GOVERNMENT OF INDIA MINISTRY OF NEW AND RENEWABLE ENERGY

LOK SABHA

UNSTARRED QUESTION NO. 520

ANSWERED ON 23/07/2025

SCHEMES TO PROMOTE RENEWABLE ENERGY SOURCE

520. SHRI Y S AVINASH REDDY

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

- (a) the total renewable energy produced in the country during the last three years;
- (b) the details of measures taken/proposed to be taken and schemes introduced by the Government to promote renewable energy sources;
- (c) the steps taken/being taken by the Government to implement green energy corridors; and
- (d) the amount of subsidy allocated and disbursed during the last three years and the current year for adopting renewable energy sources, State/UT-wise?

ANSWER

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

(a) The details of renewable energy produced in the country during the last three year are given below:

Year	Generation (in Billion Units)
2022-23	365.65
2023-24	359.89
2024-25	403.64

Source: Central Electricity Authority (CEA)

(b) The Government has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country, as given at **Annexure-I**.

Further, to promote development of renewable energy in the country, Government has introduced various schemes. The list of major ongoing schemes being implemented by the Ministry of New & Renewable Energy (MNRE) is given at **Annexure-II**.

(c) The MNRE has undertaken phased initiatives under the Green Energy Corridor (GEC) scheme to support the creation of dedicated transmission systems for the evacuation and grid integration of renewable energy (RE). Under Phase-I of the Intra-State Transmission System (InSTS), projects are being implemented in eight States (Andhra Pradesh, Gujarat, Himachal Pradesh, Karnataka, Maharashtra, Madhya Pradesh, Rajasthan, and Tamil Nadu) for developing 9,767 circuit kilometers (ckm) of transmission lines and 22,689 MVA of substation capacity for integration of 24 GW of RE.

Subsequently, GEC Phase-II (InSTS) included seven States (Gujarat, Himachal Pradesh, Karnataka, Kerala, Rajasthan, Tamil Nadu, and Uttar Pradesh) for developing 7,919 ckm of transmission lines and 24,488 MVA of substations for the evacuation of 20 GW of RE.

(d) No State-wise allocation of funds is made by the Ministry. The Central Financial Assistance (CFA) is released in accordance with the respective scheme guidelines. State/ UT-wise details of the CFA released under major ongoing schemes/ programmes of the Ministry during the last three years and the current year are given at **Annexure-III.**

Annexure-I referred to in reply of part (b) of the Lok Sabha Unstarred Question No. 520 to be answered on 23.07.2025

The Government of India has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country. These include, inter-alia, the following:

- Ministry of New & Renewable Energy (MNRE) has issued Bidding Trajectory for issuance of RE power procurement bids of 50 GW/annum by Renewable Energy Implementing Agencies (REIAs) [REIAs: Solar Energy Corporation of India Limited (SECI), NTPC Limited, NHPC Limited, SJVN Limited] from FY 2023-24 to FY 2027-28.
- Foreign Direct Investment (FDI) has been permitted up to 100 percent under the automatic route.
- Inter State Transmission System (ISTS) charges have been waived for inter-state sale of solar and wind power for projects to be commissioned by 30th June 2025, for Green Hydrogen Projects till December 2030 and for offshore wind projects till December 2032.
- To boost RE consumption, Renewable Purchase Obligation (RPO) followed by Renewable Consumption Obligation (RCO) trajectory has been notified till 2029-30. The RCO which is applicable to all designated consumers under the Energy Conservation Act 2001 will attract penalties on non-compliance. RCO also includes specified quantum of consumption from Decentralized Renewable Energy sources.
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind, Wind-Solar Hybrid and Firm & Dispatchable RE (FDRE) projects have been issued.
- Schemes such as Pradhan Mantri Kisan Urja Suraksha evam Utthaan Mahabhiyan (PM-KUSUM), PM Surya Ghar Muft Bijli Yojana, National Programme on High Efficiency Solar PV Modules, 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), National Green Hydrogen Mission, Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects have been launched.
- Scheme for setting up of Solar Parks and Ultra Mega Solar Power projects is being implemented to provide land and transmission to RE developers for installation of RE projects at large scale.
- Laying of new transmission lines and creating new sub-station capacity has been funded under the Green Energy Corridor Scheme for evacuation of renewable power.
- Electricity (Rights of Consumers) Rules, 2020 has been issued for net-metering up to five hundred Kilowatt or up to the electrical sanctioned load, whichever is lower.
- "National Repowering and Life Extension Policy for Wind Power Projects, 2023" has been issued.

