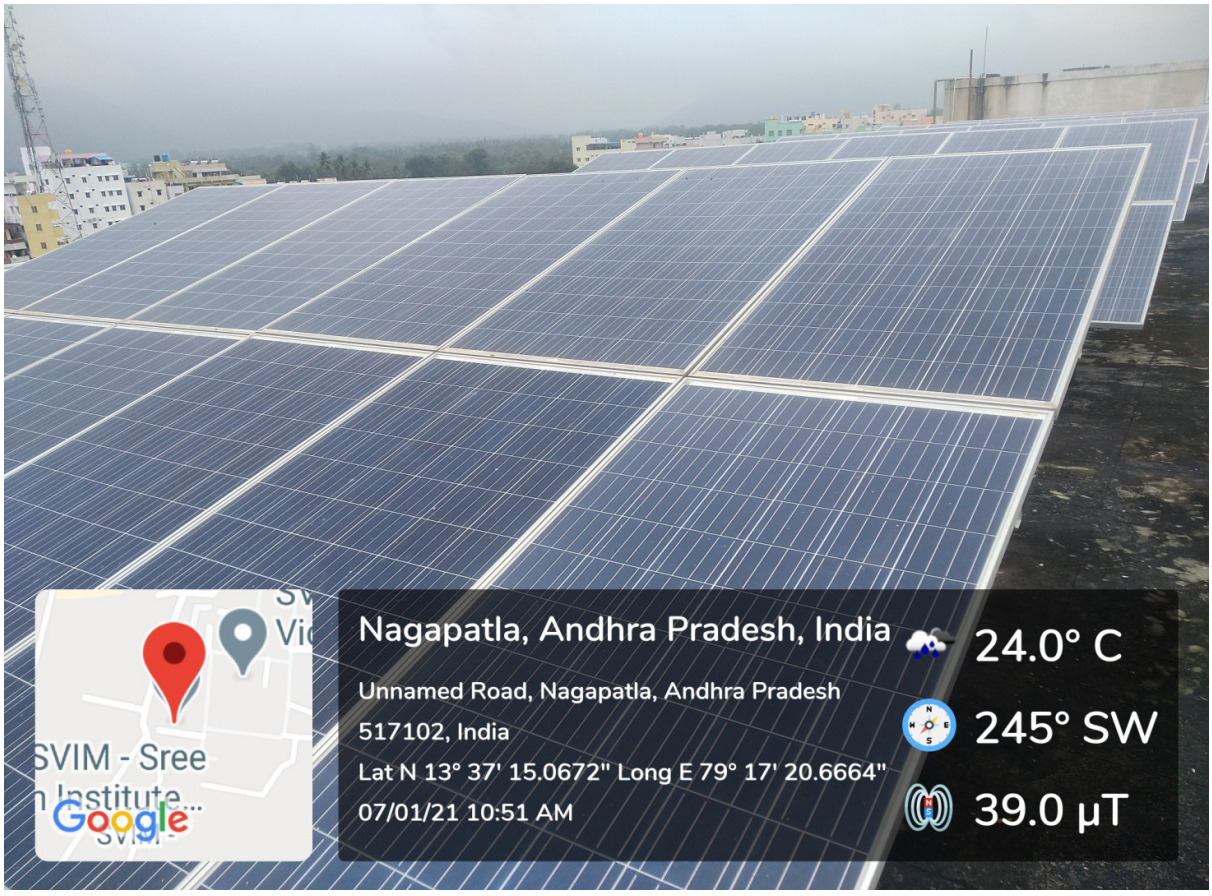


Roof Top Solar Power Plant at MNS Block North

