GOVERNMENT OF INDIA
MINISTRY OF NEW AND RENEWABLE ENERGY
LOK SABHA
UNSTARRED QUESTION NO. 3110
ANSWERED ON 19/03/2025

RENEWABLE ENERGY CAPACITY IN ANDHRA PRADESH

3110. DR. BYREDDY SHABARI

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

(a) the details of total approved and installed renewable energy capacity under various schemes in the country, State-wise and district-wise for Andhra Pradesh;
(b) the funds allocated, released and utilized for renewable energy projects in Andhra Pradesh during each of the last three years, source-wise and technology-wise;
(c) the number of households, industries and public institutions in Andhra Pradesh benefiting from renewable energy adoption along with details of grid-connected and off-grid projects;
(d) the major challenges in implementing renewable energy projects in Andhra Pradesh such as land acquisition, grid connectivity and financial viability and the steps taken to address them;
(e) whether Andhra Pradesh has pending requests for new renewable energy projects or financial support and if so, the details thereof; and
(f) the roadmap for expanding renewable energy infrastructure in Andhra Pradesh including upcoming projects and policy incentives?

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

(SHRI SHRIPAD YESSO NAIK)

(a) As on 28.02.2025, a total of 214.68 GW Renewable energy capacity has been installed in the country which includes 102.57 GW solar power, 48.59 GW wind power, 11.45 GW bio-power and 52.07 GW hydro power. State-wise details are given in **Annexure-I**. District-wise details are not maintained by the Ministry.
(b) State-wise details of Central Financial Assistance (CFA) released during the last three years under major ongoing renewable energy schemes/programmes being implementing by the Ministry in the State of Andhra Pradesh are given at **Annexure-II.**

(c) Under PM-Surya Ghar Muft Bijli Yojana 11.56 lakh applications from the households in Andhra Pradesh and 14086 rooftop solar installations have been reported till 01.03.2025 on the national portal of the scheme.

Further, as per the information received from New and Renewable Energy Department Corporation of Andhra Pradesh Ltd. (NREDCAP), 202 grid solar projects and 325 wind power projects have been commissioned by Industries; and 234 projects have been installed for institutions.

As decentralized/off-grid renewable energy systems/devices, 117235 number of solar lightning system/ home lightning system/ solar lanterns, 3815.60 kWp power packs, 34045 solar pumps, 29.56 MW waste to energy projects and 38,977 small biogas plants have been installed in the State of Andhra Pradesh. Under New Solar Power Scheme for Tribal and Particularly Vulnerable Tribal Group (PVTG) habitations/villages under Pradhan Mantri Janjati Adivasi Nyaya Maha Abhiyan (PM JANMAN) and Dharti Aaba Janjatiya Gram Utkarsh Abhiyan (DA JGUA), 1675 households have been sanctioned and 105 households have been reported electrified as on 28.02.2025.

(d) As per the information received from NREDCAP, most of the renewable energy projects proposed in Anantapur, Kurnool, Kadapa and Prakasam Districts, where the dry lands are available and land acquisition is being taken up as per the guidelines of Revenue department of the concerned Districts. Grid connectivity, in addition to the APTRANSCO 400 KV Substation at Kurnool and Anantapur, Power Grid Substations in Kurnool and Anantapur are available and new substations Anantapur II and Kurnool IV are also under pipeline.
(e) As per the information received from NREDCAP, Andhra Pradesh has no pending request.

(f) Ministry of New and Renewable Energy is working towards achieving 500 GW of installed electricity capacity from non-fossil sources by 2030.

The Government of India has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country, including in the State of Andhra Pradesh, to realize the target of 500 GW non-fossil power capacity by 2030, as given at **Annexure-III**.

Further, various steps and initiatives for expanding renewable energy infrastructure in Andhra Pradesh as informed by NREDCAP are given at **Annexure-IV**.

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Annexure-I

Annexure-I referred to in reply of part (a) of the Lok Sabha Unstarred Question No. 3110 to be answered on 19.03.2025

Source-wise and State-wise installed capacity of Renewable Power (as on 28.02.2025)

(in MW)

