



POORNIMA UNIVERSITY

27th February 2016

Report On "100 KWp Grid Connected Solar PV System-Heart of Education Enlightened up by Aura of Sun"

Poornima University (PU) was established in Jaipur in the year 2012 by Shanti Education Society, the leading educational group in Engineering & Management with a track record of thousands of Alumni working in India and abroad. With the challenging situation of global climate change and need of carbon credit control Poornima University has taken an initiative by setting up **100 KWp grid connected roof top Solar PV energy system** at the academic block of University. This system is a feather in the wings of University with an enthusiasm to promote green energy and clean energy. It is also an inspiration as well as resource for the students for conducting study, research, development and applications of solar energy.

The objective of putting the project in the University is to demonstrate the technologies of solar power generation at a place which is visited by young and innovative minds. They will see the installation, understand it and take the message back to the states for replication of similar models.

General Specifications Of the solar module are as follows:

- Capacity of Plant: 100 KW
- Cost of Plant: 79.49 Lacs INR
- Date of Production: Wednesday, February 10, 2016
- Daily Power Generation: 400-450 KWH (On Sunny Days)
- Annual Power Generation: 1, 50,000 Units

Solar PV module and **Inverter** are two important constituents of the Photovoltaic energy system. Online real time access to the generation data and performance specifications is also available with help of interconnected local area network.

Following are the advantages of solar PV energy system:

- **Awareness for social change**

It will be helpful in creating awareness in young minds present in University which acts as a hub for exchanging ideas, information and awareness in society for such initiatives of clean energy.

- **Environment Friendly**

As an initiative towards green campus it will be helpful in cutting down dependence on conventional energy as well as it will contribute towards carbon credit control and control of pollution.

- **Research & Development**

It will be helpful for understanding the theory and applications of rooftop Solar PV system. Detailed case study, reports, research ideas and new development can be formulated using such a system in University.

The main inspiration to build this power plant has been taken from an ambitious plan of India which plans to build large grid connected solar power plants, with a cumulative installed capacity of 20,000 MWP by 2020, under the National Solar Mission. Hence, it is essential to document the performance of the grid-connected solar power plant installed in Rajasthan. Solar energy can contribute to about 7 percent of our total power needs and lead to a reduction of more than 30 percent of our coal imports, one of the eight missions under the NAPCC is the Jawaharlal Nehru National Solar Mission which was launched in late 2009. The mission targets 22,000 Mw of power by 2022 keeping in mind the importance of show casing solar technology.