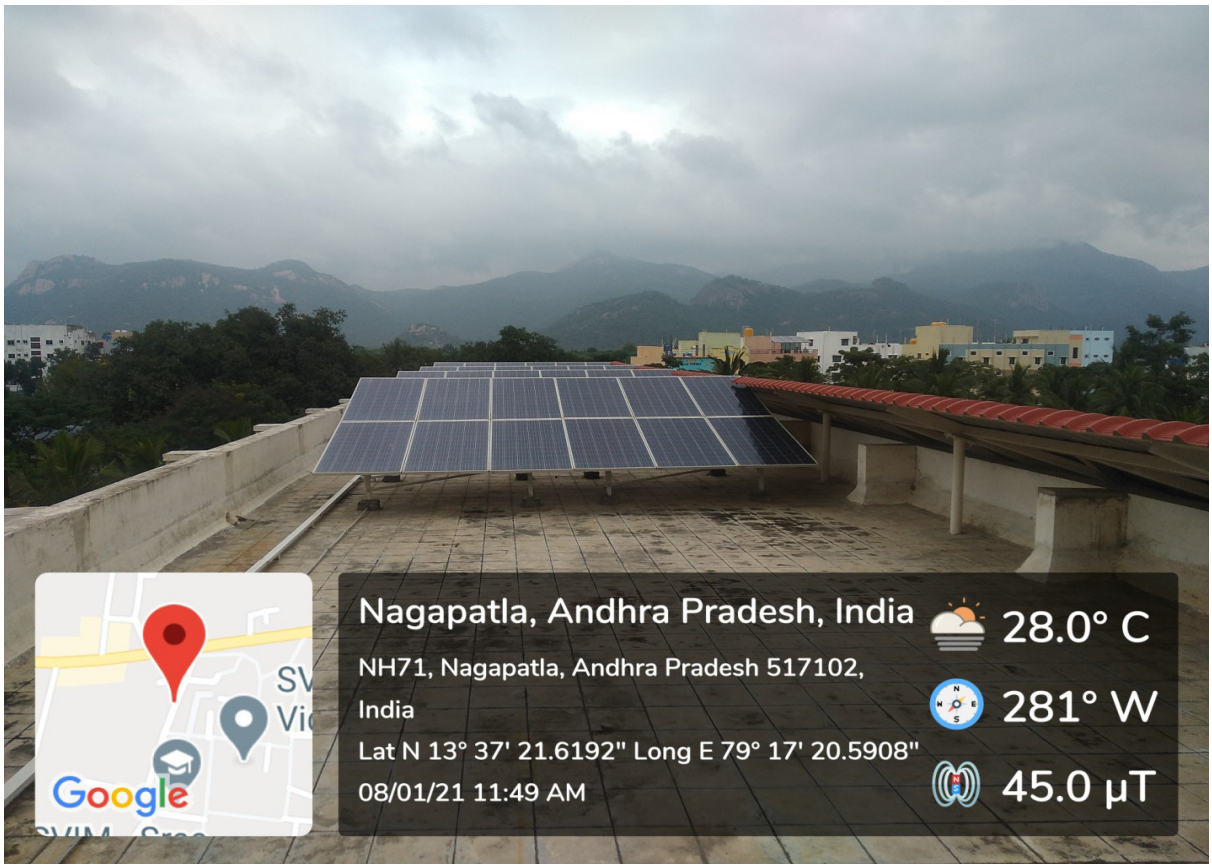
Roof top Solar Power Plant at MNS Block North



