

GOVERNMENT OF INDIA  
MINISTRY OF NEW AND RENEWABLE ENERGY  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 951**  
ANSWERED ON 30/07/2024

**POLICY FOR PROMOTION OF RENEWABLE ENERGY**

951. SHRI KESRIDEVSINH JHALA

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

- (a) the details of the policy formulated for promotion and harnessing of renewable energy to overcome power crisis in various States of the country including Gujarat and Maharashtra, State/UT-wise;
- (b) whether nodal agencies have been set up in Gujarat and Maharashtra for promotion of renewable energy and energy conservation in the States;
- (c) if so, their main objectives; and
- (d) the details of work done and achievements by these agencies in rural areas, State/UT-wise?

**ANSWER**

**THE MINISTER OF STATE FOR NEW & RENEWABLE ENERGY AND POWER**

**(SHRI SHRIPAD YESSO NAIK)**

- (a) The Government has formulated several policies and is implementing various Programmes/Schemes for promotion and harnessing renewable energy for achieving the renewable energy capacity addition targets in the country and additionally to meet the increasing power demand of the States/UTs, including for the States of Gujarat and Maharashtra. Details of major policies and Programmes/Schemes in this regard are given at **Annexure-I**.
- (b) & (c) Gujarat Energy Development Agency (GEDA) and Maharashtra Energy Development Agency (MEDA) are the nodal agencies for promotion of renewable energy and energy conservation in the States of Gujarat and Maharashtra respectively. The main objectives of these nodal agencies are given at **Annexure-II**.
- (d) With the combined efforts of state and central agencies, cumulatively over 195 GW renewable energy capacity has been achieved across the country, including the rural areas of the country, as on 30.06.2024. The details of State/UT-wise total renewable energy capacity achieved are given at **Annexure-III** and details of State/UT-wise decentralised/off-grid renewable energy systems/devices installed in the country are given at **Annexure-IV**.

\*\*\*\*\*

**Annexure-I referred to in reply of part (a) of the Rajya Sabha Unstarred Question  
No. 951 to be answered on 30.07.2024**

The details of major policies and Programmes/ Schemes for promotion and harnessing of renewable energy are given below:

- Foreign Direct Investment (FDI) permitted up to 100 percent under the automatic route.
- Waiver of Inter State Transmission System (ISTS) charges 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) trajectory has been announced till 2029-30 including separate RPO for Decentralized Renewable Energy.
- Project Development Cell for attracting and facilitating investments has been set up.
- Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar, Wind and Wind-Solar 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, National Green Hydrogen Mission, Development of 1 GW Offshore Wind Energy Projects, etc.
- Setting up of Ultra Mega Renewable Energy Parks 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 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.
- Cabinet approved the 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)
- “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.
- Notification of trajectory for RE power bids of 50 GW/annum to be issued by Renewable Energy Implementation Agencies (REIAs: SECI, NTPC, NHPC, SJVN) from FY 2023-24 to FY 2027-28.
- Procedure for Uniform Renewable Energy Tariff (URET) has been issued.

- 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.
- Notification of “The Electricity (Late Payment Surcharge and related matters) Rules (LPS rules) issued.
- Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022 issued.
- Launched Green Term Ahead Market (GTAM) 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) & (c) of the Rajya Sabha Unstarred  
Question No. 951 to be answered on 30.07.2024**

I. The main objectives of Gujarat Energy Development Agency (GEDA) are:

- Sponsor, co-ordinate and promote research programmes or projects for prototype (demonstration projects) and pilot investigations in the area of new and renewable sources of energy.
- Provide technical and financial assistance for formulation of programmes, designs and projects meant for extension of renewable energy development in the state.
- Undertake, on its own or in collaboration with other agencies, programmes of research and development, applications and extension as related to various new and renewable energy sources.
- Undertake or sponsor, techno-economic/socio-economic feasibility studies/cost-benefit analysis.
- Formulate and implement a broad-based programme for conservation of energy at all stages, including extraction, conversion, distribution and consumption in all sectors of the economy.
- Study the environmental effects of all energy-related processes.
- Establish an Energy Resources Centre that will collect and collate energy and inter-related information.
- Develop and support Documentation Services in area of energy in general and renewable energy in particular.
- Develop Communication and Education projects for wide spread dissemination of energy and environmental issues.

