



Marathwada Shikshan Prasarak Mandal's

Sunderrao Solanke Mahavidyalaya, Majalgaon



INTERNAL QUALITY ASSURANCE CELL

Criterion VII- Institutional Values & Best Practices

7.1 Institutional Values and Social Responsibilities

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 during last five years.**

Report of Solar Energy



USAGE OF SOLAR ENERGY – LIGHT & WATER HEATING REPORT

Introduction:

World's energy demand is growing fast because of population explosion and technological advancements. It is therefore important to go for reliable, cost effective and everlasting renewable energy source for energy demand arising in future. Solar energy, among other renewable sources of energy, is a promising and freely available energy source for managing long term issues in energy crisis. Solar industry is developing steadily all over the world because of the high demand for energy while major energy source, fossil fuel, is limited and other sources are expensive. In today's climate of growing energy needs and increasing environmental concern, alternatives to the use of non-renewable and polluting fossil fuels have to be investigated. One such alternative is solar energy. Solar energy is quite simply the energy produced directly by the sun and collected elsewhere, normally the Earth.

The sun creates its energy through a thermonuclear process that converts about 650,000,000 tons of hydrogen to helium every second. The process creates heat and electromagnetic radiation. The heat remains in the sun and is instrumental in maintaining the thermonuclear reaction. The electromagnetic radiation (including visible light, infra-red light, and ultra-violet radiation) streams out into space in all directions. Only a very small fraction of the total radiation produced reaches the Earth. Due to the nature of solar energy, two components are required to have a functional solar collector that collects the radiation that falls on it and converts a fraction of it to other forms of energy (either electricity and heat or heat alone). The storage unit is required because of the non-constant nature of solar energy; at certain times only a very small amount of radiation will be received. At night or during heavy cloud cover, for example, the amount of energy produced energy

generator. These two components are a collector and a storage unit. The collector simply by the collector will be quite small. The storage unit can hold the excess energy produced during the periods of maximum productivity, and release it when the productivity drops. In practice, a backup power supply is usually added, too, for the situations when the amount of energy required is greater than both what is being produced and what is stored in the container.

Report of the Activities

Sunderrao Solanke Mahavidyalaya Majalgaon is one of the prime institutions contributing in the Environmental and Social prosperity by inculcating the practical knowledge to aware the individuals regarding the importance of renewable sources of energy. A great effort has been made to tackle the energy crisis issues through the installation and functioning of ultimate source of energy i.e. solar energy. As a prime institute Sunderrao Solanke Mahavidyalaya initiated a activity to adopt eco-friendly lifestyle by the consumption of energy through solar source for which solar water heater have been installed Girls hostels. The radiation that does reach the Earth is the indirect source of nearly every type of energy used today. The exceptions are geothermal energy, and nuclear fission and fusion. Even fossil fuels owe their origins to the sun; they were once living plants and animals whose life was dependent upon the sun.. The use of solar water heater may curtail the electricity or fuel bills significantly. Energy is transferred from the sun to the water-glycol fluid used to heat water stored in a hot water cylinder. Inside the hot water cylinder, a base coil is connected to the solar collectors. This top immersion heater or coil will heat the water to a higher temperature when needed.

Use of Renewable Energy:

The use of renewable energy like solar energy is done at college Campus. The details are as follows:

Sr.No	Solar Light Panels No.	Solar Water Heater No.	Capacity	Make
1		01	500 Lit.	Farmson
2	25		40 Watt each	Farmson

Besides the use of solar energy at college campus the college plans to make use of solar energy to light up the area around the college play ground where citizens of the city come to take morning and evening walk.



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