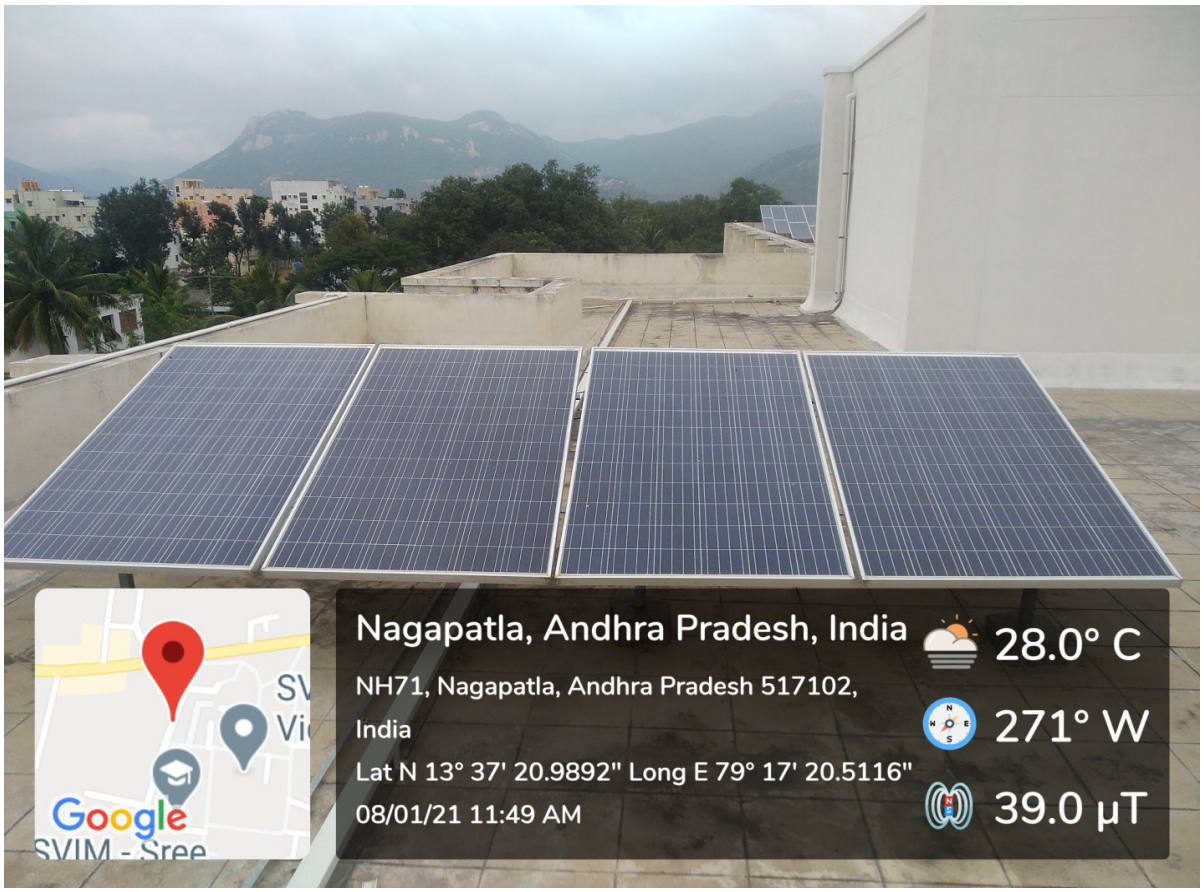
Roof top Solar Power Plant at MNS Block West



