

# Frequently Asked Questions (FAQs)

## PM- KUSUM –C Scheme

(Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan –C Scheme)

### What is the PM-KUSUM-C Scheme?

PM-KUSUM-C is the scheme of Ministry of New and Renewable Energy (MNRE), Government of India aimed at solarisation of existing grid connected agriculture pumps of individual Pump capacity upto 7.5 HP. Under this component farmers already using grid connected pumps can set up solar PV system double the capacity of their pumps in KW. Further grid connected pumps used by Water users Associations ( WUA) , Farmer Producer Organisations ( FPOs) , Primary Agricultural Credit Societies ( PACS) or for cluster based irrigation system for solarisation of Pump Capacity higher than 7.5 HP considering upto 5 HP capacity for each individual in the group .

### Question: Which category of farmers will be benefitted under PM KUSUM C?

#### Answer:

All category of farmers of the state including different farmers' societies/ groups can be benefitted under this scheme e.g.

- All individual farmers
- Pani Panchayats
- Water User Associations (WUAs)
- Farmers Producers' Organisations(FPOs)
- Primary Agricultural Credit Societies(PACS)
- Community Irrigation Projects
- Cluster based irrigation System

### Question: How a farmer/farmers' group can be benefitted under the scheme?

#### Answer.

- Farmers/Farmers' group can increase their income by selling surplus solar power to the DISCOM.
- Though this scheme a power purchaser can become a power seller.
- Farmer can avail reliable & quality power to run their pump during day time

### Question: How this scheme works?

#### Answer

- Under this scheme farmers/ farmers' group using grid connected pumps are allowed to set up solar power plants of double the capacity of their pumps in kW in the vicinity of their existing pumps.
- The solar power plant is connected to the nearby power line through a gross metering arrangement to facilitate flow of solar power to the grid.
- The DISCOM purchases solar power as per reading of the gross meter @ Rs 3.60 per kWh and sells grid power to the farmer for irrigation in the usual manner @ RST Tariff Rs1.50 per unit.
- After deducting the sale price from the purchase price the DISCOM pays the balance amount to the farmer/group on monthly basis.

**Question: what is the approximate cost of a solar power plant; is any subsidy, bank loan available for setting up the plant?**

**Answer**

- A solar power plant costs about 50,000-55000 per kW.
- For setting up a plant Central and State government provide 30% subsidy each to all eligible beneficiaries.
- The farmer can himself invest the balance 40% or can invest only 10% and avail 30% as loan from Banks or Financial institutions which can be facilitated by the Discom.

**Question: What is the tenure of the loan and what rate of interest it bears?**

**Answer:**

- The maximum allowable tenure of loan is 12 years and the maximum interest that can be charged by banks in 9%.
- For early repayment of loan there is provision of 10% discount on the outstanding loan amount which will be borne by the DISCOM.

**Question: Could you give example of project financials for a 3 HP pump?**

**Answer:**

1.	Capacity of the existing grid connected pump	3 HP
2.	Eligible capacity of the solar power plant	4.5 kW
3.	Approximate Project Cost of the solar power plant @ 55000/ Kw (Rs.)	2,47,500
4.	Total subsidy ( Centre 30 % + State30 % ) of Rs 47100/KW in Rs	1,27,170
5.	Balance cost of the system (Rs.)	1,20,330
6.	Farmer's share @ 10% (Rs.)	12,033
7.	Amount to be borrowed as loan (Rs.)	1,08,297
8.	Loan Tenor	12 Yrs.
9.	Interest on borrowed capital	9%
10.	Equated Monthly Instalment for repayment of loan (capital + interest) (Rs.)	1,232
11.	Approximate realisation from sale of power PM (Rs.)	1,750

12	Approximate cost of purchased power PM (Rs.)	182
13	Monthly average income of farmer (until repayment of loan (Rs.))	335
14	Monthly average income of farmer (after repayment of loan (Rs.))	1,567

*\*the above are approximate values, which may change slightly under actual conditions*

*For farmers who have availed loan, an amount of Rs 1000/- per kW will be deducted from their accruals towards AMC from 6<sup>th</sup> year onwards till complete repayment of the loan amount.*

*The income of farmers will largely depend on the quantum of power generated. For this farmers have to regularly clean the panels and keep them shadow free. They should also take proper care of the inverter and cables associated with the plant.*

**Question: How much land is required for setting up a solar power plant?**

**Answer:**

- Approximately 100 sft land is required per kW capacity of the solar power plant.
- The land should be located in an open and shadow free area close to the power lines.

