

GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 5267
ANSWERED ON 02/04/2025

SCHEME TO HARNESS SOLAR ENERGY

5267. SHRI BHAJAN LAL JATAV

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

- (a) the details of schemes to harness the potential of solar and wind renewable energy production in Rajasthan;
- (b) whether any incentive and assistance being provided by the Government to promote renewable energy generation in Karauli-Dholpur and Bharatpur Parliamentary Constituencies in Rajasthan; and
- (c) if so, the details thereof including the names of such schemes?

ANSWER

THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER
(SHRI SHRIPAD YESSO NAIK)

(a) Government has introduced various schemes to harness the potential of solar energy in the country including Rajasthan. The list of operational schemes are given at **Annexure-I**.

The wind power projects are set up mostly by private developers based on technoeconomic viability of the project. At present, there is no specific scheme/ programme for providing financial assistance for setting up onshore wind power projects.

(b)&(c) The Government provides incentives/assistance through various schemes to promote renewable energy generation in the country including Karauli-Dholpur and Bharatpur Parliamentary Constituencies in Rajasthan. The names of such schemes and details of incentives/assistance are given at **Annexure-II**.

**ANNEXURE-I REFERRED TO IN REPLY TO PART (a) OF LOK SABHA UNSTARRED
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List of the operational Schemes to promote solar energy

1. Scheme for Development of Solar Parks and Ultra-mega Solar Power Projects with a target of setting up 40,000 MW capacity. Under the scheme, the infrastructure such as land, roads, power evacuation system water facilities are developed with all statutory clearances/approvals. Thus, the scheme helps expeditious development of utility-scale solar projects in the country.
2. PM-Surya Ghar: Muft Bijli Yojana for installing rooftop solar and providing free electricity up to 300 units every month for One Crore households.
3. Production Linked Incentive scheme 'National Programme on High Efficiency Solar PV Modules' for achieving manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV modules (Tranche- I & II).
4. PM-KUSUM Scheme to promote small Grid Connected Solar Energy Power Plants, stand-alone solar powered agricultural pumps and solarisation of existing grid connected agricultural pumps. The scheme is not only beneficial to the farmers but also States and DISCOMs. States will save on subsidy being provided for electricity to agriculture consumers and DISCOMs get cheaper solar power at tail end saving transmission and distribution losses.
5. Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for setting up 12,000 MW grid-connected Solar Photovoltaic (PV) Power Projects by Government Producers, using domestically manufactured solar PV cells and modules, with Viability Gap Funding (VGF) support, for self-use or use by Government/ Government entities, either directly or through Distribution Companies (DISCOMS).
6. New Solar Power Scheme (for Tribal and PVTG Habitations/Villages) under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aabha Janjatiya Gram Utkarsh Abhiyan (DA JGUA) with a provision for providing off-grid Solar Lighting where electricity supply through grid is not techno-economically feasible.

**ANNEXURE-II REFFERED IN REPLY TO PART (b) & (c) OF LOK SABHA UNSTARRED QUESTION
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Names of schemes and details of incentives/assistance

Scheme/Programme	Incentives presently available as per the Scheme			
(a) PM Surya Ghar: Muft Bijli Yojana (PMSG:MBY)	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
	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.			
	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.			
	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.			
	(b) PM-KUSUM scheme	Component A: Setting up of 10,000 MW of Decentralized Ground/Stilt Mounted Solar Power Plants 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.		

Scheme/Programme	Incentives presently available as per the Scheme
	<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> <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>
(c) Solar Park Scheme	<p>(a) Up to Rs. 25 lakhs 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>
(d) Central Public Sector Undertaking (CPSU) Scheme Phase-II (Government Producer Scheme) for grid-connected Solar Photovoltaic (PV) Power Projects by the Government Producers	Viability Gap Funding (VGF) support up to Rs. 55 lakhs per MW to the CPSUs/Govt. Organizations entities selected through competitive bidding process.
(e) PLI Scheme 'National Programme on High Efficiency Solar PV Modules'	<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.
(f) New Solar Power Scheme (for Tribal and PVTG	<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.

Scheme/Programme	Incentives presently available as per the Scheme				
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 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: 				
	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
(g) Green Energy Corridor Scheme (for development of intra-state transmission system for RE projects)	<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>				
(h) Biomass Programme	<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> <ol style="list-style-type: none"> 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) 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) 				

Scheme/Programme	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) Waste to Energy Programme	<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/Programme	Incentives presently available as per the Scheme
(k) National Green Hydrogen Mission	<ul style="list-style-type: none"> • SIGHT programme for Electrolyser manufacturing has an allocation of Rs.4,440 Crores. The incentives start from Rs.4,440 per kW in the first year and end at Rs.1,480 per kW in the fifth year. • SIGHT programme for Green Hydrogen production and its derivatives have an allocation of Rs.13,050 Crores. <ul style="list-style-type: none"> ○ For Green Hydrogen Production, incentives are capped at Rs.50/kg, Rs.40/kg and Rs.30/kg for the first, second and third year respectively. ○ For Green Ammonia production, incentives are Rs.8.82/kg in the first year of production and supply, Rs.7.06/kg during the second year of production and supply, and Rs.5.30/kg during the third year of production and supply. • Pilot projects for projects in Transport Sector have an outlay of Rs.496 Crores till FY 2025-26. • Pilot projects in Shipping sector have an outlay of Rs.115 Crores till FY 2025-26. • Pilot projects in Steel sector have an outlay of Rs.455 Crores till FY 2029-30. • Hydrogen Hubs have an outlay of Rs.200 Crores till FY 2025-26. • The R&D program of the Mission has a budget of Rs.400 Crores till FY 2025-26. • Skill Development component of the Mission has an outlay of Rs.35 Crores till FY 2029-30. • The Testing component of the Mission has an outlay of Rs.200 Crores till FY 2025-26. • The New and Innovative Techniques and Applications for Green Hydrogen has an outlay of Rs.200 Crores by FY 2025-26.
(l) 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>