

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 404
ANSWERED ON 27/11/2024

IMPLEMENTATION OF PM-SGMBY

404. SHRI JANARDAN SINGH SIGRIWAL

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

- (a) whether the Government is implementing Pradhan Mantri Surya Ghar Bijli Yojana (PM-SGMBY);
- (b) if so, the details and salient features thereof;
- (c) the present status of the said yojana;
- (d) whether the Government is providing financial and technical support for the implementation of schemes to promote New and Renewable Energy (N&RE) including solar, wind energy and other schemes in the country and if so, the details thereof; and
- (e) the effective measures taken by the Government to harness the huge potential of new and renewable sources and solar energy in Government buildings, hospitals, universities and colleges in the country?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER

(SHRI SHRIPAD YESSO NAIK)

(a) to (c) The Government has approved PM-Surya Ghar: Muft Bijli Yojana in February 2024, with the aim of installing rooftop solar plants in one crore households. The total financial outlay of the scheme is ₹75,021 crore.

The salient features of the Scheme are as under:

- Help to provide free/low-cost electricity to 1 crore households up to 300 units of electricity per month by installation of rooftop solar with Central Financial Assistance upto 60% of the Benchmark Cost.
- Achieve installation of 30 GW of solar capacity through rooftop solar by 2026-27.
- Develop the required enabling ecosystem for rooftop solar projects, including regulatory support, manufacturing facilities, supply chain, vendor network, operation & maintenance facilities, etc., in the country.
- Boost local economy and employment generation along with enhanced energy security.
- Incentivize DISCOMs to promote rooftop solar.
- Develop one Model solar village in each district of the country.
- Incentivize Urban Local Bodies (ULBs) & Panchayat Raj Institutions (PRIs) for deployment of residential RTS and undertake local mobilization efforts.
- Support for innovative projects.
- Create skilled manpower through training and capacity building program.
- Create awareness among electricity consumers for participating in the scheme.
- Online process from registration to subsidy disbursal directly in the bank account of the residential consumer through National Portal.
- Saturation of Government buildings by installation of Rooftop Solar.

As on 21.11.2024, a total of 1.44 crore registrations, 25.82 lakh applications and 6.16 lakh rooftop solar installations have been reported on the National Portal.

(d) To promote New and Renewable Energy in the country, the Government is providing financial and technical support by implementation of various schemes and programmes, details of which are placed as **Annexure**.

(e) Saturation of Government buildings including hospitals, universities and colleges, by installation of rooftop solar is one of the components of the PM-Surya Ghar: Muft Bijli Yojana. Detailed guidelines in this regard providing various implementation models and allocating Central Public Sector Enterprises (CPSEs) with experience in deployment of renewable energy technologies to assist Central Ministries & States/UTs in deploying rooftop solar on their buildings, has been issued.

Annexure referred in reply to part (d) of Lok Sabha Unstarred Question No. 404 to be answered on 27/11/2024 regarding “Implementation of PM-SGMBY”

Details of support being provided for the implementation of major ongoing Renewable Energy Schemes/Programmes

Scheme/Programmes	Incentives presently available as per the Scheme			
a) PM Surya Ghar: Muft Bijli Yojana	1. Under the PMSG: MBY, the CFA for installation of Rooftop Solar in the Residential Sector is given below:			
	S.No.	Type of Residential Segment	CFA	CFA (Special Category States/UTs)
	1	Residential Sector (first 2 kWp of Rooftop Solar (RTS) capacity or part thereof)	Rs.30,000/kWp	Rs.33,000/kWp
	2	Residential Sector (with additional RTS capacity of 1 kWp or part thereof)	Rs.18,000/kWp	Rs.19,800/kWp
	3	Residential Sector (additional RTS capacity beyond 3 kWp)	No additional CFA	No additional CFA
	4	Group Housing Societies/ Residential Welfare Associations (GHS/RWA) etc. for common facilities including EV charging up to 500 kWp (@ 3 kWp per house)	Rs.18,000/kWp	Rs.19,800/kWp
<p>2. The PMSG: MBY scheme includes the provision for incentive to DISCOMs to motivate and help them in activities such as create conducive regulatory and administrative mechanisms, achieve targets for implementation. The incentive is pegged at 5% of applicable benchmark cost for capacity achieved above 10% and less than 15% of installed base capacity; 10% of the applicable benchmark cost for capacity achieved beyond 15% of installed base capacity.</p> <p>3. To push the deployment of residential rooftop solar system (RTS) and undertake local mobilization efforts, the PMSG: MBY scheme also includes the provision for incentive to the Urban Local Bodies (ULBs) and Panchayat Raj Institutions (PRIs), at the rate of Rs.1000 for every installation of RTS in residential segment in the jurisdiction of ULB/PRI, for which CFA has been transferred to consumer.</p>				

