

**GOVERNMENT OF INDIA
MINISTRY OF POWER**

**LOK SABHA
UNSTARRED QUESTION NO.703
TO BE ANSWERED ON 17.09.2020**

HIGH CARBON EMISSION POWER PLANTS

703. SHRIMATI KIRRON KHER:

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

- (a) whether the Government has identified the coal power plants with high carbon emission across the country;**
- (b) if so, the details thereof including the action taken by the Government to shut down these plants and if not, the reasons therefor;**
- (c) whether there has been a decrease in the demand for electricity and emission levels as compared to past years and if so, the details thereof; and**
- (d) the steps taken by the Government to ensure that Flue-Gas Desulfurization (FGD) and other emission related upgrades are done quickly, considering the sharp fall in demand of electricity?**

A N S W E R

THE MINISTER OF STATE (INDEPENDENT CHARGE) FOR POWER, NEW & RENEWABLE ENERGY AND THE MINISTER OF STATE FOR SKILL DEVELOPMENT & ENTREPRENEURSHIP

(SHRI R.K. SINGH)

(a) & (b) : Power generation is a de-licensed activity; and the decision to retire power generating units is taken by the concerned utilities themselves based on techno-commercial considerations.

The Central Electricity Authority (CEA) has informed that a total of 164 coal based units with a capacity of 14121.38 MW have been retired from 01.04.2002 to 31.08.2020, as per the decisions taken by the concerned utilities themselves based on the techno-economic and commercial considerations. Further, the CEA has informed that 34 units with a capacity of 5139 MW have been identified, which have not submitted any plan for compliance of emission control norms. These units would be retired/shutdown as per phasing out plan and timelines given by the Central Pollution Control Board (CPCB)/ Ministry of Environment, Forest and Climate Change (MoEF&CC) for compliance of emission norms .

(c) : The CEA has informed that the demand for electricity in terms of Energy has been increasing over a period of time in the country as per the following details of actual power supply position during the last three years i.e. from 2017-18 to 2019-20. However, in the current year 2020-21, there was a slight contraction in demand

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of electric energy in the first quarter due to Covid-19 pandemic, which has now gradually picked up.

Year	Energy Supplied/consumed	Year on year Growth
	(MU)	(%)
2014-15	1,030,785	6.8
2015-16	1,090,850	5.8
2016-17	1,135,334	4.1
2017-18	1,204,697	6.1
2018-19	1,267,526	5.2
2019-20	1,284,444	1.3
2020-21 *	5,13,528	(-)4.0

* 2020-21 (Apr to Aug,2020 only)- period of pandemic due to Covid-19

The CEA compiles a CO₂ database for all grid connected Thermal Power Stations (TPSs) in the country and publishes the CO₂ database for the TPSs after the end of each financial year in terms of tonnes of CO₂ per Megawatt hour (TCo₂/MWh). The purpose of this database is to establish an authentic and consistent quantification of the CO₂ emission baseline. The emission factors for the last 5 years in tCO₂/MWh in respect of TPSs are mentioned below:

Emission Factors (tCO ₂ /MWh) (excl. Imports)	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20*
Weighted Average Emission Rate	0.83	0.82	0.83	0.82	0.82	0.82*

* Tentative

It is worthwhile to note that the share of non-fossil power generation in the country has increased from 20.9% in 2014-15 to 24.9% in 2019-20, which has led to reduction in overall emissions.

(d) : In order to ensure uninterrupted power supply position in the country, a phased implementation plan for installation of Flue Gas De-Sulphurization (FGD) for control of Sulphur Oxides (SO_x), adoption of suitable technology for control of Particulate Matter (PM) and other parameters of emission control norms, had been prepared by the CEA in consultation with the stakeholders. Accordingly, the Central Pollution Control Board (CPCB) has issued directions under section 5 of Environment (Protection) Act, 1986 to thermal power plants to comply with emission norms in a phased manner.
