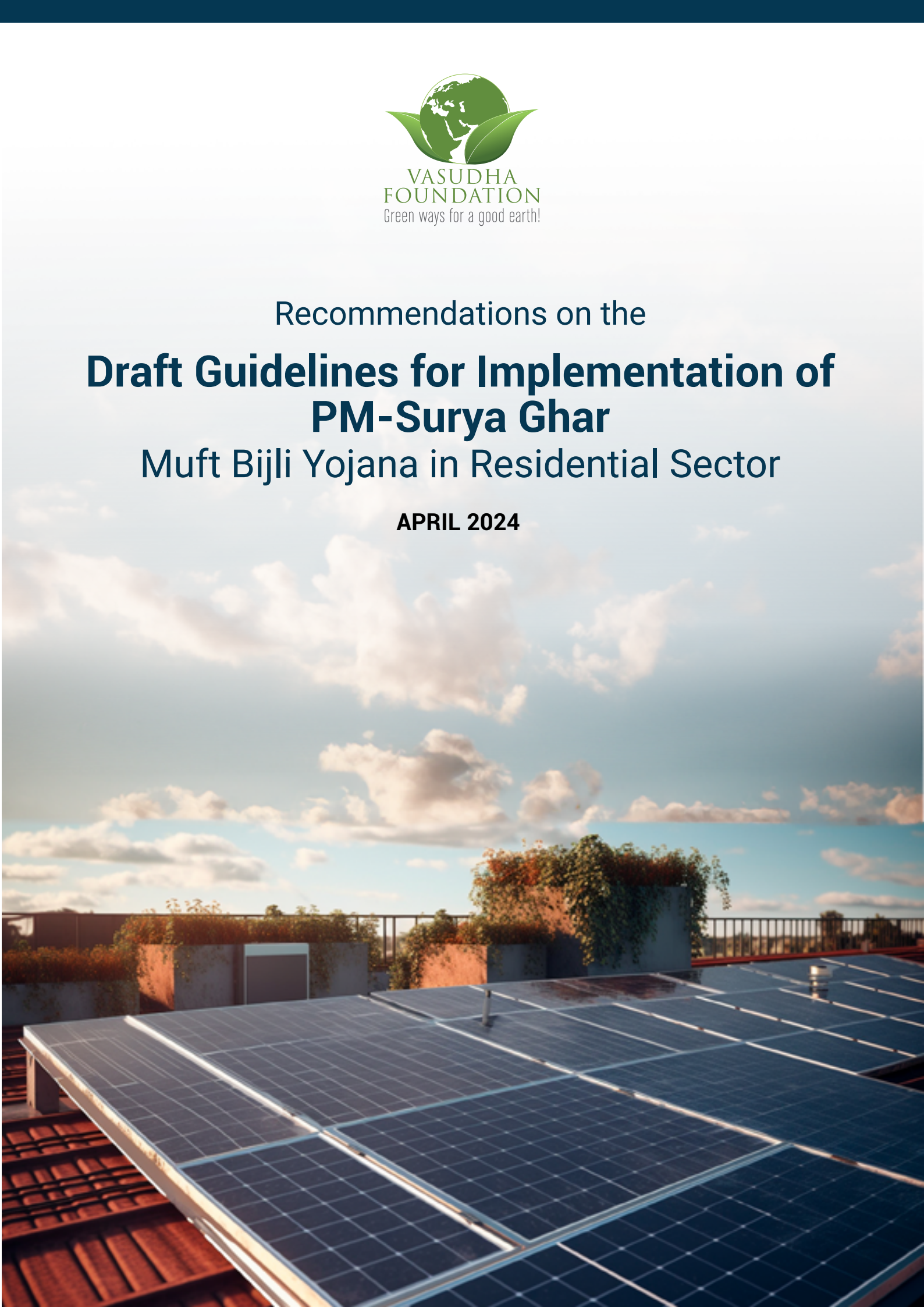
VASUDHA FOUNDATION
Green ways for a good earth!