**Question: Whom a farmer should approach for a solar power plant under the scheme and who would facilitate loan and other related works?**

**Answer:**

- For installation of the solar power plant, the beneficiary is required to submit an application in the prescribed form to the Junior Engineer/SDO of the DISCOM.
- Through TPNODL Website or through Email: [customercare@tpnodl.com](mailto:customercare@tpnodl.com).
- After the application is approved in the district committee the same will be sponsored to the bank for consideration of loan
- After sanction of the loan the plant will be set up through a Business Associate empanelled by the DISCOM.

**Question: How many days does it take for setting up a solar power plant?**

**Answer:**

- It takes about 90 days for setting up a Solar plant and make it fully functional

**Question: Could you elaborate about the maintenance and upkeep of the solar power plant?**

- The power production capability of a solar power plant grossly depends upon its maintenance and upkeep.
- Maintenance responsibility for the initial 5 years period has been vested with the Business Associate and the maintenance cost has been built in to the project cost.
- After 5 years the farmer has to continue maintenance by paying Annual Maintenance Cost (AMC) from earning of Power sale to DISCOMs.

- During this period the Business associates is expected to visit the plant every quarter and undertake necessary maintenance. In case of any defect, malfunctioning or damage to any of the component/subcomponent of the system, the concerned farmer may intimate the same to the Business Associate for necessary redressal measures.
- Apart from the Business Associate, the farmer should also undertake day to day maintenance and upkeep of the plant.
- The farmer needs to clean the panel at least once in a week with wet cloth or by spraying water on the panels. In order to avoid possible electric shocks this should be done either before sunrise or after sunset.
- Clean and shadow free solar panels produce the desired amount of power.
- If for any reason the cable gets snapped or any component of the solar power plants gets damaged the farmer should promptly report the matter to the Business associate or Junior Engineer /SDO of the DISCOM.

**Question: Is there any provision of insurance against accidental damage or vernalisation of the system?**

**Answer:**

- For the initial 5years the system is insured against natural disasters such as cyclone, flood, earth quake, lightening etc. Beyond 5 years the farmer has to continue the insurance in his own cost.

**Question: If in any given month the accruals due to the farmer is not adequate to serve the EMI, AMC & Insurance Premium. Will the farmer bear the balance amount of EMI, AMC & Insurance Premium**

**Answer:**

- In case the farmer opts to approach Discom to facilitate the loan, the Discom would arrange for repayment of loan principle and interest from the surplus solar power procured by Discom after adjusting for the metered consumption of the farmer.
- In case there is any shortfall to meet the EMI/ AMC, the DISCOM will bear the balance amount of EMI, AMC & Insurance Premium from its non-tariff income. However, if the power generation is affected due to negligence of the farmer in day-to-day maintenance and upkeep of the plant, the concerned farmer will remain responsible for the same.

**Question: Is there any minimum Energy Consumption by the Farmer from the solar installation?**

**Answer:** The minimum Energy Consumption by the Farmer from the solar

installation has to be annual load factor of **15%**.

**Question: whether installation of Solar pump set is included in the project cost Solar installation?**

**Answer:** Installation of Solar pump set is **not** included in the Scheme. The pump sets already existing with farmer's can be used for running on solar power generated under this scheme.

**Question: Whether in night hours (Evening 6 PM to Moring 5 AM) farmer can use the Pumps for irrigation purpose?**

**Answer:** Farmer shall use the Pumps for irrigation purpose during day time from **5 AM to 6 PM** only as approved by Hon'ble OERC.