Frequently Asked Questions (FAQs)

Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan Scheme
(PM KUSUM)

1. What is the PM-KUSUM scheme?

PM-KUSUM (Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan) is the scheme of Ministry of New and Renewable Energy (MNRE), Government of India aimed at supporting the agriculture sector through setting up of decentralized solar power plants, replacement of agriculture diesel pumps with solar agriculture water pumps and solarisation of existing grid connected agriculture pumps. The scheme has three major components as mentioned below

Component-A:

Setting up of Decentralized Ground/ Stilt Mounted Grid Connected Solar up to 2MW. Farmers can set up such plants in their land and sell the power to GRIDCO/DISCOM at predetermined tariff.

Component-B:

Installation of Standalone Solar Agriculture Pumps. Farmers having or intending to have bore-wells in their fields but not having access to power or farmers who wish to replace their diesel pumps can install standalone solar pumps at subsidized rates under this component.

Component-C:

It has two sub-components:

Solarisation of Grid Connected Individual Agriculture Pumps: Under this sub-component farmers already using grid connected pumps capacity up to 7.5 HP (to get subsidy) can set up solar power system double the capacity of their pumps in kW and sell the generated power to the DISCOM at pre- determined tariff while for running the existing pump will continue to purchase power from the DISCOM by paying the usual tariff.

Feeder Level Solarisation: Dedicated agricultural feeders or feeders having major agricultural loads can be solarised under this component by DISCOMs or though Developers in CAPEX or RESCO mode. Developers can sell the power to the utility at tariffs determined through tenders. For conserving water, farmers will be financially rewarded under this scheme to the extent of power they save through conservation.

In subsequent pages, Frequently Asked Questions and Answers in respect of PM-KUSUM Component C towards Solarisation of Grid Connected Individual Agriculture Pumps have only been discussed.

2. **Which category of farmers will be benefitted under PM KUSUM C?**

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

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

3. **How a farmer/farmers' group can be benefitted under the scheme?**

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

4. **How this scheme works?**

- 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 vicinityof their existing pumps.
- The solar power plant is connected to the nearby power line through a gross meter 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 @ Rs1.50 per unit.
- After deducting the sale price from the purchase price, the DISCOM pays thebalance amount to the farmer/group on monthly basis.

5. **What is the approximate cost of a solar power plant; is any subsidy, bank loan available for setting up the plant?**

- 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.

6. **What is the tenor of the loan and what rate of interest it bears?**

- The maximum allowable tenor 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.

7. **How much land is required for setting up a solar power plant?**
   - Approximately 100 sqft land is required per kW capacity of the solar power plant.
   - The land should be located in and open and shadow free area close to the power lines.

8. **Whom a farmer should approach for a solar power plant under the scheme and who would facilitate loan and other related works?**
   - For installation of the solar power plant, the beneficiary is required to apply in the prescribed form to the Junior Engineer/SDO of TPSODL.
   - 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 empaneled by the DISCOM.
   - For any query, may contact to 1912/ 18003456797 or mail to customercare@tpsouthernodisha.com.

9. **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 the maintenance and upkeep.
   - Maintenance responsibility for the initial 5 years period has been vested in the Business associate and the maintenance cost has been built in to the project cost.
   - 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 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.

10. How many days does it take for setting up a solar power plant?

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

11. Is there any provision of insurance against accidental damage or vandalisation of the system?

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

12. 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?

- 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.

13. Is there any minimum Energy Consumption by the Farmer from the solar installation?

- The minimum Energy Consumption by the Farmer from the solar installation has to be annual load factor of 15%.

14. Whether installation of Solar pump set is included in the project cost Solar installation?

- 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.

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

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