Roof Top Solar Power Plant at MNS Block South

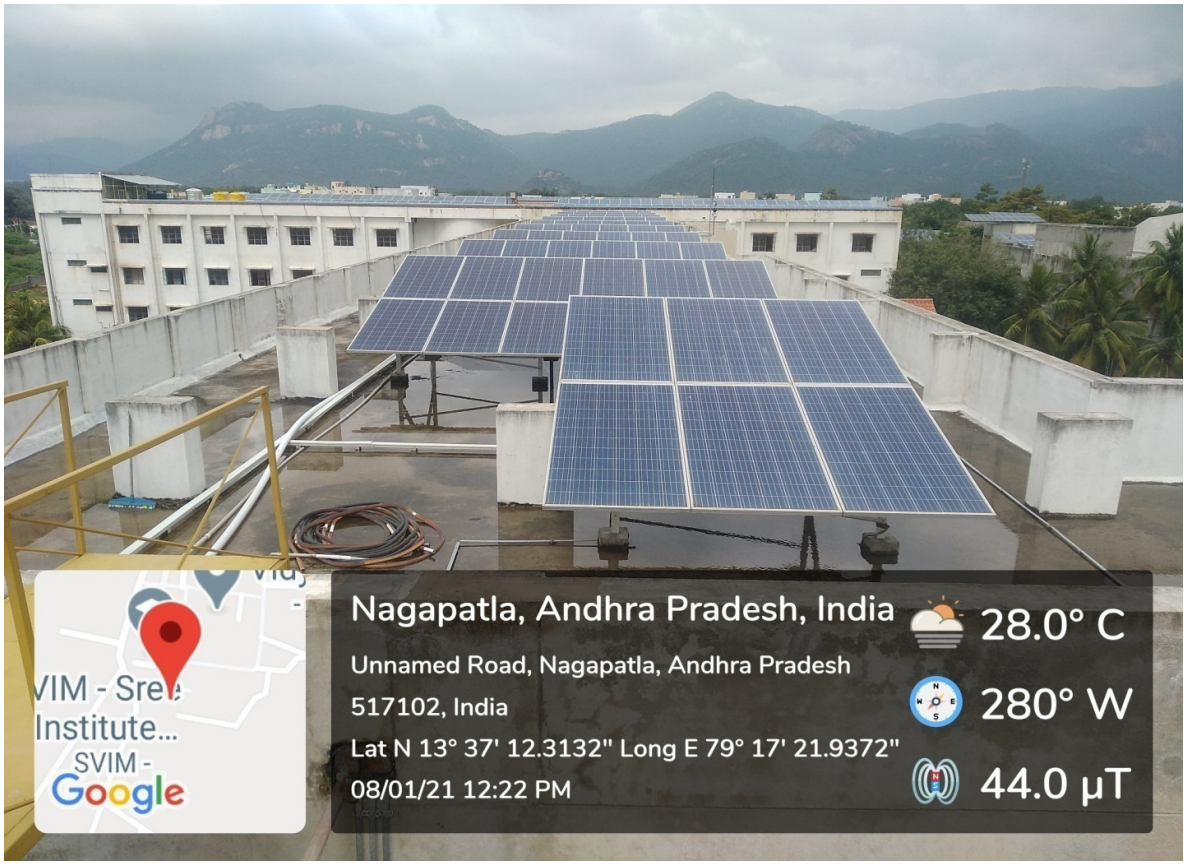


Roof Top Solar Power Plant at PG Block



1kW Stand Alone Roof Top Solar Power Plant at PG Block

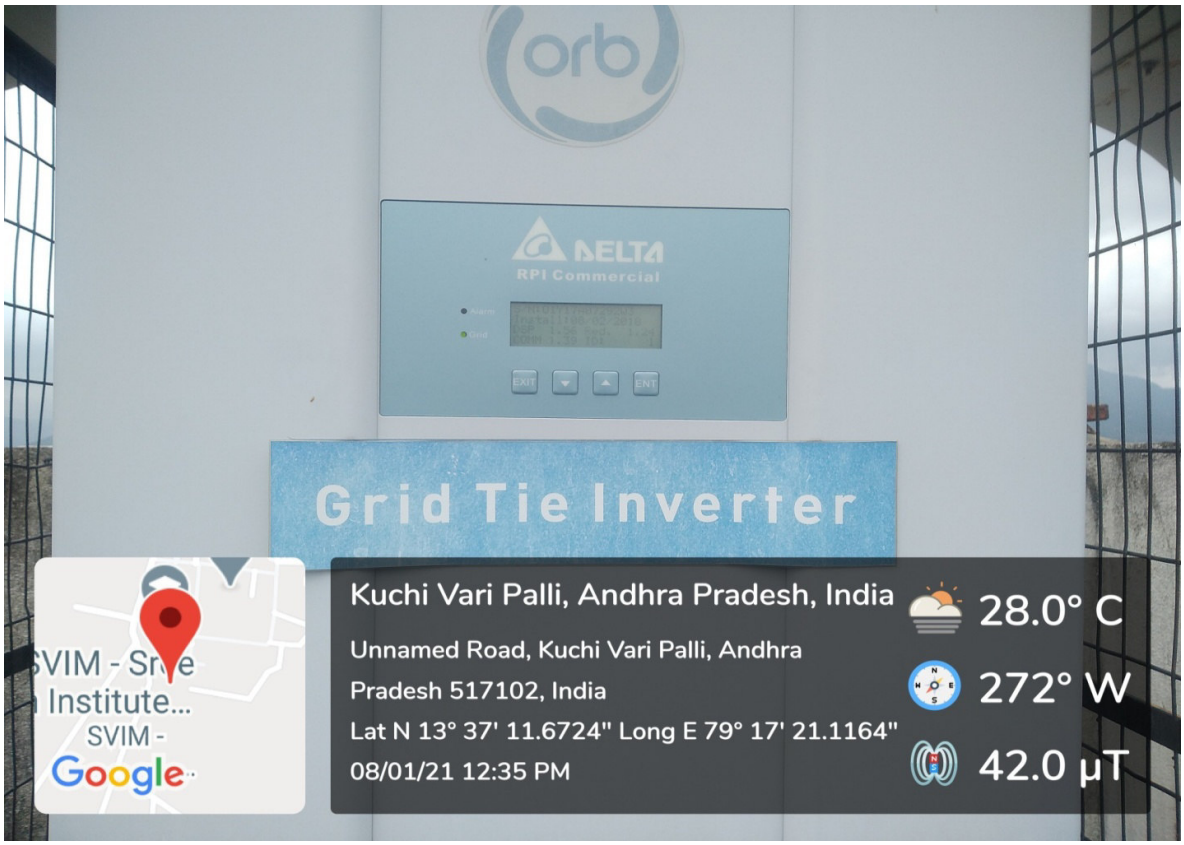
Roof Top Solar Power Plant at PG Block



Roof Top Solar Power Plant at Civil Engineering Block

Roof Top Solar Power Plant at Civil Engineering Block South

Roof Top Solar Power Plant at Mechanical Engineering Block

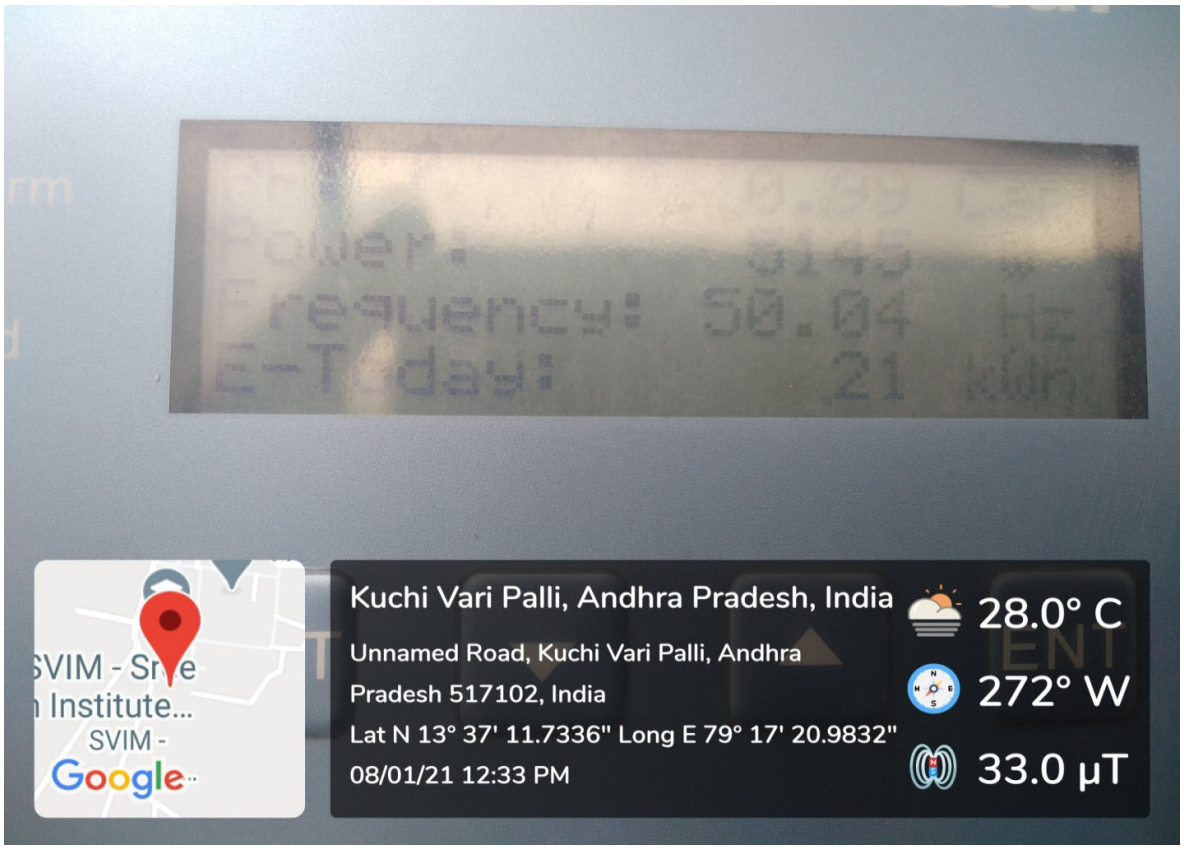


Roof Top Solar Plant Grid Inverter Control Panel

Inverter Switch Gear Panel for connecting Roof Top Solar Plant to Grid

Indication of Roof Top Solar Plant Grid Connection

Roof Top Solar Plant Grid Three Phase Supply Levels



Roof Top Solar Plant Grid Connection Measurements

Roof Top Solar Plant Grid Connection Measurements

Roof Top Solar Plant Grid connected Measurements
(Day Wise Indication)

Roof Top Solar Plant Grid Connection Measurements
