

7.2 BEST PRACTICES

Solar

1. Title of the Practice

A green initiative moving towards renewable energy as sustainable campus.

2. Objectives of the Practice

Yenepoya (Deemed to be University) provides higher emphasis on creating an eco friendly campus and has established itself as a green campus over the last 25 years.

University has established a solar roof top which is an initiative to install 498KW plant in all its buildings in a collaborative venture with OV Energy. Green initiatives become sustainable only when they are economically tied into a project. One such project of establishing a solar form has converted a beneficial and economically viable venture and is serving as a model to all institutions in and around the region. The solar roof top being cheaper than the grid power, under this scheme the University produces 6 lakhs units of energy annually, translating to a yearly saving of approximately 25 lakhs to the University in terms of energy and expenditure.

3. The context

The solar energy corporation of India provides subsidy and financial support to educational institutions to switch to solar energy. This also falls under the State net-metering policy whereby all excess units of energy generated during the day are fed back to the grid and accorded due credit with the DISCOM, increasing the overall savings generated. This scheme also promotes wide use of solar power. Secondly the beautiful architecture of various buildings situated within the campus of the University is suited for solar, utilizing the existing angle of the tiled roof to opt solar irradiation on the panels and ensure maximum energy output. The system has been designed in such a way to ensure that roofing is not compromised in any way with respect to leakages but rather is benefitted to the entire building by reducing the temperature in peak summer and thereby reducing the energy needed to cool – another form of savings through rooftop solar. Hence this creates a win-a-win scenario for both the consumer as well as the investor.

4. The practice

The goal of creating a campus which is sustainable with renewable resources the University management has had several discussions with the renewable energy providers. The University took a decision to go solar not only to switch across to a cleaner, emission-free source of power, but also driven by the desire to enjoy significant reduction in the form of savings on the electricity expenditure which was increasing several crores due to various developmental activities happening within the campus.

University houses Health Science related Colleges and Hospital which consumes 1608 units of energy each day to the teaching hospital wherein electricity need to be provided to the facilities 24x7. This forced the Institution and its Management to look into other alternate source of energy wherein savings can be met on this expenditure.

The major challenge of installing such facility was to find out a suitable partner and also to find out buildings wherein maximum solar exposure can be achieved using existing infrastructural limitations.

5. Evidence of success

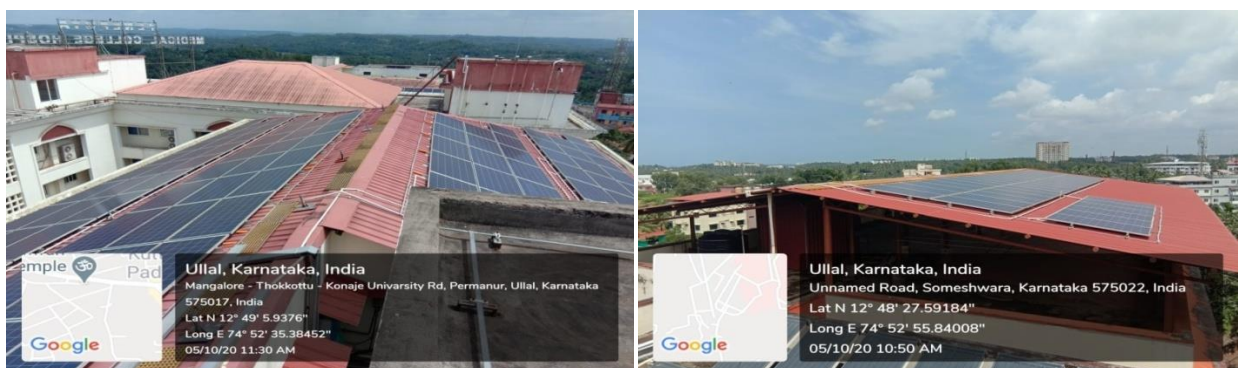
Since last one and a half year after solar installation the University has produced 7,23,977 units of power which directly translates 48,265 units of solar power generation per month with savings of Rs.2,16,399/- per month.

The roof leakages have been reduced significantly during the last one and a half years as well as the temperature has significantly reduced in these buildings where solar power has been installed. This also has reduced usage of Air conditioners in the last floors of the buildings. With this the University has gained significant attraction in the media as well as amongst the peers for pioneering these efforts. This also has significantly contributed to India's emission targets and promoting India's' commitment and ambitious challenge on a global stage.

6. Problems encountered and resources required:

The resources required are solar panels, maintenance of solar panels, dedicated monitoring process, dedicating wiring and supply chain, auditing process and accountability.

7. Notes (optional)



Geotagged photos