

**GOVERNMENT OF INDIA
MINISTRY OF POWER
LOK SABHA
UNSTARRED QUESTION NO.1796
ANSWERED ON 01.08.2024**

CONVENTIONAL AND NON-CONVENTION SOURCES OF ENERGY

1796 SHRI ANIL YESHWANT DESAI:

**Will the Minister of POWER
be pleased to state:**

- (a) whether India is self sufficient in the field of energy demands and supply and if so, the details thereof;**
- (b) the details of different conventional and non-conventional sources of energy and their share to meet the energy demand;**
- (c) the details of the steps taken to increase the production of the green energy in the country; and**
- (d) the details of public and private companies taking active initiatives in this field?**

A N S W E R

THE MINISTER OF STATE IN THE MINISTRY OF POWER

(SHRI SHRIPAD NAIK)

(a) : There is adequate availability of power in the country. We have addressed the critical issue of power deficiency by adding 2,14,237 MW of generation capacity in the last ten years transforming our country from power deficit to power sufficient. We have increased the generation capacity by 79.5% from 2,48,554 MW in March 2014 to 4,46,190 MW in June 2024.

We have added 1,95,181 ckt kilometre of transmission lines since April 2014 connecting the whole country into one grid running on one frequency. This has enabled us to transfer 1,18,740 MW from one corner of the country to another. We strengthened the distribution system by implementing projects of 1.85 lac crores under DDUGJY/IPDS/SAUBHAGYA. Under the above distribution sector schemes, 2927 new sub-stations have been added, upgradation of 3965 existing sub-stations has been carried out, 6,92,200 Distribution Transformers have been installed, Feeder separation of 1,13,938 Circuit Kilometer (Km) has been done and 8.5 Lakh Circuit Kilometer (CKm) of HT and LT lines have been added/upgraded across the States. As a result of these measures, the availability of power supply in rural areas has increased from 12.5 Hours in 2015 to 21.9 Hours in 2024. The power supply in urban areas has increased to 23.4 Hours in 2024. The gap between Energy

Requirement and Energy Supplied has come down from 4.2% in 2013-14 to 0.1% in FY 2024-25 (till June, 2024). Even this gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network and financial constraints of DISCOMs etc

The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024 are given at Annexure-I.

(b) : The details of the different conventional and non-conventional sources of energy as on 30.06.2024 and their share to meet energy demand in the country are given at Annexure-II.

(c): The Government has taken the following steps to increase the green energy production in the country:

- (i) Permitting Foreign Direct Investment (FDI) in Renewable energy sector up to 100 percent under the automatic route.**
- (ii) 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.**
- (iii) Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029- 30.**
- (iv) Setting up of Ultra Mega Renewable Energy Parks to provide land and transmission to RE developers for installation of RE projects on a large scale.**
- (v) Schemes such as Pradhan Mantri KisanUrja 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.**
- (vi) Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power.**
- (vii) Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.**
- (viii) Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.**
- (ix) Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.**
- (x) National Green Hydrogen Mission launched with an aim to make India a global hub for production, utilization and export of Green Hydrogen and its derivatives.**

(d) : The details of major Renewable Energy (RE) developers (Public and Private) in the country are given at Annexure-III.

ANNEXURE-I**ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 1796 ANSWERED IN THE LOK SABHA ON 01.08.2024**

The details of power supply position in the country in terms of Energy for the last ten years and the current year till June-2024

Years	Energy [in Million Units (MU)]			
	Energy Requirement	Energy Supplied	Energy not Supplied	
	(MU)	(MU)	(MU)	(%)
2014-15	10,68,923	10,30,785	38,138	3.6
2015-16	11,14,408	10,90,850	23,558	2.1
2016-17	11,42,928	11,35,332	7,596	0.7
2017-18	12,13,326	12,04,697	8,629	0.7
2018-19	12,74,595	12,67,526	7,070	0.6
2019-20	12,91,010	12,84,444	6,566	0.5
2020-21	12,75,534	12,70,663	4,871	0.4
2021-22	13,79,812	13,74,024	5,787	0.4
2022-23	15,13,497	15,05,914	7,583	0.5
2023-24	16,26,132	16,22,020	4,112	0.3
2024-25 (Upto June, 2024)*	4,51,746	4,51,172	574	0.1

*Figures for June, 2024 are provisional

ANNEXURE-II**ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 1796 ANSWERED IN THE LOK SABHA ON 01.08.2024**

The details of the different conventional and non-conventional sources of energy as on 30.06.2024 and their share to meet energy demand in the country

Sources		Installed Capacity (MW)	% age share of Total
Conventional Sources :			
Thermal	Coal	2,10,969.50	47.28
	Lignite	6,620.00	1.48
	Gas	24,818.21	5.56
	Diesel	589.20	0.13
	Total Thermal	2,42,996.91	54.46
Nuclear		8,180.00	1.83
Large Hydro		46,928.17	10.52
Sub-total (Conventional Sources)		2,98,105.08	66.81
Non-Conventional :			
Renewable Energy Sources (RES) (Including Large Hydro)	Small Hydro Power	5,005.25	1.12
	Wind Power	46,656.37	10.46
	Bio-Power	10,948.71	2.45
	Solar Power	85,474.31	19.16
Sub-total (Non-Conventional Sources)		1,48,084.64	33.19
Total Installed Capacity		4,46,189.72	100.00

ANNEXURE-III**ANNEXURE REFERRED IN REPLY TO PART (d) OF UNSTARRED QUESTION NO. 1796 ANSWERED IN THE LOK SABHA ON 01.08.2024**

List of major Renewable Energy (RE) developers (Public and Private)

Sl. No.	Major RE Developers	Sl. No.	Major RE Developers
Public			
1	NTPC LTD.	5	DVC
2	SJVNL	6	OIL INDIA LTD.
3	NHPC	7	ONGC
4	THDC		
Private			
8	ACME ENERGY PVT LTD.	18	ALFANAR WIND
9	ADANI ENERGY PVT.LIMITED	19	APRAAVA ENERGY PRIVATE LIMITED (AEPL)
10	AMP ENERGY GREEN PRIVATE LIMITED	20	Green Infra Wind Energy Limited
11	AMPLUS AGES PRIVATE LIMITED	21	POWERICA WIND
12	AVAADA PVT LTD	22	SITAC WIND
13	AYANA RENEWABLE PVT LTD	23	SRIJAN WIND
14	RENEW SOLAR ENERGY PVT LTD	24	TORRENT SOLARGEN LIMITED
15	AZURE POWER PRIVATE LTD	25	GREEN INFRA
16	TATA POWER LIMITED	26	JSW RENEW ENERGY TWO LTD
17	SERENTICA RENEWABLES INDIA 4 PRIVATE LIMITED_BKN2		
