

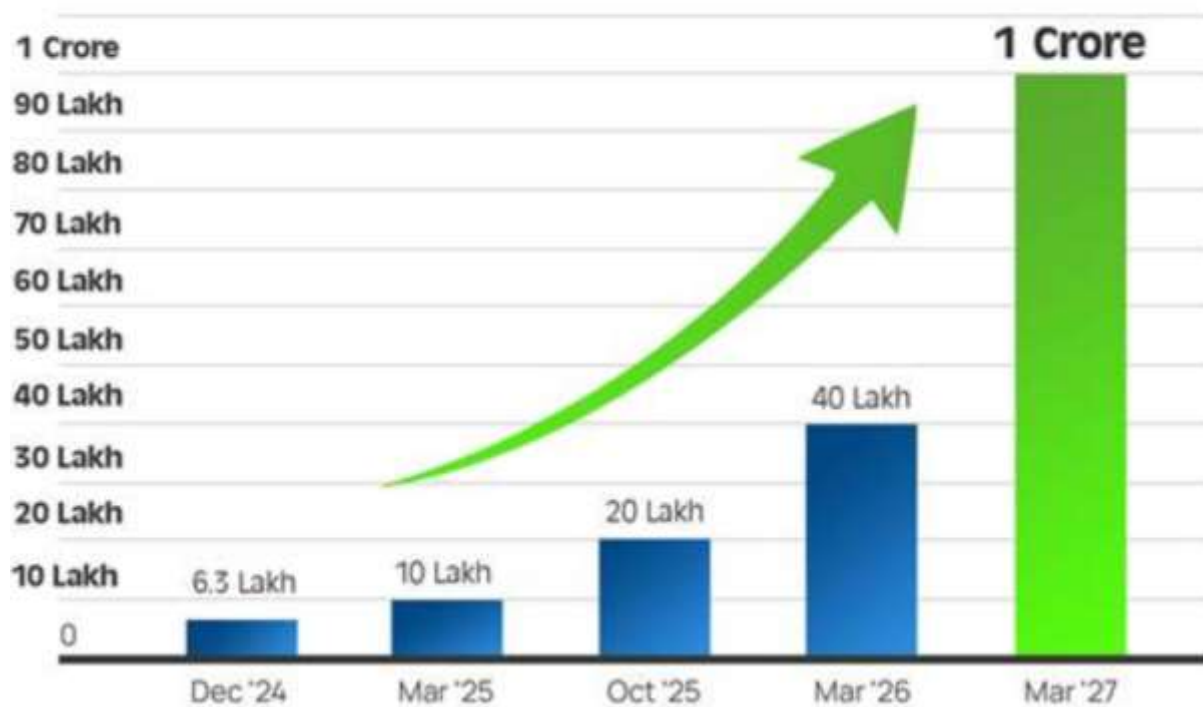


PM-SURYA GHAR: MUFT BIJLI YOJANA - SCHEMES

NEWS: *The Ministry of New and Renewable Energy (MNRE) has recently issued operational guidelines for the implementation of various components under the 'PM-Surya Ghar: Muft Bijli Yojana'.*

WHAT'S IN THE NEWS?

Projected Growth in Installations under PM Surya Ghar: Muft Bijli Yojana



PM-Surya Ghar: Muft Bijli Yojana

- **About:** It was launched with the aim to promote the use of rooftop solar power in residential sectors under the Ministry of New and Renewable Energy (MNRE).
- **Key Features:**
 - **Subsidy and Financial Assistance:** Offers a subsidy of up to 40% to reduce the upfront cost of rooftop solar installations.
 - **Payment Security Mechanism:** Guarantees timely payments through DBT to vendors and installers, encouraging more participation from the private sector.
 - **Capacity Building and Training:** Aims to create 3 lakh skilled manpower through fresh skilling and up-skilling programs.
 - **Ease of Application:** The 'National Portal for Rooftop Solar' streamlines the application process.



Key Components of the Recent Guidelines

- **Payment Security Mechanism (PSM):** A ₹100 crore corpus fund has been established to de-risk investments in **Renewable Energy Service Company (RESCO)** based grid-connected rooftop solar models in the residential sector.
 - This fund may be supplemented through other grants, funds, and sources after due approval from the Ministry.
- **Implementation Models:**
 - **RESCO Model:** Third-party entities invest in rooftop solar installations, allowing consumers to pay only for the electricity consumed without bearing the upfront costs.
 - **Utility-Led Aggregation (ULA) Model:** DISCOMs or state-designated entities will install rooftop solar projects on behalf of individual residential sector households.
- **Central Financial Assistance (CFA):** Aims to support 1 crore residential consumers in installing rooftop solar systems.

