

GOVERNMENT OF INDIA
MINISTRY OF POWER

RAJYA SABHA
STARRED QUESTION NO.12
TO BE ANSWERED ON 30.11.2015

HIGH EFFICIENCY COAL-FIRED POWER GENERATION TECHNOLOGY

*12. SHRI V.P. SINGH BADNORE:

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

- (a) the details of new high efficiency technology for coal-fired generation of power being planned for the country; and
- (b) how much reduction of CO₂ emissions is expected from such clean superior coal technology in the country, the details?

A N S W E R

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

(SHRI PIYUSH GOYAL)

(a) & (b) : A Statement is laid on the Table of the House.

STATEMENT

STATEMENT REFERRED TO IN REPLY TO PARTS (a) & (b) OF STARRED QUESTION NO. 12 TO BE ANSWERED IN THE RAJYA SABHA ON 30.11.2015 REGARDING HIGH EFFICIENCY COAL-FIRED POWER GENERATION TECHNOLOGY.

(a) : Supercritical technology helps to enhance the efficiency of coal fired power generation. The design efficiency of a Supercritical unit with steam parameters of 247 kg/cm²; 565/593⁰C as generally adopted is about 5% higher than that of a typical 500 MW subcritical unit. These (supercritical) units are likely to have correspondingly lower fuel consumption and CO₂ emissions. The efficiency of the Supercritical units is around 40%.

42 supercritical units (660/800 MW) with total capacity of about 28,805 MW have been commissioned in the country as on 24.11.2015 and around 49,000 MW are under construction.

(b) : The reduction of CO₂ emissions by adoption of these technologies is in the range of 38-55 gm/kWH of electricity generation. The total reduction in CO₂ emissions in the country by installation of supercritical units and their corresponding cumulative generation till 30.09.2015 is 10.51 million tonnes.
