

Maharashtra Energy Development Agency

Grid Connected Rooftop System (GCRT)

Frequently Asked Questions FAQ

1. What is a Solar Rooftop System?

Ans: In a solar rooftop system, the solar panels are installed in the roof of any residential, commercial, institutional and industrial buildings. This can be of two types (i) Solar Rooftop System with storage facility using battery. (ii) Grid Connected Solar Rooftop System.

2. What is a Grid Connected Solar Rooftop System?

Ans: In Grid connected Solar Rooftop PV system the DC power generated from SPV panel is converted to AC power using power conditioning unit .Generated Power by this system during the day time is utilized fully for powering captive loads and excess power is fed to the Grid. Grid connected Solar Rooftop system is operational so long as grid is available. In case, where solar power is not sufficient due to cloud cover etc., the captive loads are served by drawing power from the grid.

3. What are the advantages of Grid Connected Rooftop Solar System?

Ans: i) Electricity generation at the consumption center and hence Savings in transmission and distribution losses ii) No requirement of additional land iii) Improvement of tail-end grid voltages and reduction in system congestion with higher self-consumption of solar electricity iv) Local employment generation.

4. What is the process for installation of Grid connected solar rooftop PV system and to avail CFA?

Ans: Please refer methodology for empanelled category and open category in GCRT portal on MEDA website (www.mahaurja.com).

5. How will I get the details of installers?

Ans: Please refer download section in GCRT portal on MEDA website (www.mahaurja.com)

6. How & from where will I obtain the Application format?

Ans: Please refer GCRT portal on MEDA website (www.mahaurja.com).

7. What is the eligible capacity of Solar Rooftop Photovoltaic Grid-Tie-Power plant under the scheme?

Ans: Minimum Capacity of project is 1 kWp and Maximum Capacity of project is 500 kWp for availing CFA at single beneficiary location.

8. How do I register to submit the application to get in-principle sanction?

Ans: Please refer help section in GCRT portal on MEDA website (www.mahaurja.com)

9. How to find the methodology for empanelled category and open category?

Ans: Please refer GCRT portal on MEDA website (www.mahaurja.com)

10. What is empanelled category?

Ans: Channel partners who are empanelled with MEDA only those can apply through empanelled category.

11. What is Open category?

Ans: Any channel partner / channel partner (New entrepreneur) / project developer can apply through Open category..

12. How much area is required for a 1 kW rooftop Solar PV System?

Ans: About 10sq.m south facing shadow free area is required to set up 1 kWp grid connected rooftop solar system.

13. What are the subsidies / capital support available from the Government?

Ans: Subsidy/Support is available from Central Government through MNRE: The subsidy available on Installation of Grid connected Solar Rooftop Power Plants is 30% of the benchmark cost. i.e.

Category wise Benchmark cost & Subsidy for 2018-19 of Grid Connected Rooftop Solar Power Plants as following :-

Capacity	Benchmark Costs (Rs./Wp)	Category Wise Subsidy Rs.
Above 1 Kw and up to 10 kw	47,000/-	14,100/-
Above 10 Kw and up to 100 kw	44,500/-	13,350/-
Above 100 Kw and up to 500 kw	44,000/-	13,200/-

14. There is any subsidy for Govt. buildings?

Ans: Government Institutions including Public Sector Undertaking (PSU) shall not be eligible for subsidy; instead they will be given achievement-linked incentives/awards. (Refer MNRE guidelines dated 04/05/2016).

15. What amount of electricity generate from 1 kW SPV?

Ans: Generally 1 kW SPV generate 4-5 kWh / units per day. It depends upon the system as well as solar radiations.

