

Date: 31/07/2022

### 1. Title of the Practice

Taping Alternative Sources of Energy (Solar Energy) & Conservation of Energy

### 2. Objectives of the Practice (in about 100 words)

- In order to protect the environment, the college has switched over to the use of solar street lights and solar geyser since it is a clean and emission free source of energy. Solar energy is one of the most promising energies. It is renewable, inexhaustible, non-polluting, avoids global warming, reduces use of fossil fuels, and contributes to sustainable development.

### 3. The Context (in about 150 words)

- It is the need of the hour to shift the institution to renewable, inexhaustible and non-polluting source of energy which contributes towards environment protection and its sustainable development.
- Thus, institute has decided to work in the areas of minimal power consumption, its alternative sources and energy conservation as per national policy and objectives of the UN Sustainable Development Goal no. 7, 'Affordable and clean energy for all'.
- Institution is situated in hilly terrain, therefore, exposure to the sun is adequate.

### 4. The Practice

- The students of the hostel now have access to hot water 24 hrs a day.
- Institution has also replaced all the traditional bulbs with LEDs and tubes in the whole campus to minimize the consumption of electricity.
- 'Save Electricity' campaigns are conducted throughout the academic year. Thus, the institution has put an effort to spread this message in practical form.

### 5. Evidence of Success

- The institution has connectivity of rooftop solar PV system of 950 kw for load of 1312 KW.
- The institution has installed solar LED Bulbs throughout Medical college & Hospital campus and solar hot water plant (geyser) in the student's hostels (Both boys & Girls) which provides continuous warm water to boarders.
- The campus lighting is now totally shifted to solar light.

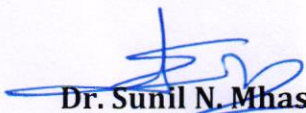
- Initiative towards reduction of global warming and consumption of hydro-electricity.
- The institute's heavy burden of electricity expenditure has also reduced significantly which can be seen as follows. The electricity expenditure for the year 2022 where in Solar energy use was implemented is 55%+ less than previous two consecutive years.

Sr no.	Bill Month	Amount (INR) Year wise		
		2020	2021	2022 (Solar energy Implementation)
1	January	3559055	3078451	906745
2	February	3566024	2943843	889472
3	March	3470412	3712465	1022790
4	April	2962101	3402962	1197465
5	May	3566199	3433498	1495195
6	June	3085290	3434048	1955486
7	July	3152581	3553309	1882242
8	August	2974975	3557138	-
9	September	2969358	3307002	-
10	October	3006311	2844287	-
11	November	2741198	1258804	-
12	December	3785321	1161470	-
Total		38838825	35687277	9349395

## 6. Problems Encountered and Resources Required

- Cost Management: Installation & maintenance of solar power project is a costly affair due to the expensive panels.
- Availability of labor: As the college is located in the rural area, we always encounter the problem of availability of labor.
- Accessibility of resources: It is also a great concern due to the location of our institution far from the city.
- "During rainy season, less solar energy is available".
- Awareness and efforts are required by each and every one for optimum use of electricity and thus contributing towards conservation of environment.



  
**Dr. Sunil N. Mhaske,**  
**Dean,**  
 DVVPF's Medical College & Hospital,  
 Ahmednagar.