

**GOVERNMENT OF INDIA  
POWER  
LOK SABHA**

UNSTARRED QUESTION NO:5758  
ANSWERED ON:30.04.2010  
IMPROVING ENERGY EFFICIENCY  
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**Will the Minister of POWER be pleased to state:**

- (a) the percentage of carbon emissions by the power projects in the country;
- (b) whether the Government has initiated measures to reduce the carbon emissions and improve efficiency in the energy sector;
- (c) if so, the details thereof; and
- (d) the extent to which the initiatives of the Government have so far been able in reducing the carbon emissions and improving efficiency in the energy sector?

**Answer**

THE MINISTER OF STATE IN THE MINISTRY OF POWER(SHRI BHARATSINH SOLANKI)

- (a) : The Power sector approximately accounts for 60% of the total carbon dioxide emissions generated in the country.
- (b) & (c) : Ministry of Power has initiated following measures to improve efficiency and to reduce carbon emissions in the power sector:
  1. Moving towards super critical and clean coal technologies.
  2. Renovation & Modernization of old thermal power stations.
  3. Retirement of old and small size generating units.
  4. Energy Efficiency improvement Awards – annual award for performance of thermal power stations award for best environment managed thermal power station and incentive awards to power generation and transmission companies to reduce transmission & distribution losses.
  5. Establishment of Energy Efficiency Cell at Thermal Power Stations.
  6. Initiatives by Bureau of Energy Efficiency (BEE):

BEE has drawn up an Action plan to improve energy efficiency in various sectors and proposed eight schemes to promote energy efficiency in the country namely, Bachat Lamp Yojana to promote energy efficient and high quality CFLs, Standards & Labeling scheme, Energy Conservation Building Code, Agricultural and Municipal sector targeting replacement inefficient pump sets, street lighting, etc., Operationalising Energy Conservation Act by Strengthening Institutional capacity of State Designated agencies, energy efficiency (EE) in small and medium enterprises, institutional strengthening of BEE and other EE Institutions and Contribution to state Energy Conservation fund.

Further, the National Action Plan on Climate Change (NAPCC), released by the Prime Minister on 30th June 2008, outlines Eight National Missions, representing multi-pronged, long-term and integrated strategies for achieving Key goals in the context of climate change. These missions are:

- # National Solar Mission
- # National Mission for Enhanced Energy Efficiency
- # National Mission on Sustainable Habitat
- # National Water Mission
- # National Mission for sustaining the Himalayan ecosystem
- # National Mission for a Green India
- # National Mission for sustainable agriculture
- # National Mission for Strategic Knowledge for climate change

(d) : The BEE has informed that initiatives taken by them have resulted in an avoided capacity generation of 2127 MW during the last two years i.e., 2007-08 and 2008-09. The fuel savings are nearly 1% of the total fuel use in the country.

Further, Central Electricity Authority (CEA) has intimated that the weighted average emissions rate of grid connected power stations from power sector in India has been reduced from 0.85 ton CO<sub>2</sub>/MWh in 2002-03 to 0.82 ton CO<sub>2</sub>/MWh in the year 2008-09.