Recommendations on the

Draft Guidelines for Implementation of PM-Surya Ghar

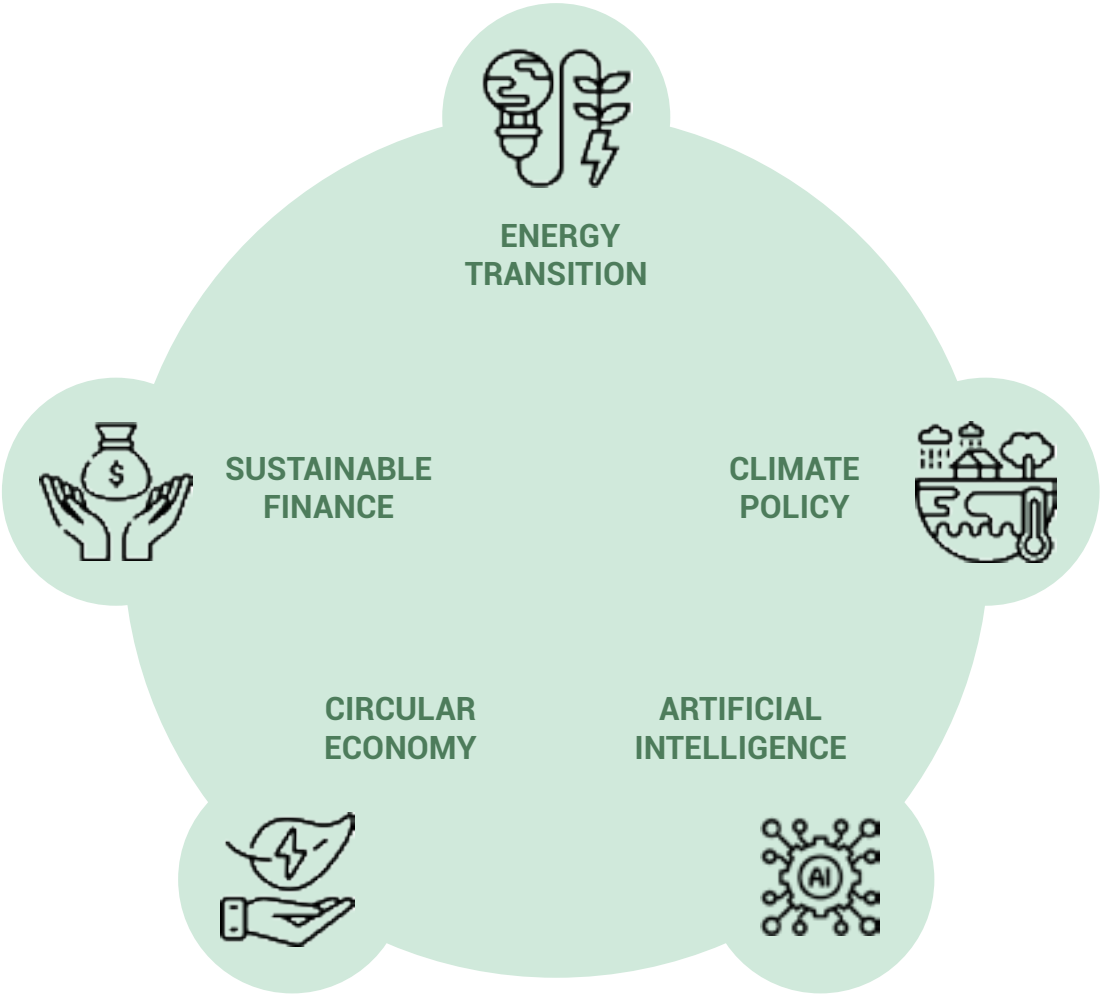
Muft Bijli Yojana in Residential Sector

APRIL 2024



ABOUT VASUDHA FOUNDATION

Vasudha Foundation is one of India's premier policy think tank promoting green, socially just, and sustainable models of energy by focusing on renewable energy and energy-efficient technologies and lifestyle solutions. We are a cohort of energy and environment professionals committed to India's clean energy transition through thought leadership and conscientious research. Our approach is a combination of creating cross-sectoral data repositories and carrying out data analytics, coupled with strategic outreach to ensure resource conservation with the ultimate objective of conserving Mother Earth.