II. The main objectives of Maharashtra Energy Development Agency (MEDA) are:

- Development and dissemination projects / schemes / instruments which are used to generate electricity from Non-Conventional Energy Sources as well as use of Energy Conservation.
- To promote generation of electricity from New & Renewable Energy Sources.
- To undertake & disseminate energy saving and energy efficiency programs.
- Implementation of New & Renewable Energy programs of State Government and Central Government.

**Annexure-III referred to in reply of part (d) of the Rajya Sabha Unstarred Question No. 951 to be answered on 30.07.2024**

Details of State/UT-wise total renewable energy capacity achieved as on 30.6.2024 are given below:

S. No.	STATES / UTs	Small Hydro Power	Wind Power	Bio-Power					Solar Power				Solar Power Total	Large Hydro Power	Total Capacity
				Biomass Power/ Bagasse Cogeneration	Biomass Cogeneration (Non-Bagasse)	Waste to Energy	Waste to Energy (Off-grid)	Bio Power Total	Ground Mounted Solar	PM-Surya Ghar Yojna	Hybrid Solar Comp.	Off-grid Solar/ KUSUM			
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	163.31	4096.65	378.10	113.57	53.16	29.56	574.39	4321.76	213.10	0.00	88.34	4623.20	1610.00	11067.55
2	Arunachal Pradesh	133.11						0.00	1.27	4.34	0.00	6.33	11.94	1115.00	1260.05
3	Assam	34.11			2.00			2.00	126.00	42.46	0.00	9.44	177.90	350.00	564.01
4	Bihar	70.70		112.50	26.40		1.32	140.22	146.06	71.89	0.00	21.28	239.23		450.15
5	Chhattisgarh	76.00		272.09	2.50		0.41	275.00	770.96	81.01	0.00	390.73	1242.70	120.00	1713.70
6	Goa	0.05				1.94		1.94	0.95	43.38	0.00	1.12	45.45		47.44
7	Gujarat	91.64	11852.68	65.30	12.00	7.50	28.18	112.98	9847.83	3818.78	610.95	81.05	14358.61	1990.00	28405.91
8	Haryana	73.50		151.40	111.26	11.20	11.17	285.03	265.80	642.73	0.00	720.29	1628.82		1987.35
9	Himachal Pradesh	969.71			9.20		1.00	10.20	74.35	20.08	0.00	34.57	129.00	10281.02	11389.93
10	Jammu & Kashmir	169.93						0.00	2.49	37.66	0.00	25.29	65.44	3360.00	3595.37
11	Jharkhand	4.05			19.10			19.10	21.00	91.88	0.00	53.79	166.67	210.00	399.82
12	Karnataka	1280.73	6469.61	1867.10	20.20	1.00	19.42	1907.72	8189.36	593.90	0.00	36.51	8819.77	3689.20	22167.03
13	Kerala	276.52	63.50		2.27		0.23	2.50	322.79	817.25	0.00	24.93	1164.97	1864.15	3371.64
14	Ladakh	42.99						0.00	6.00	1.80	0.00	0.00	7.80	89.00	139.79
15	Madhya Pradesh	123.71	2844.29	92.50	14.85	15.40	12.19	134.94	3600.33	374.55	0.00	102.04	4076.92	2235.00	9414.86
16	Maharashtra	384.28	5212.18	2568.00	16.40	12.59	47.76	2644.75	3848.47	2270.04	0.00	472.90	6591.41	3047.00	17879.62
17	Manipur	5.45						0.00	0.60	6.36	0.00	6.08	13.04	105.00	123.49
18	Meghalaya	55.03			13.80			13.80	0.00	0.21	0.00	4.07	4.28	322.00	395.11
19	Mizoram	45.47						0.00	22.00	1.96	0.00	6.35	30.31	60.00	135.78
20	Nagaland	32.67						0.00	0.00	1.00	0.00	2.17	3.17	75.00	110.84

