

## FREQUENTLY ASKED QUESTIONS (FAQs)

**Q. Whether all power consumers are eligible to install solar rooftop systems to avail net metering facility?**

Ans:- No, only those consumers who are having the electricity supply connection from DISCOMs are eligible.

**Q. How much capacity of the system do I need?**

Ans:- Based on your annual consumption, the capacity of the system can be arrived. Every 1500 unit's consumption per annum, 1Kwp system can be installed. But consumer should have sanction load from concerned DISCOMS for required capacity. If the consumer requires 3Kwp solar system, his sanctioned connected load should be  $\geq 3$ Kwp is mandatory.

**Q. How much space on my roof do I need for a solar PV installation?**

Ans:- The grid connected system of 1KW peak power capacity occupies about 10 square meters (around 100 Sq Ft) on the roof top.

**Q. How much electricity does a PV system output?**

Ans:- For every kW peak power installed on a South facing roof, the system will generate around 1500 to 1600 units in a year. This reduces by around 50% for an East or West facing orientation of modules.

**Q. How much does a Solar PV system cost?**

Ans:- The cost of the system varies with the capacity of the system, which As follows.

Sl.No.	Capacity	System Rate
1	1Kwp	Rs.52,000/-
2	2Kwp	Rs.48,900/-
3	3Kwp	Rs.47,700/-
4	4Kwp to 10Kwp	Rs.46,600/-
5	11Kwp to 100Kwp	Rs.41,500/-
6	Above 100Kwp	Rs.39,200/-

**Q. Do I need plan permission from the Municipal Authorities?**

Ans:- The roof mounted systems do not need any permission from municipal authorities/local bodies.

**Q. Will my roof be strong enough?**

Ans:- Most roofs are strong enough to take a solar installation without any reinforcement. However, in case of larger systems, it is suggested to obtain the opinion of a qualified Structural Engineer.

**Q. Do I need to inform Power Utility (DISCOM)?**

Ans:- Prior permission (i.e. Technical feasibility approval) is to be taken from concerned DISCOM to install the SPV system based on net metering.

**Q. Is there ANY application?**

Ans:- The application shall be made in prescribed format to the concerned ICSC (or) Assistant Divisional Engineer/ Operation/DISCOM along with a fee of Rs.2,500/- + GST@18%. The consumer can download solar net metering rooftop application from official websites of TSDISCOMs.

**Q. How much time will it take to give permission?**

Ans:- Permission will be issued normally within 15 days from the date of submission of completed application, provided there is feasibility for connectivity.

**Q. Who is the Nodal Point of Contact?**

Ans:- The nodal point of contact for solar net metering programme shall be the Assistant Divisional Engineer (Operations), TSDISCOMs.

**Q. Are there any grants / subsidy available?**

Ans:-Yes. Central Financial Assistance up to 40% of the system cost may be provided by MNRE as per the prescribed eligibility criteria.

**Q. Who are eligible for subsidy?**

Ans:- Residential houses, Independent Common / Apartment Common / Group Housing consumers are only eligible other categories are not eligible for subsidy.

**Q. How much amount can I get subsidy?**

Ans:- Capacity wise subsidy amount as follows.

Sl.No.	Capacity of the System	Subsidy amount
1	1Kwp	18,800
2	2Kwp	34,400
3	3Kwp	50,400
4	4Kwp	57,400
5	5Kwp	65,600
6	6Kwp	73,800
7	7Kwp	81,996
8	8Kwp	90,200
9	9Kwp	98,154
10	10Kwp	1,06,600

**Q. Where shall I contact for subsidies?**

Ans:- The Central Financial Assistance (CFA) may be provided by the concerned DISCOMs through TSREDCO who are installing the system or the consumer shall make application in the prescribed format to TSDISCOMs requesting for grant of CFA, before installation of the system. In respect of CFA from MNRE, the proposals will be recommended to MNRE by TSDISCOMs.

**Q. What is the difference between mono crystalline and polycrystalline PV panels?**

Ans:- Mono crystalline solar electricity panels tend to be slightly more expensive than polycrystalline panels, however mono crystalline panels are regarded as having a higher output per kW peak power installed. Polycrystalline wafer has a dark blue colour, mono crystalline wafer is black.

**Q. How much do the solar PV panels weigh?**

Ans:- Normally about 15kg per Sq m.

**Q. Are the solar PV panels fragile?**

Ans:- Solar PV panels are very robust and can withstand the normal stresses subjected by nature.

**Q. What is a PV system?**

Ans:- PV technology produces electricity directly from electrons freed by the interaction of sunlight with a solar panel made of semiconductor material. The power provided is direct current (DC) electricity. The basic building block is known as a cell. Many cells put together are known as a module, and many modules assembled together form an array. A PV system will consist of an array of modules generating DC electricity, an inverter, and sometimes battery storage back up with charge controller.

**Q. What is an inverter?**

Ans:- There are two kinds of electricity, DC and AC. Homes that are connected to utility power use AC electricity. Flashlights, small radios and automobiles use DC electricity. In to use solar power to operate the appliances in your home, an inverter will convert PV power from DC to AC.

Inverters can be further classified as units that use batteries (UPS) and those that use the utility grid as power storage (Grid-tied). Inverters are now required to possess meters that will indicate their performance and some manufacturer's supply remote display units that can be mounted inside the home. It is important to check on your inverter regularly to become acquainted with its operation and performance.

**Q. What is a “grid-tie” PV system?**

Ans:- You may connect your solar system directly into the wires of your utility. Since the “Net Metering” allows you to do this you will actually be spinning your meter backwards when your system is generating more power than you are consuming. When you generate excess electricity (more power than you are using) it will enter the grid. Your meter will tally the excess and credit to your account.

**Q. Who are the Vendors for installation of the system?**

Ans:- Approved Channel Partners of MNRE or Manufacturer/Supplier/System Integrator empanelled with TSREDCO. The list of vendors/system integrators is available in TSREDCO website, and TS DISCOMs Website.

**Q. Are there any technical standards for various components of the system?**

Ans:- Yes. The various components of SPV system shall have IEC/ISI/BIS Certification and confirm to technical standards specified by MNRE /TSDISCOMs.

**Q. What guarantees will I receive?**

Ans:- As per the MNRE guidelines, the SPV system shall be guaranteed for a period of 5 years and Solar Panel life for a period of 25 Years.

**Q. How the billing and payments are made?**

Ans:- (i).The consumer shall receive a net import/export bill indicating either net export to the grid or net import from the grid.

(ii). In case of net import bill, consumer shall settle the same as per existing norms. If it is a net export bill, then credit units shall be carry forward to next month for adjustment against next month import bill. Net credit available in his account will be refunded twice in a year based on June and December Month bills of each year. Net Credit amount payable will be credited by DISCOM in consumer’s service account number by June and December month end as the case may be. The amount payable for net export of energy will be based on pooled cost decided by TSERC for that year.