- "Strategy for Establishments of Offshore Wind Energy Projects" has been issued indicating a bidding trajectory of 37 GW by 2030 and various business models for project development.
- The Offshore Wind Energy Lease Rules, 2023 have been notified vide Ministry of External Affairs notification dated 19th December 2023, to regulate the grant of lease of offshore areas for development of offshore wind energy projects.
- Standard & Labelling (S&L) programs for Solar Photovoltaic modules and Grid-connected Solar Inverters have been launched.
- To augment transmission infrastructure needed for steep RE trajectory, transmission plan has been prepared till 2030.
- "The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules) have been notified.
- Electricity (Promoting Renewable Energy Through Green Energy Open Access) Rules, 2022, has been notified on 06th June 2022 with objective of ensuring access to affordable, reliable, and sustainable green energy for all. Green Energy Open Access is allowed to any consumer with contract demand of 100 kW or above through single or multiple single connection aggregating Hundred kW or more located in same electricity division of a distribution licensee.
- Green Term Ahead Market (GTAM) has been launched to facilitate sale of Renewable Energy Power through exchanges.
- Government has issued orders that power shall be dispatched against Letter of Credit (LC) or advance payment to ensure timely payment by distribution licensees to RE generators.

Annexure-II referred to in reply of part (b) of the Lok Sabha Unstarred Question No. 520 to be answered on 23.07.2025

Details of the major ongoing Renewable Energy Schemes / Programmes

- 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 for One Crore households by 2026-27.
- 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 for setting up decentralized solar or other renewable energy power plants, installation of stand-alone solar agriculture pumps, and solarization of existing grid-connected agriculture pumps, including feeder-level solarization. The scheme benefits not only farmers but also the States and DISCOMs.
- 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. National Green Hydrogen Mission launched with aim to make India a Global Hub for production, utilization and export of Green Hydrogen and its derivatives.
- 7. Green Energy Corridors (GEC): to create intra-state transmission system for renewable energy projects. Central Financial Assistance (CFA) is provided to set up transmission infrastructure for evacuation of Power from Renewable Energy projects in total ten States (considering both the phases of GEC).
 - (i) Intra-State Transmission System Green Energy Corridor Phase-I in eight States
 - (ii) Green Energy Corridor Phase-II
 - a) Intra-State Transmission System in Seven States
 - b) Inter-State Transmission System for 13 GW RE Projects in Ladakh
- 8. Viability Gap Funding (VGF) Scheme for Offshore Wind Energy Projects for installation and commissioning of 1 GW of Offshore Wind Energy Projects (500 MW each off the coast of Gujarat and Tamil Nadu), also for upgradation of two ports to meet logistics requirements for offshore wind energy projects.
- 9. Bio-Energy Programme:

- Waste to Energy Programme : Programme on Energy from Urban, industrial and Agricultural Wastes/Residues
- Biomass Programme: Scheme to Support Manufacturing of Briquettes & Pellets and Promotion of Biomass (non-bagasse) based cogeneration in Industries.
- Biogas Programme : for promotion of family type Biogas plants
- 10. Renewable Energy Research and Technology Development (RE-RTD) Programme.
- 11. Human Resource Development Scheme with components such as short-term trainings & skill development programmes, fellowships, internships, support to lab upgradation for RE and renewable energy chair.
- 12. 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-III referred to in reply of part (d) of the Lok Sabha Unstarred Question No. 520 to be answered on 23.07.2025

State-wise details of CFA released for the Renewable Energy projects under the major ongoing schemes being implemented by the Ministry during 2022-23