16. What amount of capacity I should refer to install on my rooftop?

Ans: Please refer link for solar rooftop calculator:

http://solarrooftop.gov.in/Grid/financial_tool/2

17. What is the benchmark cost of grid connected rooftop solar power plant?

Ans: The category wise benchmark cost of MNRE, GoI is as follows:

Capacity	Benchmark Costs (Rs./Wp)
Above 1 Kw and up to 10 Kw	60,000/-
Above 10 Kw and up to 100 Kw	55,000/-
Above 100 Kw and up to 500 Kw	53,000/-

The category wise benchmark cost of Maharashtra is as follows:

Capacity	Benchmark Costs (Rs./Wp)
Above 1 Kw and up to 10 Kw	47,000/-
Above 10 Kw and up to 100 Kw	44,500/-
Above 100 Kw and up to 500 Kw	44,000/-

**18. Is it required to install the Grid Connected Rooftop solar PV Power Plant on the
Rooftop of the Building?**

Ans: It is required that Rooftop Solar Power Plant System should be located in the premises of the consumer." Premises" means rooftops or /and elevated areas on the land ,building or infrastructure or part or combination thereof in respect of which a separate meter or metering arrangements have been made by the utility for supply of electricity.

19. Which type of beneficiary is eligible for availing the CFA?

Ans: 1) Residential: All type of residential buildings. 2) Institutional: Schools, Health institution including Medical college& Hospitals, Universities, Educational institutions etc. [including those registered under the Societies Registration Act 1860 and the Indian Trust Act 1882.]. 3) Social sector: Community centres, welfare homes, old age homes, orphanages, common service centres, common workshops for artisans or craftsman, facilities for use of community. Trusts / NGOs / Voluntary organizations / Training institutions, any other establishments for common public use etc. [including those registered under the Societies Registration Act under the societies Registration act 1860 and the Indian Trust Act 1882].

Note: - No CFA is applicable for all types of Govt. buildings, Govt. institutions/Govt.

Organizations including PSU's.

20. What is net-meter?

Ans: "Net Meter" means an energy meter as defined in the Electricity Supply Code which is also capable of recording both the import and export of electricity, or a pair of energy meters, one for recording the import and the other for recording the export of electricity.

21. What is the meaning of "Net Metering" arrangement?

Ans: "Net Metering Arrangement" means an arrangement under which a Roof-top Solar PV System with Net Meter installed at an Eligible Consumer's premises delivers surplus electricity, if any, to the Distribution Licensee after setting off the quantum of electricity supplied by such Licensee during the applicable Billing Period.

22. What is Net Metering Connection Agreement?

Ans: "Net Metering Connection Agreement" means an agreement entered into by a Distribution Licensee and an Eligible Consumer for executing a Net Metering arrangement.

23. How the consumer will be compensated for excess electricity injected Grid by the Rooftop Solar PV System installed?

Ans: In case of electricity injected in the Grid exceeds the electricity consumed by the consumer in the billing period (Monthly electricity bill) ,such excess injected electricity shall be carried forward to the next billing period as electricity credit and may be utilized to net electricity injected or consumed in future billing periods but within the settlement period (-from 1st of April in an English calendar year and ending with the 31st of the March of next year) .At the end of settlement period any electricity credits ,which remain unadjusted ,shall be paid at average cost of power purchase as approval by MERC for that year.

24. Is it required by consumer to change the electrical meter already installed in his premises?

Ans: Yes. The net meter (Bidirectional meter) is to be installed by the distribution company.

25. Is any provision for availing loans for solar rooftop system available?

Ans: Department of Financial services has instructed to all Public Sector Banks to encourage home loan/ home improvement loan seekers to install rooftop solar PV plants and include cost of system in their home loan proposals. So far, nine PSBs namely Bank of India, Syndicate Bank, State Bank of India, Dena Bank , Central Bank of India, Punjab National Bank, Allahabad Bank, Indian Bank and Indian Overseas Bank have given instructions to extend loan for Grid Interactive Rooftop Solar PV Plants as home loan/ home improvement loan.

26. In case of grid failure, is there any chance for shocks to the person who is repairing?

Ans: In case the grid fails, the solar power has to be fully utilized or stopped immediately feeding to the grid so as to safe-guard any grid person/technician from getting shock (electrocuted) while working on the grid for maintenance etc. This feature is termed as 'Islanding Protection'.

27. What is Comprehensive Maintenance Contract?

Ans: It is a contract of maintenance with installer having period of 5 year.

28. What are the durability / lifetime of SPV power plant?

Ans: It is assumed that the lifetime of SPV power plant is 20 years.