GOVERNMENT OF INDIA
MINISTRY OF POWER

LOK SABHA
UNSTARRED QUESTION NO.2902
ANSWERED ON 12.12.2024

SELF SUFFICIENCY IN ENERGY DEMAND

2902. 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 different conventional and non-conventional sources of energy and their share to meet the energy demand; and

(c) the details of the steps taken/being taken by the Government to increase the green energy availability?

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. Present installed generation capacity of the country is 4,54,452 MW. Government of India has addressed the critical issue of power deficiency by adding 2,22,500 MW of generation capacity since April, 2014 transforming the country from power deficit to power sufficient.

1,98,970 ckm of transmission lines have been added since April 2014 connecting the whole country into one grid running on one frequency. This has enabled to transfer 1,18,740 MW from one corner of the country to another. Distribution system has been strengthened by implementing projects of 1.85 lac crores under DDUGJY (Deen Dayal Upadhyaya Gram Jyoti Yojana) /IPDS (Integrated Power Development Scheme)/SAUBHAGYA (Pradhan Mantri Sahaj Bijli Har Ghar Yojana). 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 ckm has been done and 8.5 Lakh ckm of HT and LT lines have been added/upgraded across the States.

Under RDSS, projects worth Rs. 2.77 lakh crore for distribution infrastructure works and smart metering works have been sanctioned at National level.

As a result of these measures, the hours of supply for rural areas has improved from 12.5 hrs in FY 2014 to 21.9 hrs in FY 2024 and for urban areas it has improved from 22.1 hrs in FY 2014 to 23.4 hrs in FY 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 October, 2024). Marginal gap between Energy Requirement and Energy Supplied is generally on account of constraints in the State transmission/distribution network.

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

(b) : The details of the different conventional and non-conventional sources of energy as on 31.10.2024 and their share to meet energy demand in the country are given at Annexure-II.

(c): India has committed to augment non fossil fuel based installed electricity generation capacity to over 5,00,000 MW by 2030. The Government has taken the following steps to increase the green energy production in the country:

(i) 1,27,050 MW of Renewable Capacity is under construction and 89,690 MW is under various stages of tendering.

(ii) Permitting Foreign Direct Investment (FDI) in Renewable energy sector up to 100 percent under the automatic route.

(iii) 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.

(iv) Declaration of trajectory for Renewable Purchase Obligation (RPO) up to the year 2029- 30.

(v) 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.

(vi) **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.**

(vii) **Laying of new transmission lines and creating new sub-station capacity under the Green Energy Corridor Scheme for evacuation of renewable power.**

(viii) **To achieve the objective of increased domestic production of Solar PV Modules, the Govt. of India is implementing the Production Linked Incentive (PLI) scheme for High Efficiency Solar PV Modules with an outlay of Rs. 24,000 crore. This will enable manufacturing capacity of Giga Watt (GW) scale in High Efficiency Solar PV Module.**

(ix) **Standard Bidding Guidelines for tariff based competitive bidding process for procurement of Power from Grid Connected Solar PV and Wind Projects.**

(x) **Notification of Promoting Renewable Energy through Green Energy Open Access Rules 2022.**

(xi) **Launch of Green Term Ahead Market (GTAM) to facilitate sale of Renewable Energy Power through exchanges.**

(xii) **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.**

(xiii) **Construction of Green Energy Corridors and putting in place 13 Renewable Energy Management Centres.**

****

ANNEXURE-I

ANNEXURE REFERRED IN REPLY TO PART (a) OF UNSTARRED QUESTION NO. 2902 ANSWERED IN THE LOK SABHA ON 12.12.2024

****

The details of power supply position in the country in terms of Energy for the last ten years and the current year till October-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 October, 2024)	10,28,850	10,27,589	1,261	0.1

****

ANNEXURE-II

ANNEXURE REFERRED IN REPLY TO PART (b) OF UNSTARRED QUESTION NO. 2902 ANSWERED IN THE LOK SABHA ON 12.12.2024

****

The details of the different conventional and non-conventional sources of energy as on 31.10.2024 and their share to meet energy demand in the country

Sources		Installed Capacity (MW)	% age share of Total
Conventional Sources :			
Thermal	Coal	2,11,030	46.44
	Lignite	6,620	1.46
	Gas	24,818	5.46
	Diesel	589	0.13
	Total Thermal	2,43,057	53.48
Nuclear		8,180	1.80
Large Hydro		46,968	10.34
Sub-total (Conventional Sources)		2,98,205	65.62
Non-Conventional :			
Renewable Energy Sources (RES) (Including small Hydro)	Solar Power	92,119	20.27
	Wind Power	47,717	10.50
	Bio Power	10,728	2.36
	Small Hydro Power	5,077	1.12
	Waste to Energy	606	0.13
Sub-total (Non-Conventional Sources)		1,56,247	34.38
Total Installed Capacity		4,54,452	100.00

****