

 Early Warning System

WB-P508489

PM Surya Ghar Muft Bijli Yojana (Solar Rooftops for Households)



Quick Facts

Countries	India
Financial Institutions	World Bank (WB)
Status	Proposed
Bank Risk Rating	U
Voting Date	2026-07-09
Borrower	Government of India - Ministry of New & Renewable Energy; REC Limited
Sectors	Energy, Law and Government
Investment Type(s)	Grant, Loan
Loan Amount (USD)	\$ 940.00 million
Grant Amount (USD)	\$ 70.00 million
Project Cost (USD)	\$ 6,950.00 million



Project Description

According to the Bank's website, the objective of this project is to increase the installed generation capacity of grid-connected rooftop solar photovoltaics by households and strengthen the capacity of relevant institutions to implement the PM Surya Ghar: Muft Bijli Yojana.

The government approved the PM Surya Ghar: Muft Bijli Yojana ("PMSG program") on February 13, 2024, which aims to incentivize solar rooftop installation for 10 million households by March 2027 and encourage local manufacturing of solar rooftop equipment, with a public sector budget of approximately US\$8.9 billion.



Early Warning System Project Analysis

The key environmental risks identified for the Program are increased quantum of solar waste, site selection, and occupational health and safety (OHS). Solar waste is due to damaged/discarded panels during installation and decommissioning. Solar waste is governed by the E-Waste (Management) Rules 2022, whereby solar cell and panel producers are responsible for collecting and storing solar waste until 2034-35. However, enabling an environment for safe management and compliance with the Rules is required at the policy level. Currently, the PMSG system does not have a provision for screening the siting of potential installations in sensitive areas of biodiversity value or areas protected as physical and cultural resources. Additionally, roofing material for the installation of GRPV must be screened for carcinogenic materials, such as asbestos. Installations in such areas will not be supported under the proposed Bank Program. Though the Government program checks for electrical provisions to prevent electrical hazards, the OHS aspects of installers and residents need to be factored into the guidelines. Other risks include potential storm and drainage issues that can affect solar rooftop installations; loss of habitat, soil erosion, and loss of tree cover to provide shadow-free coverage for elevated ground-mounted installations; availability of water for panel cleaning; and safety of the population in case of poorly designed installations for wind speed and direction. The above risks will also need to be factored into the Program during capacity building and awareness generation.

Social risks are based on minimal secondary data and would relate to (a) social exclusion whereby those consuming less than 3 kW of electricity may not be able to access the subsidy and the benefits primarily due to a lack of information and/or technical requirement for installation of solar panels on their residential rooftops which is higher than their household needs; (b) providing encumbrance free land without land acquisition may be an issue for ground-mounted systems (in such cases, relevant ground-mounted systems will be excluded from Program boundaries); (c) ensuring compliance with state and national labor welfare measures; (d) Women's and community health and safety considerations during the panel installations and (e) gaps in the system to track grievances and feedback from the customers/beneficiaries; and (f) long term operations and maintenance issues in accessing panels.



Investment Description

- World Bank (WB)

Total World Bank Group Lending: US\$ 940.00 million

Grant Amount: US\$ 70.00 million

Total Operation Cost: 6,950.00



Private Actors Description

REC Limited, formerly Rural Electrification Corporation Limited, is an Indian 'Maharatna' Central Public Sector Undertaking (CPSU) that serves as an infrastructure finance company under the administrative control of the Ministry of Power, Government of India.



Private Actor 1	Private Actor 1 Role	Private Actor 1 Sector	Relation	Private Actor 2	Private Actor 2 Role	Private Actor 2 Sector
-	-	-	-	REC Limited	Client	-



Contact Information

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Borrower/Client/Recipient

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REC Limited

ACCESS TO INFORMATION

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Bank Documents

- [Concept Program Information Document \(PID\) \(English\)](#)
- [P508489 - Draft Environmental and Social Systems Assessment \(ESSA\) - Solar Rooftops for Households P](#)