S. No.	STATES / UTs	Small Hydro Power	Wind Power	Bio-Power					Solar Power				Solar Power Total	Large Hydro Power	Total Capacity
				Biomass Power/ Bagasse Cogeneration	Biomass Cogeneration (Non-Bagasse)	Waste to Energy	Waste to Energy (Off-grid)	Bio Power Total	Ground Mounted Solar	PM-Surya Ghar Yojna	Hybrid Solar Comp.	Off-grid Solar/ KUSUM			
21	Odisha	115.63		50.40	8.82			59.22	419.16	52.90	0.00	36.41	508.47	2154.55	2837.87
22	Punjab	176.10		299.50	231.79	10.75	25.21	567.25	886.27	390.31	0.00	81.35	1357.93	1096.30	3197.58
23	Rajasthan	23.85	5195.82	119.25	2.00		4.39	125.64	18417.13	1226.74	1980.00	791.35	22415.22	411.00	28171.53
24	Sikkim	55.11						0.00	0.00	5.12	0.00	1.92	7.04	2282.00	2344.15
25	Tamil Nadu	123.05	10789.24	969.10	43.55	6.40	26.40	1045.45	7872.55	679.20	0.00	65.85	8617.60	2178.20	22753.54
26	Telangana	90.87	128.10	158.10	3.30	45.80	14.47	221.67	4360.49	434.51	0.00	8.71	4803.71	2405.60	7649.95
27	Tripura	16.01						0.00	5.00	4.78	0.00	9.96	19.74		35.75
28	Uttar Pradesh	49.10		1957.50	165.26		107.55	2230.31	2525.46	265.10	0.00	276.21	3066.77	501.60	5847.78
29	Uttarakhand	218.82		72.72	60.00		9.52	142.24	298.40	262.71	0.00	14.42	575.53	4035.35	4971.94
30	West Bengal	98.50		300.00	43.52		4.84	348.36	113.80	67.13	0.00	13.14	194.07	1341.20	1982.13
31	Andaman & Nicobar	5.25						0.00	25.05	4.59	0.00	0.27	29.91		35.16
32	Chandigarh							0.00	6.34	58.37	0.00	0.81	65.52		65.52
33	DNH and D&D							0.00	12.64	33.82	0.00	0.00	46.46		46.46
34	Delhi					84.00		84.00	9.84	253.01	0.00	1.46	264.31		348.31
35	Lakshadweep							0.00	2.45	0.00	0.00	2.52	4.97		4.97
36	Pondicherry							0.00	0.88	50.36	0.00	0.18	51.42		51.42
37	Others		4.30					0.00	0.00	0.00	0.00	45.01	45.01		49.31
	<b>Total</b>	<b>5005.25</b>	<b>46656.37</b>	<b>9433.56</b>	<b>921.79</b>	<b>249.74</b>	<b>343.62</b>	<b>10948.71</b>	<b>66523.48</b>	<b>12923.03</b>	<b>2590.95</b>	<b>3436.85</b>	<b>85474.31</b>	<b>46928.17</b>	<b>195012.81</b>

**Annexure-IV referred to in reply of part (d) of the Rajya Sabha Unstarred Question No. 951 to be answered on  
30.07.2024**

Details of State/UT-wise decentralised/off-grid renewable energy systems/ devices installed in the country as on 30.6.2024 are given below:

S. No.	STATES / UTs	Waste to Energy (Off-grid)	Solar Photovoltaic (SPV) Systems					PM KUSUM Solar Power Packs - Comp. A	Solar Pumps (Off-grid)	PM KUSUM Solar Pumps Comp. C
			SLS	HLS	SL	Lighting Total	Power Packs - (Off grid)			
		(MW)	(Nos)	(Nos)	(Nos)	(Nos)	(KW)	(KW)	(Nos)	(Nos)
1	Andhra Pradesh	29.56	16460	22972	77803	117235	3815.60		34045	
2	Arunachal Pradesh		25008	35065	218551	278624	963.20		281	
3	Assam		29538	46879	647761	724178	1605.00		45	
4	Bihar	1.32	54147	12303	1735227	1801677	6905.00		2813	
5	Chhattisgarh	0.41	4538	42232	3311	50081	31372.90	4000	119282	
6	Goa		707	393	1093	2193	32.72		45	700
7	Gujarat	28.18	5004	9253	31603	45860	13576.60		17921	
8	Haryana	11.17	34625	56727	93853	185205	2321.25	2250	104910	
9	Himachal Pradesh	1.00	98800	22592	33909	155301	1905.50	23400	661	
10	Jammu & Kashmir		39076	144316	51224	234616	8129.85		1475	
11	Jharkhand		14344	9450	790515	814309	3769.90		19721	
12	Karnataka	19.42	5694	52638	7781	66113	7854.01		8788	
13	Kerala	0.23	1735	41912	54367	98014	16268.39		826	6135
14	Madhya Pradesh	12.19	16808	7920	529101	553829	3654.00	20130	25138	
15	Maharashtra	47.76	10420	3497	239297	253214	3857.70	6000	126693	3650
16	Manipur		32767	24583	69722	127072	1580.50		118	
17	Meghalaya		5800	14874	97360	118034	2004.00		115	

S. No.	STATES / UTs	Waste to Energy (Off-grid)	Solar Photovoltaic (SPV) Systems							
			SLS	HLS	SL	Lighting Total	Power Packs - (Off grid)	PM KUSUM Solar Power Packs - Comp. A	Solar Pumps (Off-grid)	PM KUSUM Solar Pumps Comp. C
		(MW)	(Nos)	(Nos)	(Nos)	(Nos)	(KW)	(KW)	(Nos)	(Nos)
18	Mizoram		20325	12060	155217	187602	3894.60		37	
19	Nagaland		16045	1045	30766	47856	1506.00		68	
20	Orissa		19109	5274	99843	124226	2321.52		13317	
21	Punjab	25.21	43758	8626	17495	69879	2066.00		17534	
22	Rajasthan	4.39	8934	187968	225851	422753	30449.00	201000	125908	3007
23	Sikkim		504	15059	45200	60763	850.00		0	
24	Tamil Nadu	26.40	41419	298641	16818	356878	13052.60		8695	
25	Telangana	14.47	2458	0	142000	144458	7450.00		424	
26	Tripura		15517	32723	364012	412252	867.00		2979	50
27	Uttar Pradesh	107.55	302532	235909	2351205	2889646	10638.31		75393	
28	Uttarakhand	9.52	43803	91595	165071	300469	4059.53		344	
29	West Bengal	4.84	18203	145332	17662	181197	1730.00		653	20
30	Andaman & Nicobar		1490	468	6296	8254	167.00		5	
31	Chandigarh		901	275	1675	2851	730.00		12	
32	DNH and D&D		0	0	0	0	0.00		0	
33	Delhi		301	0	4807	5108	1269.00		90	
34	Lakshwadeep		4465	600	5289	10354	2190.00		0	
35	Puducherry		417	25	1637	2079	121.00		21	
36	Others		9150	140273	125797	275220	23885.00		4621	
	<b>Total</b>	<b>343.62</b>	<b>944802</b>	<b>1723479</b>	<b>8459119</b>	<b>11127400</b>	<b>216862.68</b>	<b>256780</b>	<b>712978</b>	<b>13562</b>

SLS = Street Lighting System; HLS=Home Lighting System;

SL= Solar Lanterns; MW=Mega Watt; kWp=kilowatt peak; PP = Power plants;