Scheme/Programmes	Incentives presently available as per the Scheme
	<p>4. Further, a fund of Rs. 800 crore has been provisioned for developing a Model Solar Village in each district of the country, with an assistance of Rs 1 crore per Model Solar Village under PMSG: MBY scheme.</p>
<p>b) Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers</p>	<p>Viability Gap Funding (VGF) support up to Rs. 55 lakhs per MW to the CPSUs/Govt. Organizations entities selected through competitive bidding process.</p>
<p>c) PLI Scheme 'National Programme on High Efficiency Solar PV Modules'</p>	<p>The beneficiaries are eligible for Production Linked Incentive (PLI) on production and sale of solar PV modules. The quantum of PLI eligible for disbursement depends upon:</p> <ul style="list-style-type: none"> (i) quantum of sales of solar PV modules; (ii) performance parameters (efficiency and temperature coefficient of maximum power) of solar PV modules sold; and (iii) percentage of local value addition in modules sold.
<p>d) Solar Park Scheme</p>	<p>(a) Up to Rs. 25 lakh per Solar Park, for preparation of Detailed Project Report (DPR).</p> <p>(b) Rs. 20 lakh per MW or 30% of the project cost, whichever is lower, for development of infrastructure.</p>
<p>e) PM-KUSUM scheme</p>	<p>Component A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Solar Power Plants</p> <p>Benefits available: Procurement Based Incentive (PBI) to the DISCOMs @ 40 paise/kWh or Rs.6.60 lakhs/MW/year, whichever is lower, for buying solar power under this scheme. The PBI is given to the DISCOMs for a period of five years from the Commercial Operation Date of the plant. Therefore, the total PBI payable to DISCOMs is up to Rs. 33 Lakh per MW.</p> <p>Component B: Installation of 14 Lakh Stand-alone Solar Pumps</p> <p>Benefits available: CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar agriculture pump is provided. However, in North Eastern States, Sikkim, Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the stand-alone solar pump is provided. Component B can also be implemented without State share of 30%. The Central Financial Assistance will continue to remain 30% and rest 70% will be borne by the farmer.</p>

Scheme/Programmes	Incentives presently available as per the Scheme
	<p>Component C: Solarisation of 35 Lakh Grid Connected Agriculture Pumps including through Feeder Level Solarisation</p> <p>Benefits available:</p> <p>(a) Individual Pump Solarization (IPS): CFA of 30% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component will be provided. However, in North Eastern States, Sikkim, Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Lakshadweep and A&N Islands, CFA of 50% of the benchmark cost or the tender cost, whichever is lower, of the solar PV component is provided. Component C (IPS) can also be implemented without State share of 30%. The Central Financial Assistance will continue to remain 30% and rest 70% will be borne by the farmer.</p> <p>(b) Feeder Level Solarization (FLS): Agriculture feeders can be solarized by the State Government in CAPEX or RESCO mode with CFA of Rs. 1.05 Crore per MW as provided by MNRE. However, in North Eastern States, Sikkim, Jammu & Kashmir, Ladakh, Himachal Pradesh, Uttarakhand, Lakshadweep and Andaman & Nicobar Island, CFA of Rs. 1.75 crore per MW is provided.</p>
<p>f) Green Energy Corridor Scheme</p> <p>(for development of intra-state transmission system for RE projects)</p>	<p>(a) GEC Phase-I: CFA of 40% of DPR cost or awarded cost whichever is lower.</p> <p>(b) GEC Phase-II: CFA of 33% of DPR cost or awarded cost whichever is lower.</p> <p>(c) Inter-State Transmission Expansion: A major inter-state GEC project will facilitate power evacuation from Leh to Haryana, enabling the integration of 13 GW of RE projects in Ladakh. This initiative will also support stable power supply to Ladakh and Jammu & Kashmir.</p>
<p>g) Biomass Programme</p>	<p>(a) For Briquette manufacturing plants: Rs. 9 Lakhs/MTPH (metric ton/hour) [Maximum CFA- Rs. 45 Lakh per project]</p> <p>(b) For Non-Bagasse Cogeneration Projects: Rs. 40 Lakhs/MW (on installed capacity) (Maximum CFA- Rs. 5 Crore per project)</p> <p>(c) For pellet plants whose applications have been received before 16.07.2024: Rs. 9 Lakhs/MTPH (metric ton/hour) [Maximum CFA- Rs. 45 Lakh per project]</p> <p>(d) For pellet plants whose applications have been received on or after 16.07.2024:</p> <p>i. For Non-Torrefied Pellet manufacturing plant: Rs. 21 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 105 lakhs per project)</p>