(Month Wise Indication)

BILLS RELATED
TO
500kWP
ROOF TOP SOLAR POWER PLANT

COMMERCIAL INVOICE

Orb Energy Pvt Ltd, 19/8/47/A,R C Road Hathi Ramji Colony,Gound Floor Tirupathi-517502-A P GST no. 29AAACO8596J1ZO	Ref No :1718110204-252-261-263-282-306-327-356-378-428-554-566-618-634-671-682-690 DATED 11-01-2018 Buyers Order no. / Email 16400948 / India Delivery Terms :
Buyer **Sree Vidyanikethan Educational Trust** **Sree Sai Nagar, A Rangampet,** **Chandragiri(MDL), Chittor(Dist)** **Andhra Pradesh - 517102** **M-96109 99953**	**Delivery Address** (if other than the buyer address) NA
Buyer's Contact Details :	**Payment Terms :**

Product Code	Model	Quantity	Unit Price	Total Amount
SL500KAN06041	Solectric 500 Kwp - 50kVAx4 - 30kVax9 GT flat	1 Nos	28,571,428.00	28,571,428.00
	IGST @ 5% Round off			1428571.40 0.60
Amount chargeable in words : THREE CRORE ONLY			**Total Amount**	30,000,000.00

For Orb Energy Pvt Ltd.

Authorised Signatory