								Rs.
State	Solar Parks	Rooftop Solar	PM KUSUM	CPSU	Biomass	Biogas	Waste to Energy	GEC
A&N Islands								
Andhra		5.6					50.47	
Pradesh		3.0					30.47	
Arunachal			0.82					
Pradesh			0.62					
Assam		4.9				0.11		
Bihar				1.75				
Chandigarh		2						
Chhattisgarh		3.3				3.70		
Dadra & Nagar Haveli and Daman & Diu				1.5				
Delhi		10.85						
Goa								
Gujarat	522.17	1040.21	7.83				1.38	27.97
Haryana		14.72	137.95				3.53	
Himachal		11.7	5.85					4.02
Pradesh		11.7	3.83					4.02
Jammu &		1.2	15.69					
Kashmir		1.2						
Jharkhand		3	20.04					
Karnataka		9.93				0.12		17.50
Kerala	2.52	104.45						
Ladakh								
Lakshadweep								
Madhya	109.36	35.47		32.25		0.29		96.77
Pradesh				32.23				
Maharashtra	12	58.95	247.60		1.75	3.04		5.08
Manipur			0.23					
Meghalaya	1.20	0.0						
Mizoram	1.28	0.8	0.20					
Nagaland		0.6	0.20		0.40	0.47		
Odisha		0.6			0.40	0.47		
Puducherry		0.01 46.2	31.11		1.73	2.11		
Punjab		96.31	247.63		1./3	0.10		10.85
Rajasthan Sikkim		90.31	247.03			0.10		10.83
Tamil Nadu		20.54			1.03	0.34		87.81
Telangana		43.9			1.03	0.34	0.33	0/.81
Tripura		43.9	0.12				0.55	
Uttar Pradesh	28.78	5.92	82.30				1.82	
Uttarakhand	20.78	1.84	4.00				1.02	
West Bengal			4.00				0.07	
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Annexure-III contd...

State-wise details of CFA released for the Renewable Energy projects under the major ongoing schemes being implemented by the Ministry during 2023-24

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State	Solar Parks	Rooftop Solar	PM KUSUM	CPSU	Biomass	Biogas	Waste to Energy	GEC
A&N Islands		0.01						
Andhra		4.5		22.45			2.74	47.54
Pradesh		7.5		22.73			2.74	77.57
Arunachal			2.12			0.39		
Pradesh		2.11						
Assam Bihar		2.11				1.26		
Chandigarh		9.8						
Chhattisgarh	14.3	1.43				0.95		
Dadra &	14.3	1.43				0.93		
Nagar Haveli and Daman & Diu						0.11		
Diu Delhi		6.12				0.23		
Goa		0.12				0.23	3.00	
Gujarat	505.13	644.91	28.72	145.91		8.14	3.00	23.85
Haryana	303.13	24.64	429.78	143.71		0.14		23.03
Himachal			129.70					
Pradesh		2.4						40.50
Jammu &								
Kashmir								
Jharkhand			2.36					
Karnataka		11.68	2.38	112.35		6.77	6.61	147.12
Kerala		199.89	28.53					
Ladakh								
Lakshadweep								
Madhya Pradesh	59.26	31.39	0.80			6.97	0.84	22.26
Maharashtra		314.75	326.22		0.07	13.02	0.56	
Manipur		0.9	0.17			0.22		
Meghalaya			0.31			0.22		
Mizoram								
Nagaland			0.18			0.18		
Odisha		3.08	3.44			0.32		
Puducherry		0.39						
Punjab	05.51	23.83	5.41	602.05	1.05	2.34		52.52
Rajasthan	97.51	104.08	49.41	692.07	1.97	0.35		53.73
Sikkim		12.04	2.50	00.07		0.47	2.26	
Tamil Nadu		13.94	2.59	80.97		0.47	2.36	
Telangana		23.24	17.01	27.39		0.29		
Tripura	20.20	0.04	17.81			0.70	4 71	
Uttar Pradesh	39.30	61.06	92.13			1.84	4.71	
Uttarakhand Wast Bangal		10.77			2.14	0.77		
West Bengal					2.14			

Annexure-III contd...