S. No.	STATES / UTs	Small Hydro Power	Wind Power	Bio Power	Solar Power	Large Hydro	Total RE
		(MW)	(MW)	(MW)	(MW)	(MW)	(MW)
1	Andhra Pradesh	163.31	4096.65	574.39	5179.23	1610.00	11623.58
2	Arunachal Pradesh	140.61		0.00	14.85	1115.00	1270.46
3	Assam	34.11		2.00	192.34	350.00	578.45
4	Bihar	70.70		140.22	319.44		530.36
5	Chhattisgarh	76.00		277.09	1340.54	120.00	1813.63
6	Goa	0.05		1.94	55.44		57.43
7	Gujarat	106.64	12583.88	118.10	18125.41	1990.00	32924.03
8	Haryana	73.50		292.62	2025.18		2391.30
9	Himachal Pradesh	1000.71		10.20	170.26	10281.02	11462.19
10	Jammu & Kashmir	189.93		0.00	74.49	3360.00	3624.42
11	Jharkhand	4.05		20.14	199.87	210.00	434.06
12	Karnataka	1284.73	6878.30	1909.95	9312.71	3689.20	23074.89
13	Kerala	276.52	63.50	2.50	1482.14	1904.15	3728.81
14	Ladakh	45.79		0.00	7.80	89.00	142.59
15	Madhya Pradesh	123.71	2844.29	150.88	5012.88	2235.00	10366.76
16	Maharashtra	384.28	5279.08	2992.57	9881.37	3047.00	21584.30
17	Manipur	5.45		0.00	13.79	105.00	124.24
18	Meghalaya	55.03		13.80	4.28	322.00	395.11
19	Mizoram	45.47		0.00	30.39	60.00	135.86
20	Nagaland	32.67		0.00	3.17	75.00	110.84
21	Odisha	115.63		60.05	621.84	2154.55	2952.07
22	Punjab	176.10		568.25	1421.43	1096.30	3262.08
23	Rajasthan	23.85	5195.82	200.56	27636.75	411.00	33467.98
24	Sikkim	55.11		0.00	7.56	2282.00	2344.67
25	Tamil Nadu	123.05	11514.64	1045.45	9723.95	2178.20	24585.29
26	Telangana	90.87	128.10	221.67	4842.10	2405.60	7688.34
27	Tripura	16.01		0.00	21.24		37.25
28	Uttar Pradesh	49.10		2273.67	3357.51	501.60	6181.88
29	Uttarakhand	233.82		142.24	593.07	4035.35	5004.48
30	West Bengal	98.50		348.36	320.62	1341.20	2108.68
31	Andaman & Nicobar Islands	5.25		0.00	29.91		35.16
32	Chandigarh			0.00	78.85		78.85
33	Dadra & Nagar Haveli and Daman & Diu			3.75	48.12		51.87
34	Delhi			84.00	313.40		397.40
35	Lakshadweep			0.00	4.97		4.97
36	Puducherry			0.00	54.11		54.11
37	Others		4.30	0.00	45.01		49.31
	Total (MW)	**5100.55**	**48588.56**	**11454.40**	**102566.02**	**46968.17**	**214677.70**

MW = Megawatt

Annexure-II

Annexure-II referred to in reply of part (b) of the Lok Sabha Unstarred Question No. 3110 to be answered on 19.03.2025

Details of CFA released during the last three years in the State of Andhra Pradesh under major ongoing renewable energy schemes/programmes being implementing by the Ministry

(Rs. in Crore)

Year	Rooftop Solar	CPSU	Solar Off-grid	Green Energy Corridor	Biomass	Waste to Energy	Biogas
2021-22	2.1		0.87		0.99	50.55	0.88
2022-23	5.6					50.47	
2023-24	3.0	22.45		47.54		2.74	

Annexure-III

Annexure-III referred to in reply of part (f) of the Lok Sabha Unstarred Question No. 3110 to be answered on 19.03.2025

The Government of India has taken several steps and initiatives to promote and accelerate renewable energy capacity in the country, including in the State of Andhra Pradesh, to realize the commitment of 500 GW non-fossil energy capacity by 2030. 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.
- 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, 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-IV

Annexure-IV referred to in reply of part (f) of the Lok Sabha Unstarred Question No. 3110 to be answered on 19.03.2025

Various steps and initiatives for expanding renewable energy infrastructure in Andhra Pradesh *(as informed by NREDCAP)*

- Government of Andhra Pradesh is giving priority for promotion of Renewable Energy Power projects and has been rolling out multiple initiatives, programs, policies and incentives to accelerate the development of the renewable energy sector. The state is having good RE power potential particularly in Rayalaseema region where huge extents of lands have been identified for promotion of RE power projects by inviting private investments.
- To achieve and lead the country's goals of net zero, Government of Andhra Pradesh has formulated "Andhra Pradesh Integrated Clean Energy Policy, 2024", vide G.O. Ms No: 37 dated 30.10.2024 of Energy (Power-II) Department. The policy aims to add over 160 GW of renewable energy capacity, with potential to attract investments worth ~Rs. 10,00,000 Crores, thereby generating an estimated employment for 7,50,000, both direct and indirect.
- The Government is considering aggregation of lands at the potential zones for development of RE Power projects. The land will be allotted on lease basis @ Rs. 31,000/ Acre / Annum with an annual escalation of 5% for every 2 years. In case of private land owners also the lease rentals will be the same and Rs. 30,000 will go directly to the farmer which will incentivize and motivate them to offer their lands for RE Power projects.
- Central Electricity Authority (CEA) has planned for development of transmission infrastructure in the state for evacuation of 51 GW RE capacity by the year 2030. Central Transmission Utility of India Limited (CTUIL) has already planned to create Transmission infrastructure to evacuate 17 GW RE Power i.e. 4.50 GW in Nandyal District, 8 GW in Ananthapuramu district and 4.50 GW in Kurnool district.

Road Map and Incentives:

- ❖ Giving priority for promotion of Renewable Energy Power projects and rolling out multiple initiatives, programs, policies and incentives to accelerate the development of the renewable energy sector.
- ❖ Harness the untapped wind energy potential by providing vital incentives for the development of wind projects and turbine manufacture.
- ❖ NREDCAP and STU will provide land parcels and sub-stations, prioritizing high-value and employment-generating projects like biofuels, Green Hydrogen, RE Round-the-Clock with storage, hybrid projects, PSP, wind, and solar.

- Waive of Transmission and Wheeling charges to promote RE equipment manufacturing and development of RE infrastructure projects.
- Establishment of skill development centers by partnering with academia, training hubs and think tanks to facilitate learning for both current and future workforces and be available to private and public companies.
- Sector specific capital & interest subsidies to foster innovation and contribute to a greener, more resilient energy grid.
- SGST reimbursement for RE equipment manufacturing, to reduce the operational costs and accelerate the expansion of RE projects.
- Energy generation and production incentives to renewable energy equipment manufacturers.
- Subsidies on power costs and electricity duty to reduce expenses and promote RE manufacturing facilities.