Our Bankers :
Axis Bank Ltd.,
Sona Tower, No.8, 32E Cross, 4th T Block, Jayanagar, Bangalore - 560041
A/c Name: Orb Energy Private Limited
A/c No.911020049684781
Swift Code : AXISINBB052 RTGS Code : UTIB0000052

BILLS RELATED TO
NET METER INSTALLATION
FOR
500 kWp SOLAR PLANT

SOUTHERN POWER DISTRIBUTION COMPANY OF A.P. LTD.
OPERATION CIRCLE :: TIRUPATI

Memo No. SE/O/TPT/DE/T/ADE/AAE/Comml./F./D. No.148/18, Dt.05-02-2018.

Sub: -APSPDCL – (O) Circle / Tirupati – Estimate for replacement of existing ordinary HT Meter with HT Net Meter to the solar power plant erected on the Roof Top in favour of M/s Sri Vidyanikithan Engineering College, A.Rangampeta for a CMD of 500KVA (Solar 500KW) under HT Cat –IIA at 11 KV potential (HT.Sc.No.TPT/240) in operation Circle Tirupati– Release orders issued – Reg.

Ref: -1. SE/O/TPT/AE-Comml/F.No.27/D.No.1536/16, dt.25.07.2017.
2. Lr.No.DE/R/TPT/AAE-COM./F.SPV./DNO.310/18, Dt.31.01.18 .