Scheme/Programmes	Incentives presently available as per the Scheme
	<p>ii. For Torrefied Pellet manufacturing plant: Rs. 42 lakhs/MTPH production capacity or 30% of the capital cost considered for plant and machinery of 1 MTPH plant, whichever is lower (Maximum Rs. 210 lakhs per project)</p>
<p>h) Waste to Energy Programme</p>	<p>(a) For Biogas generation: Rs. 0.25 crore per 12000 cum/day (Maximum CFA- Rs.5 crore/project)</p> <p>(b) For BioCNG/Enriched Biogas/Compressed Biogas generation: (Maximum CFA- Rs.10 crore/project)</p> <p>(i) BioCNG generation from new Biogas plant – Rs. 4 Crore per 4800 Kg/day;</p> <p>(ii) BioCNG generation from existing Biogas plant - Rs 3 Crore per 4800 Kg/day;</p> <p>(c) For Power generation based on Biogas (Maximum CFA - Rs. 5 crore/project):</p> <p>(i) Power generation from new biogas plant: Rs. 0.75 crore per MW</p> <p>(ii) Power generation from existing biogas plant: Rs. 0.5 crore per MW</p> <p>(d) For Power generation based on bio & agro-industrial waste (other than Municipal Solid Waste (MSW) through incineration process): Rs.0.40 crore/MW (Maximum CFA - Rs.5.00 Crore/Project)</p> <p>(e) For Biomass Gasifier for electricity/ thermal applications:</p> <p>i) Rs. 2,500 per kW_e with dual fuel engines for electrical application</p> <p>ii) Rs. 15,000 per kW_e with 100% gas engines for electrical application</p> <p>iii) Rs. 2 lakh per 300 kW_{th} for thermal applications.</p> <p>Note:</p> <ul style="list-style-type: none"> • In case, the Waste to Energy plants are set up in Special Category States (NE Region, Sikkim, Himachal Pradesh and Uttarakhand), Jammu & Kashmir, Ladakh, Lakshadweep and Andaman & Nicobar Islands, the eligible CFA would be 20% higher than Standard CFA pattern given above. • Biogas/BioCNG/Power (biogas based) generation plants based on cattle dung as main feedstock set up by Gaushalas independently or through joint ventures/partnerships will be eligible for 20% higher CFA than Standard CFA pattern given above. These Gaushalas (Shelters) should be registered with the respective State Government.

Scheme/Programmes	Incentives presently available as per the Scheme
i) Biogas Programme	<p>(a) Rs. 9800/- to Rs. 70,400/- per plant based on size of the plant in cubic meter for small biogas plants (1-25 cubic meter/day plant capacity)</p> <p>(b) Rs. 35,000/- to Rs. 45,000/- per kilowatt for power generation and Rs. 17,500 /- to Rs. 22,500/- per kilowatt equivalent for thermal applications (25 - 2500 cubic meter/day plant capacity)</p> <p>The eligible CFA would be 20% higher than Standard CFA in for North Eastern Region (NER), Island, Registered Gaushalas and SC/ST beneficiaries.</p>
j) R&D programme	<p>The Ministry encourages research and technology development proposals in collaboration with the industry and provides up to 100% financial support to Government/non-profit research organizations and up to 70% to Industry, Start-ups, Private Institutes, Entrepreneurs and Manufacturing units.</p>
k) National Green Hydrogen Mission	<ul style="list-style-type: none"> • SIGHT programme for Electrolyser manufacturing has an allocation of ₹4,440 Crore. The incentives start from ₹4,440 per kW in the first year and end at ₹1,480 per kW in the fifth year. • SIGHT programme for Green Hydrogen production and its derivatives have an allocation of ₹13,050 Crore. <ul style="list-style-type: none"> ○ For Green Hydrogen Production, incentives are capped at ₹50/kg, ₹40/kg and ₹30/kg for the first, second and third year respectively. ○ For Green Ammonia production, incentives are ₹8.82/kg in the first year of production and supply, ₹7.06/kg during the second year of production and supply, and ₹5.30/kg during the third year of production and supply. • Pilot projects for projects in Transport Sector have an outlay of ₹496 Crore till FY 2025-26. • Pilot projects in Shipping sector have an outlay of ₹115 Crore till FY 2025-26. • Pilot projects in Steel sector have an outlay of ₹455 Crore till FY 2029-30. • Hydrogen Hubs have an outlay of ₹200 Crore till FY 2025-26. • The R&D program of the Mission has a budget of ₹400 Crore till FY 2025-26. • Skill Development component of the Mission has an outlay of ₹35 Crore till FY 2029-30. • The Testing component of the Mission has an outlay of ₹200 Crore till FY 2025-26. • The New and Innovative Techniques and Applications for Green Hydrogen has an outlay of ₹200 Crore by FY 2025-26.
l) Offshore Wind	<ul style="list-style-type: none"> • The Union Cabinet has approved the 'Viability Gap Funding (VGF) scheme for offshore wind energy projects' on 19.06.2024 at a total outlay of ₹ 7453 crore, including an outlay of ₹ 6853 crore for installation and commissioning of 1 GW of offshore wind energy projects (500 MW each off the coast of Gujarat and Tamil Nadu), and