RECOMMENDATIONS

On April 16, 2024, the Ministry of New and Renewable Energy (MNRE) unveiled the preliminary guidelines for the Implementation of PM-Surya Ghar: Muft Bijli Yojna in Residential Sector. Since its announcement, this scheme has sparked considerable interest. These guidelines elaborate on numerous crucial details essential for the seamless implementation of the scheme. In this document, we offer several key observations on the clauses, derived from our experience and engagements with all stakeholders within the solar rooftop system value chain.

Sl. No.	Page No./ Clause No./ Para No. with the description of the item	Comments	Remark/Justification
1	Page No. 3/Clause No. 4/ Para No.- e) In order to ensure that the customers are not overcharged, the Ministry of New and Renewable Energy will publish benchmark prices of solar modules, inverters, and other important equipment on the portal every year.	The Ministry of New and Renewable Energy will annually release benchmark prices for solar modules, inverters, and essential equipment on its portal. Customized pricing will be established for different states, including special category states, with specific differentiations for urban and rural areas, ensuring fair pricing for customers, preventing overcharging, and simultaneously ensuring equitable compensation for developers.	Given that the majority of developers are small-scale, it is observed that the cost of equipment varies between urban and rural areas. As India aims to foster entrepreneurialism in the solar sector, it becomes crucial to offer support to these developers.
2	Page No. 4/Clause No. 5/ Para No.- a) For the purpose of CFA, residential RTS plant would be the grid connected solar power system tagged to a particular residential power connection of the local DISCOM and will only include installations on a roof/terrace/balcony/ elevated structures.	For the purpose of CFA, a residential RTS plant would be a grid-connected solar power system tagged to a particular residential power connection of the local DISCOM. It will only include installations on a roof, terrace, balcony, elevated structures, or open spaces within the premises of residential consumers, provided that the total installation capacity doesn't exceed the contracted demand.	It has come to our attention that certain households in rural areas of India may lack sufficient space on their roofs, or may prefer to keep the roof area free from shadows for other purposes. Therefore, we kindly propose to amend the provision to allow them to still install solar rooftop systems.

Sl. No.	Page No./ Clause No./ Para No. with the description of the item	Comments	Remark/Justification
3	Page No. 6/Clause No. 5/ Para No.- c) Benchmark Cost: The benchmark cost for 1 kW system is fixed at ₹ 50,000/kW for the first 2 kW of RTS capacity and ₹ 45,000 for the additional kW with effect from 13th February, 2024. The benchmark for special category States (States/Uts of Uttarakhand, Himachal Pradesh, J&K, Ladakh, States in the North East including Sikkim, Uts of A&N and Lakshadweep) will be Rs 55,000 for first 2 kW of RTS capacity and Rs 49,500 for the additional kW of RTS capacity.	Please modify as appropriate, incorporating differential prices for rural and urban areas.	Given that the majority of developers are small-scale, it's observed that the cost of equipment varies between urban and rural areas. As India aims to foster entrepreneurialism in the solar sector, it becomes crucial to offer support to these developers.
4	Page No. 7/Clause No. 5/ Para No.- d) The benchmark cost will be revised at the time of midterm review of the programme to reflect changed market trends, if any, or earlier in case of substantial upward revision in module prices for unforeseen reasons. The benchmark will reflect changes in solar module supply prices, inverter costs and other systems costs as per the methodology defined by the Ministry of New and Renewable Energy.	The benchmark cost will be revised at the time of midterm review of the programme to reflect changed market trends, if any, or earlier in case of substantial upward revision in module prices for unforeseen reasons. The benchmark will reflect changes in solar module supply prices, inverter costs and other systems costs as per the methodology defined by the Ministry of New and Renewable Energy. **Please refer Annexure XI for further information regarding the benchmark costs.**	Please append an annexure outlining the components included in the calculation of benchmark costs. We have noticed instances where customers have been informed that the benchmark cost covers only modules and inverters, with additional costs for other components.

