

GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
LOK SABHA
UNSTARRED QUESTION NO- 3683
ANSWERED ON 18/12/2024

NET-ZERO EMISSIONS

3683. DR. SHASHI THAROOR

Will the PRIME MINISTER be pleased to state:-

- (a) the details of the current sources of electricity and their share in percentage terms;
- (b) the action plan for generating electricity through non-fossil fuel-based sources to achieve net-zero emissions by 2070;
- (c) whether the Government is exploring nuclear power generation to achieve net-zero emissions by 2070 and if so, the details thereof; and
- (d) if not, whether the Government has propose to conduct a study on expanding nuclear power generation source to achieve the net-zero emissions target by 2070, if so, the details thereof?

ANSWER

THE MINISTER OF STATE FOR PERSONNEL, PUBLIC GRIEVANCES & PENSIONS
AND PRIME MINISTER'S OFFICE (DR. JITENDRA SINGH)

- (a) The details of current sources of electricity and their share in percentage term, are given in Annexure (Source: <https://powermin.gov.in>).
- (b) & (c) Country has set a target of 50% of the installed power generation capacity from non-fossil fuel by 2030. The energy mix published by Central Electricity Authority, as part of National Electricity Plan 2022-32, the target for 2030 is largely going to be achieved by Renewables. India's Long-term Low Green House Gas Emission Development Strategy recognizes a significantly greater role of nuclear energy in achieving Net-Zero targets. Nuclear energy has a vital role in the country's energy transition to net zero, as it is a base load source of clean electricity, available 24X7. It also has huge potential to provide the country long-term energy security in a sustainable manner. In this regard, a nuclear power expansion programme is being implemented to increase the installed nuclear power capacity to 22480 MW by 2031-32 from 8180 MW at present.
- (d) Not Applicable

1. Total Installed Capacity (As on 30.11.2024)- Source : Central Electricity Authority (CEA)

➤ Installed Generation Capacity (Sector wise) as on 30.11.2024 :

Sector	Installed Capacity (MW)	% Share in Total
Central Sector	1,04,453	22.9%
State	1,08,330	23.7%
Private Sector	2,43,974	53.4%
TOTAL	4,56,757	

➤ Installed Generation Capacity (Fuel wise) as on 30.11.2024 :

Category		Installed Generation Capacity	% Share in Total		
Fossil Fuel	Coal	2,11,030	46.2%		
	Lignite	6,620	1.4%		
	Gas	24,818	5.4%		
	Diesel	589	0.1%		
	Total Fossil Fuel :		2,43,057	53.2%	
Non-Fossil Fuel	RES (Incl. Hydro)	2,05,521	45.0%		
	Hydro	46,968	10.3%		
	Wind, Solar & Other RE	1,58,552	34.7%		
	Wind	47,959	10.5%		
	Solar	94,168	20.6%		
	BM Power/Cogen.	10,728	2.3%		
	Waste to Energy	613	0.1%		
	Small Hydro Power	5,084	0.1%		
	Nuclear		8,180	1.8%	
	Total Non-Fossil Fuel :		2,13,701	46.8%	
Total Installed Capacity (Fossil Fuel & Non-Fossil Fuel)		4,56,757	100%		