State-wise details of CFA released for the Renewable Energy projects under the major ongoing schemes being implemented by the Ministry during 2024-25

State	Solar Parks	Rooftop Solar	PM KUSUM	CPSU	PM JANMAN	Biomass	Biogas	Waste to Energy	GEC
A&N Islands		0.09							
Andhra Pradesh	83.90	111.42			0.37	1.84		0.72	11.87
Arunachal			1.91				0.31		
Pradesh			1.91				0.31		
Assam		64.33							
Bihar		53.76		0.70					
Chandigarh		6.28							
Chhattisgarh	2.80	8.80					0.72		
Dadra & Nagar Haveli and Daman & Diu		0.67							
Delhi		10.75		0.41					
Goa		14.47		-				0.03	
Gujarat		3251.13	59.95	342.20				3.06	17.77
Haryana		207.42	303.40			2.04	0.11	7.43	
Himachal Pradesh		18.41	1.73						
Jammu & Kashmir		59.85	12.90						
Jharkhand		19.37	48.73		6.43				
Karnataka		81.01	0.89		0.63	4.00	0.95	8.30	24.65
Kerala	7.40	801.27	1.72				0.04		
Ladakh		2.67							
Lakshadweep		1.97							
Madhya Pradesh	73.9	266.92					3.83	10.20	
Maharashtra		1248.62	1619.00				27.77	10.20	
Manipur		2.56	0.17						
Meghalaya		0.08							
Mizoram	2.24	1.46	0.84						
Nagaland		0.16							
Odisha		25.30					0.26		
Puducherry		5.11							
Punjab		81.18	13.09			7.60	2.21		
Rajasthan	48.5	321.04	295.20	211.30				1.69	
Sikkim		0.02							
Tamil Nadu		172.64	6.48	1.76			4.95	15.18	10.47
Telangana		89.52		1.30	0.44		0.85	5.37	
Tripura	4	1.14	9.31		5.96	0.50	0.91	22.75	205.05
Uttar Pradesh	155.1	684.83	173.01			0.51	0.58	23.79	292.93
Uttarakhand		163.26	15.60				1.29	0.20	
West Bengal		0.10					0.01		

Annexure-III contd...

State-wise details of CFA released for the Renewable Energy projects under the major ongoing schemes being implemented by the Ministry during 2025-26 (Upto June 2025)

States/ UTs	Solar Parks	Rooftop Solar	PM KUSUM	CPSU	PM JANMAN	Biomass	Biogas	Waste to Energy	GEC
A&N Islands		0.29							
Andhra		116.01				0.13			11.62
Pradesh		110.01				0.13			11.02
Arunachal									
Pradesh Assam		74.14	1.41						
Bihar		24.38	1.41	1.05					
Chandigarh		1.07		1.03					
Chhattisgarh		9.87							
Dadra &		7.07							
Nagar Haveli		1.70							
and Daman &		1.72							
Diu									
Delhi		8.66		0.61			0.50		
Goa		1.77	0.43						
Gujarat		654.02	199.05						
Haryana		62.39	135.74						
Himachal Pradesh		11.35							
Jammu &									
Kashmir		37.57							
Jharkhand	55.00	2.39	16.37						
Karnataka	22.00	24.50	82.15						
Kerala	1.14	240.20	18.98						
Ladakh		2.01							
Lakshadweep		1.74							
Madhya		106.89	7.95	20.63			0.17		
Pradesh				20.03			0.17		
Maharashtra		551.30	812.02						
Manipur		1.18							
Meghalaya		0.03							
Mizoram		1.22	0.02						
Nagaland Odisha	2.98	0.03 30.83	0.02 4.09						
Puducherry	2.90	3.05	4.09						
Punjab		14.10	10.90						
Rajasthan		138.54	85.09						
Sikkim		0.03	33.07						
Tamil Nadu		63.29	5.71						
Telangana		37.89		İ					
Tripura		2.21					0.99		
Uttar Pradesh		398.42	21.73			0.35			477.57
Uttarakhand		120.73	7.10				-	-	
West Bengal		0.42							