Sl. No.	Page No./ Clause No./ Para No. with the description of the item	Comments	Remark/Justification
5	Page No. 11/Clause No. 8/ Para No.- a) The National Portal will provide a seamless and fully integrated experience to prosumers in the residential sector. The portal will be fully integrated with State DISCOM portals for a harmonized experience for consumers in all stages of rooftop installations, including requests for net metering, load sanctions, inspections etc.	The National Portal will provide a seamless and fully integrated experience to prosumers in the residential sector. The portal will be fully integrated with State DISCOM portals for a harmonized experience for consumers in all stages of rooftop installations, including requests for net metering, load sanctions, inspections etc. **Additionally, post-installation, the portal will regularly record the prosumer's monthly electricity consumption, solar rooftop system-generated units, total electricity bill, savings accrued, and other pertinent details, enabling prosumers to easily monitor their information.**	As not all distribution utilities offer consumers an application for ongoing monitoring of their electricity usage and the benefits gained through solar rooftop systems, it would be advantageous for the portal to fulfill this role. By offering such information, the portal could become an invaluable asset in consumers' lives, aiding them in taking necessary steps to manage their consumption effectively.
6	Page No. 13/Clause No. 9/ Para No.- c) Once the vendors have installed a significant capacity through the National Portal, the bank guarantee requirement will be indexed to the capacity as follows: Capacity installed - Bank Guarantee 0-200 kW - Existing Initial Bank Guarantee 200-1000 kW - Rs 15 lakh 1000-5000 kW - Rs 50 lakh >5000 kW - Rs 1 crore	**Once vendors have installed a substantial capacity via the National Portal, the bank guarantee requirement will be raised.The bank guarantee referred to here will be in addition to the one previously submitted.** **The bank guarantee amount for vendors will be contingent upon their vendor rating. For top-performing vendors rated A/A+, the bank guarantee will be half of the predetermined amount listed in the table. Vendors in other categories will be subject to the following payment requirements.** Capacity installed - Bank Guarantee 0-200 kW - Existing Initial Bank Guarantee 200-1000 kW - Rs 15 lakh 1000-5000 kW - Rs 50 lakh >5000 kW - Rs 1 crore	Linking the bank guarantee to vendor ratings will stimulate competition and emphasize the significance of quality among vendors, offering them an opportunity to decrease their bank guarantee accordingly.

Sl. No.	Page No./ Clause No./ Para No. with the description of the item	Comments	Remark/Justification
7	Page No. 15/Clause No.10/ Para No.- f) Registered vendors shall provide the services to the beneficiaries for repairs/maintenance of the RTS plant free of cost for 5 years of the Comprehensive Maintenance Contract (CMC) period from the date of commissioning of the plan. Non-performing/ under-performing PV panels will be replaced free of cost in the warranty period. The beneficiary shall be provided with the specified warranties given by the respective OEMs on the system components for any future replacement of malfunctioned components.	Registered vendors shall provide the services to the beneficiaries for repairs/maintenance of the RTS plant free of cost for 5 years of the Comprehensive Maintenance Contract (CMC) period from the date of commissioning of the plan. Non-performing/under-performing PV panels will be replaced free of cost in the warranty period. **The beneficiary will receive information regarding the specific warranties and their durations provided by the respective OEMs for system components, facilitating any necessary future replacement of malfunctioning components.**	It is crucial for the prosumer to know the specific duration of warranty for each component - given that not all components enjoy the same warranty period besides the performance warranty on solar modules, which is 25 years typically. Therefore, emphasizing the importance of regular maintenance becomes paramount.
8	Page No. 16/Clause No.12/ Para No.- **Grievance Redressal**	A provision should be added to notify prosumers of the steps to take if the vendor or the OEM discontinues operations and they need to address issues with their system.	Prospective consumers are discouraged from proceeding with installations due to a lack of clarity.

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