Key Features of the PM Surya Ghar: Muft Bijli Yojana

- **About:** Launched on 15th February 2024, **PM Surya Ghar Muft Bijli Yojana**, the world's largest rooftop solar initiative, aims to provide free electricity to one crore households by **March 2027**.
- **Eligibility Criteria:**
 - The household must include individuals who are Indian citizens.
 - The household must own a house with a roof that is suitable for installing solar panels.
 - The household must have a valid and active electricity connection.
 - The household must not have availed any other subsidy for solar panel installation.
- **Free Electricity for Beneficiaries:** Each beneficiary household is entitled to **300 units of free electricity per month**, reducing monthly utility costs significantly while fostering sustainable energy practices .
- **Comprehensive Subsidy Structure:** The scheme offers a subsidy of up to **40%** to households, making renewable energy more affordable and accessible.

Average Monthly Electricity Consumption (units)	Suitable Rooftop Solar Plant Capacity	Subsidy Support
0-150	1-2 kW	Rs. 30,000/- to Rs. 60,000/-
150-300	2-3 kW	Rs. 60,000/- to Rs. 78,000/-



> 300	Above 3 kW	Rs. 78,000/-
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- **Additional Support for Residential Societies:** The subsidy for **Group Housing Society/Resident Welfare Association (GHS/RWA)** is **Rs. 18,000 per kW** for common facilities, including EV charging, up to 500 kW capacity, covering individual rooftop plants as well.
- **Low-Interest Loans for Accessibility:** The scheme facilitates **collateral-free loans at a 7% interest rate** for rooftop solar installations up to **3 kW**, ensuring affordability for low- and middle-income families .
- **Revenue Generation for Households:** Beneficiary households can generate **additional income by selling surplus power** from their rooftop solar installations to local DISCOMs, creating a sustainable revenue model .
- **Significant Carbon Emission Reduction:** By switching to solar energy, the scheme is projected to cut **720 million tonnes of CO2 emissions** over a 25-year operational lifetime, contributing to global environmental goals .
- **Annual Savings for the Government:** The government is expected to save **Rs 75,000 crore annually** by reducing dependency on conventional energy sources .
- **Large-Scale Job Creation:** The initiative will create approximately **17 lakh jobs** in various fields, including manufacturing, logistics, installation, and maintenance of solar systems .
- **Capacity Building:** The scheme aims to install **1 crore solar rooftops**, requiring 1 lakh teams of 3-4 technicians.
 - To ensure quality installations, the **Ministry of New and Renewable Energy (MNRE)** will provide training for technicians, installers, engineers, and other stakeholders like DISCOM and banking officials, as outlined in the skilling and capacity building guidelines issued in July 2024.

Model Solar Village

- **Goal of the Initiative:** The **Model Solar Village** component seeks to establish one solar-powered village in each district to showcase energy self-reliance and renewable energy adoption .
- **Financial Allocations:** The government has allocated **Rs 800 crore**, with Rs 1 crore designated for each selected village .
- **Selection Criteria for Villages:** Villages with a population of over **5,000** (or 2,000 for special category states) are eligible for selection under this initiative .
- **Competitive Implementation Model:** Villages compete to achieve the highest renewable energy capacity within six months of selection to receive financial support.

Implementation Framework:

- **National Program Implementing Agency:** **REC Ltd.** has been designated as the **National Program Implementing Agency (NPIA)** to oversee execution at both the national and state levels .



- **Role of DISCOMs:** State DISCOMs are tasked with responsibilities like **inspections, vendor management, net meter installations**, and system commissioning .
- **Capacity Building Programs:** Training initiatives focus on skilling **DISCOM staff, REDAs, and financial institutions**, ensuring smooth implementation .

India and Renewable Energy

Total Electricity Generation Capacity: 452.69 GW (October 2024);

1. **Renewable Energy:** 203.18 GW (about 46.3% of total installed capacity), surged from 178.98 GW in October 2023.
2. It aligns with the country's ambitious renewable energy target of achieving 500 GW from non-fossil sources by 2030.

India's Nationally Determined Contributions (NDCs) target to achieve about 50% cumulative electric power installed capacity from non-fossil fuel-based energy resources and to reduce the emission intensity of its **GDP by 45% from 2005 level by 2030.**

Solar Energy in India

About *5,000 trillion kWh per year* energy is incident over **India's land area** with most parts receiving 4-7 kWh per sqm per day.

National Institute of Solar Energy (NISE) has assessed the country's solar potential of **about 748 GW** assuming 3% of the waste land area to be covered by Solar PV modules.

National Solar Mission (NSM) is one of the key missions in India's National Action Plan on Climate Change (NAPCC).

Source: <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=2092717>