@@@

In the reference 1st cited, estimate sanctioned for replacement of existing ordinary HT meter with HT Net meter to the solar power plant erected on the rooftop in favour ofM/s Sri Vidyanikithan Engineering College, A.Rangampeta for a CMD of 500KVA (Solar 500KW) under HT Cat –IIA at 11 KV potential (HT.Sc.No.TPT/240) in Operation Circle Tirupati.

In the reference 2nd cited, the Divisional Engineer/Rural/Tirupati has furnished that execution of work was completed and requested for Synchronization of net metering service.

Further it is stated that the consumer has paid the following amounts

1. Estimate cost : Rs. 16,414/- PR.No.043445, Dt:03.08.2017

After careful consideration of the proposal the undersigned is pleased to accord approval to the Divisional Engineer/Rural /Tirupati for Synchronising with HT Net meter to the solar power plant erected on the rooftop in favour of M/s Sri Vidyanikithan Engineering College, A.Rangampeta for a CMD of 500KVA (Solar 500KW) under HT Cat –IIA at 11 KV potential (HT.Sc.No.TPT/240) in Operation Circle Tirupatiduly following all other departmental procedures in vogue.

Sd/- H.HARANATHA RAO
SUPERINTENDING ENGINEER
OPERATION:: TIRUPATI

To
The Divisional Engineer / Rural / Tirupati.
Copy to the Divnl. Engineer / M&P / Tirupati.
Copy to the Asst.Divnl.Engineer / OSD /Chandragiri.
Copy to the Senior Accounts Officer / CO / Tirupati.
Copy submitted to the Chief Engineer / Zone / Tirupati.
Copy submitted to the Chief General Manager / O / APSPDCL / Tirupati.

// F.B.O //

Assistant Divisional Engineer / Comml

SOUTHERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED
RURAL DIVISION :: TIRUPATI

From :
Divisional Elect. Engineer,
Operation: Rurals
Tirupati.

To
Superintending Engineer,
Operation,
Tirupati.

Lr No:- DE / R / TPT / AAE -COM / F. SPV/ DNO 310 /18 DT: 31 - 01 - 2018.

Sir,

Subc - Elecy-Rural Division – Tirupati –Estimate for replacement of existing ordinary HT Meter with HT Net meter to the solar power plant erected on the Roof Top in favour of M/s Sri Vidyanikethan Engineering College, A.Rangampeta for a CMD of 500KVA (Solar 500KW) under HT Cat IIA at 11KV potential HT.Sc.No. TPT/240 in Rural section Chandragiri – Synchronization orders – Requested – Reg.

Ref : - 1) SE/O/TPT/AE/Comml/F.27/D.No. 1536/17, Dt.25.07.2017
2) Consumer Application No. SPV 54242CN00672017JUL10
3) Lr. No. ADE/Ope/CGR/ F. / D.No. 140 / 17, Dt. 25.01.2018 received on 27.01.2018

# # #

It is to submit that in the above reference 1st cited, an estimate sanctioned for replacement of existing ordinary HT Meter with HT Net meter to the solar power plant erected on the roof top in favour of M/s Sri Vidyanikethan Engineering College, A.Rangampeta for a CMD of 500KVA (Solar 500KW) under HT Cat IIA at 11KV potential HT.Sc.No. TPT/240 in Operation section Pakala vide WBS No.D-2017-05-04-31-02-005

The prospective consumer has paid the estimate cost Rs. 16,414/- vide DD No. 043445, Dt.03.08.2017.

With the above 3rd reference cited, the Asst. Divisional Engineer, Operation, Chandragiri intimated that during the inspection of the above premises the solar roof top net metering system is ready to release.

Hence, it is requested to arrange to issue of Synchronization orders for further necessary action please.

Encl: NREDCAP certificate

DIVISIONAL ELECL. ENGINEER
OPERATION : : RURALS
TIRUPATHI

Copy to
The Asst. Divisional Engineer/Operation/ Chandragiri
The Asst. Engineer/Rural/ Chandragiri
The District Manager/ NREDCAP, D.No. 10-16, Gandhi Road, Chittoor