Scheme/Programmes	Incentives presently available as per the Scheme																						
	grant of ₹ 600 crore for upgradation of two ports to meet logistics requirements for offshore wind energy projects. The scheme guidelines for implementation of “VGF Scheme for Offshore Wind Energy Projects” issued by MNRE on 11th September 2024.																						
J) New Solar Power Scheme (for Tribal and PVTG Habitations/Villages) under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DA JGUA):	<ul style="list-style-type: none"> The Scheme will cover electrification of One Lakh un-electrified households (HHs) in Tribal and PVTG areas identified by Ministry of Tribal Affairs (MoTA) by provision of off-grid solar systems. The scheme includes a provision for providing off-grid solar lighting in 1500 Multi-Purpose Centres (MPCs) in PVTG areas as approved under PM JANMAN. Similarly, the scheme also includes provision for solarisation of 2000 public institutions through off-grid solar systems as approved under DA JGUA. The off-grid solar systems shall be provided only where electricity supply through grid is not techno-economically feasible. The financial outlay approved for the scheme under PM JANMAN and DA JGUA is given below: <table border="1" data-bbox="571 913 1406 1599"> <thead> <tr> <th data-bbox="571 913 628 1070">S. No.</th> <th data-bbox="628 913 895 1070">Components</th> <th data-bbox="895 913 1066 1070">Central Share (100%)</th> <th data-bbox="1066 913 1241 1070">Approved Financial Outlay (in Rs. Crore)</th> <th data-bbox="1241 913 1406 1070">Timeline</th> </tr> </thead> <tbody> <tr> <td data-bbox="571 1070 628 1227">1</td> <td data-bbox="628 1070 895 1227">Provision of 0.3 kW Solar offgrid system for 1 lakh Tribal and PVTG HHs</td> <td data-bbox="895 1070 1066 1227">Rs. 50,000 per HH or as per actual cost</td> <td data-bbox="1066 1070 1241 1227">500</td> <td data-bbox="1241 1070 1406 1227" rowspan="2">FY 2023-24 to FY 2025-26</td> </tr> <tr> <td data-bbox="571 1227 628 1384">2</td> <td data-bbox="628 1227 895 1384">Solar street lighting and provision of lighting in 1500 MPCs of PVTG areas</td> <td data-bbox="895 1227 1066 1384">Rs. 1 lakh per MPC</td> <td data-bbox="1066 1227 1241 1384">15</td> </tr> <tr> <td data-bbox="571 1384 628 1599">3</td> <td data-bbox="628 1384 895 1599">Solarisation of 2000 public institutions through off-grid solar systems</td> <td data-bbox="895 1384 1066 1599">Rs 1 lakh per kW</td> <td data-bbox="1066 1384 1241 1599">400</td> <td data-bbox="1241 1384 1406 1599">FY 2024-25 to FY 2028-29</td> </tr> </tbody> </table>				S. No.	Components	Central Share (100%)	Approved Financial Outlay (in Rs. Crore)	Timeline	1	Provision of 0.3 kW Solar offgrid system for 1 lakh Tribal and PVTG HHs	Rs. 50,000 per HH or as per actual cost	500	FY 2023-24 to FY 2025-26	2	Solar street lighting and provision of lighting in 1500 MPCs of PVTG areas	Rs. 1 lakh per MPC	15	3	Solarisation of 2000 public institutions through off-grid solar systems	Rs 1 lakh per kW	400	FY 2024-25 to FY 2028-29
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